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Edited by **Danielle Winchester and Axton Betz-Hamilton**

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November 14-16

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Editors' Note

Welcome to the 2018 AFCPE® *Symposium Proceedings*. The broad range of items selected by the program task forces for posters, practitioner's forums, and research papers for the 2018 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 2018 AFCPE® Research and Training Symposium. The *Proceedings* include the research papers, practitioner forum summaries, and poster abstracts presented at the AFCPE® Symposium in Norfolk, VA, November 14-16, 2018.

We would especially like to thank Sara Martin-Fuller, AFCPE® Special Events Manager, and Elizabeth Kiss, former *Proceedings* co-editor, who patiently and graciously answered our many questions 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 2018 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 2019 AFCPE® *Proceedings* and for presentation at the symposium in Portland, OR, November 19-21, 2019. 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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Posters

College Students' Money Management and Financial Well-being in a Digital Age

Lijun Li, Virginia S. Zuiker, Vilma Q. Fernandez, University of Minnesota

Key words: college students, digital age, emerging adults, financial well-being, millennials, technology

The past decade has experienced exponential growth of personal technology devices and applications to enhance personal money management (Brown, Dodini, Gonzalez, Merry, & Thomas, 2015; De Blasio & Menin, 2015; Hernandez-Murillo, Llobet, & Fuentes, 2010, p.1). This study examined 180 undergraduate students between the ages of 18-25 at a large Midwestern research university to explore the knowledge of financial management in college students and their technology use in financial management. We also examined whether the use of technology, along with other factors may influence individual financial well-being. Results indicate that the majority of college students use technology to manage personal finances. Personal computer, smartphone, and cell phone (not internet enabled) were rated highest in use. When managing their finances, almost half of the sample reported using two different devices, while the proportion of students using one and two technology based applications were 32.08% and 33.33%, respectively. While college students exceed in their use of technology, results also showed that they both lack financial knowledge and they tend to overestimate their knowledge of personal finances. Whereas, confidence in managing their finances and credit card use behaviors were two strong predictors of financial well-being, financial behaviors using technology did not predict financial well-being. Understanding the significance of technology use in money management practices of college students provides parents, financial professionals, and educators with relevant tools to promote better money management practices.

References

Brown, A., Dodini, S., Gonzalez, A., Merry, E., & Thomas, L. (2015). Consumers and mobile financial services 2015. *Board Governors Federal Reserve Syst., Washington, DC, USA, Tech. Rep*.

De Blasio, B., & Menin, J. (2015). From cradle to cane: the cost of being a female consumer. A study of gender pricing in New York City. *The New York Department of Consumer Affairs*.

Hernández-Murillo, R., Llobet, G., & Fuentes, R. (2010). Strategic online banking adoption. *Journal of Banking & Finance*, *34*(7), 1650-1663.

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Debt, Religion, and Life Satisfaction

David Allen Ammerman, West Texas A&M University, Cherie Stueve, Kansas State University, Stephen Hayward, West Texas A&M University

Abstract

The purpose of this study was to explore religious factors as a resource for coping with indebtedness. Using a sample (*n* = 3,405) extracted from the Health and Retirement Study (HRS), we examined the relationship between household debt and life satisfaction, and tested for stress-buffering (i.e., moderation) from religiosity and prayer frequency across subsamples stratified by self-identified religious preference. Results suggest that prayer frequency moderates the negative association between debt and life satisfaction for Protestant Christians, but not for groups with other religious beliefs. Implications for practice (particularly faith-based providers of financial counseling) and recommendations for future research are discussed.

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Does Foreclosure Counseling Matter to Delinquent Homeowners?

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Key words: delinquency, foreclosure, housing

Since the Great Recession, US households have experienced significant housing instability and faced foreclosure. The incidence of foreclosure can result from an unpaid mortgage, second mortgage, or unpaid property taxes (MSU Extension, 2015). According to April 2018 data, 1 in 2058 US households experience foreclosure (RealtyTrac, 2018). To offer support, local communities, in partnership with the federal government, non-profits, and state housing authorities offer foreclosure counseling and prevention services to struggling homeowners. In one Midwestern community, a unique partnership has emerged between a local HUD-certified housing counseling agency and the local Treasurer's Office to provide financial counseling to all homeowners who are three years' delinquent on property taxes and entering foreclosure. Each participant is offered a 12-month extension on repaying their delinquent bill if they agree to enter counseling and receive education from a HUD-certified counseling agency and make timely monthly payments. Between 2016 and 2017, 265 households have taken advantage of this program. Thus, the purpose of this poster was to evaluate the effectiveness of the intervention to see if participants who received education and counseling from a HUD certified counselor are better able to repay their delinquent payment and avoid foreclosure.

In collaboration with the local Treasurer's office and the HUD counseling agency, the researchers reviewed and analyzed 265 client case files who were delinquent due to unpaid property taxes and participated in a HUD certified counseling session between January 1, 2016 and December 31, 2017. Key factors assessed included client demographics (income, race/ethnicity, gender, age, marital status, and education), key financial ratios (i.e front and back end) and each client's financial hardship and cause of delinquency (income reduction, unaffordable housing costs, medical, non-housing debt, and other circumstances such as divorce or death of spouse). Using these factors, the investigators evaluated how these indicators predicted if a client was successful in repaying their debt to the Treasurer's Office.

This poster is of primary interest to both researchers and practitioners. This unique partnership offers insight to assess the question of if interventions for foreclosure clientele are effective and closes the gap between practitioner client files and the intended outcome of clients who access those services. In addition, this poster advises practitioners who work with struggling households around foreclosure and presents a unique approach to providing a key service for families in need. This type of data is not generally available to most non-profit counseling agencies. Thus, this research provides a unique contribution to the literature.

References

MSU Extension (2014). Knowing Your Rights and Responsibilities Online Toolkit. Retrieved from: http://msue.anr.msu.edu/uploads/234/69603/GMI_010-6 Knowing_Your_Rights__Responsibilities_AA.pdf

RealtyTrac (2018). US Real Estate Trends and Market Info. Retrieved from: https://www.realtytrac.com/statsandtrends/foreclosuretrends/

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Economic Well-Being of Single Mothers in the United States: An Application of an Ecological Systems Approach

Sarah M. Ellis, Jorge Ruiz, PhD, and Martie Gillen, PhD, University of Florida, Travis Mountain, PhD, Virginia Tech University

Key words: economic well-being, financial risk tolerance, future orientation, single mothers, personal financial knowledge

Prior research on single mother households and their economic well-being have reported that factors, such as education and employment status, significantly influence economic well-being. The present study seeks to expand the extant body of knowledge by examining the impact of additional ecological factors, i.e., future orientation, risk tolerance, and personal financial knowledge on the economic well-being of single mother households. Our results show that the ecological factors risk tolerance and future orientation are significant determinants of economic well-being.

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Effects of Value-Based Financial Literacy on African-American Families

Demitri McGee, University of Minnesota

Key words: African American families, budgeting, credit, financial literacy, financial management, Minnesota, poverty

Approximately 90% of African Americans between the ages of 25 and 75 years old will experience poverty for at least a year (Drake & Rank, 2009). Meyer (2003) suggests that stigma, prejudice, and discrimination create a hostile and stressful social and economic environment for minority groups. A study conducted by Drake and Rank, (2009) indicated that by just living in high-poverty neighborhoods raises the chances of one developing mental and physical health problems. Barton & Bryant (2016) also found that financial strains were the leading cause of family conflict. Research suggests that community based financial education programs may improve the lives of families who participate (McGee & Bruin, 2016). The purpose of this study is to assess the impact of one such community program, the Family Stabilization Plan (FSP).

FSP, is a program provided by Build Wealth Minnesota (BWM). The program is offered in partnership with a network of financial institutions, social service providers, faith-based groups, churches, state and city government agencies and other community groups. The FSP program offers financial interventions that rely on a value-based applied learning delivery model. This value-based applied learning delivery model approach to financial planning is based on what is of importance to individual participants. FSP generally serves low-to moderate income families, primarily African/ African American heritage, that reside in underserved communities. At the core of this delivery model is a combination of two vital parts; short term financial education and long term one on one coaching which typically last up to two years. This allows for an in-depth long-term comprehension of materials in a culturally relevant manner.

The guiding framework for the study is grounded in the Family Stress and Resilience Theory (FSRT), positing that all individuals experience stressors and crisis that challenge their ability to deal with everyday life (Allen & Henderson, 2017). A key assumption of the theory is that families have the capacity to display resilience and create solutions by seeking support when needed. FSRT suggest that the process of how families prepare for, deal with and learn from stressful situations contribute to positive or poor outcomes. From this perspective, families who participate in FSP will strengthen their capacity to manage their finances.

The data collected for the present study is drawn from spring 2014 FSP participants. The participants took a pre-test upon enrolling into the program. A posttest was taken 2 years later during the spring of 2016. Seventy-five participants were recruited through email using convenience sampling. Ninety-five percent of FSP participants were African American; 49% were single, 42% married, 7% divorced and 2% engaged. Eighty-three percent of participants had children. Fifty-three percent of participants were homeowners, 42% were renters and 5% did not own a home or rent. The average monthly income ranged between \$0-\$2,074. Twenty-four additional individuals were selected as a comparison or control group. The participants of the control group closely resembled the demographic variables of the program participants but had not completed the FSP program.

Participants were monitored over a two-year period that ended in the spring of 2016. Self-reported data on financial conditions and outcomes were collected via an online survey. Participants were asked to respond to fill-in-the blank questions. Sample questions included “What is your approximate average monthly household income?”, and “What is your approximate credit score?”. Control group participants completed identical surveys, minus questions that evaluate program perception, via online survey.

Preliminary Results

A series of paired sampled t-test were conducted to assess change in financial conditions and compare group outcomes. According to participant self-report data participants experienced the following changes in financial conditions…

- Participants of the FSP had a larger increase in income than control group participants;
    - Pre-test FSP participant income ($M = 1.68$, $SD = .932$), post-test participant income ($M= 2.11$, $SD = 1.133$); $t(71)= -3.326$, $p=.001$).

  - Pre-test control group participant income (M = 1.54, SD = .738), post-test control participant income (M= 1.95, SD = 0.653); t(21)= -2.247, *p*=.036).
- Participants of FSP had a significant increase in their credit score, while participants of the control group did not have a significant increase in their credit score;
  - Pre-test FSP participant credit score (M = 1.97, SD = 1.067), post-test FSP participant credit score (M= 2.91, SD = .924); t (65) = -7.367, *p*=.000).
  - Pre-test control group credit score (M = 2.18, SD = 1.14), post-test control participant credit score (M= 2.5, SD = .96); t (21) = -1.5, *p*=.148).
- Participants of FSP had a 13.62% increase in homeownership rates, while participants of the control group remained the same.

Discussion

These preliminary results suggest that a value-based intervention, such as the FSP program, is an effective learning delivery model for African/ African American participants. On average financial conditions improved for FSP participants at a higher rate than participants that have not gone through the FSP program. The combination of financial education and ongoing coaching may offer a pathway out of chronic financial strain to more financial stability for low-income African/ African American Families.

References

Allen, K., & Henderson, A. (2017). Family Stress and Resilience Theory. *Family Theories: Foundations and Applications,*209-229.

Barton, A. W., & Bryant, C. M. (2016). Financial strain, trajectories of marital processes, and African American newlyweds' marital instability. Journal of Family Psychology, 30(6), 657-664.

Drake, B., & Rank, M. (2009). The racial divide among American children in poverty: Reassessing the importance of neighborhood. Children and Youth Services Review, 31, 1264–1271.

McGee, D., & Bruin, M. (2016). The Various Outcomes of a Comprehensive Values-Based Financial Literacy Program. Consumer Interests Annual,62.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin,129*(5), 674-697. doi:10.1037/0033-2909.129.5.674

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Equity Ownership of Older Workers across Income Levels

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Key words: financial education, financial investment, older workers, retirement savings, stocks

There is a lack of information about to what extent income level relates to owning equities among older workers approaching retirement. Concern is emerging about the growing gap in financial well-being between the lower- and upper-income classes, based on evidence that many families with lower income reported little or no stock ownership. While investing in stocks can provide high returns, it is risky and can be viewed as a challenging method for some individuals. This study attempted to identify who is more or less likely to own equities among older workers. Considering extended life expectancy, examining the relationship between income levels and equity ownership among older workers could have important implications for financial educators and professionals.

Using data from the 2014 RAND HRS which is a user-friendly version of a subset of the HRS, older workers aged between 51 and 66 and currently working in the labor force were included as study sample. F-tests and chi-square tests were accomplished to compare the differences in financial asset portfolios across income percentiles (Bottom 10th, bottom 40th, middle 40th, and top 10th percentiles). Logistic regression analysis was performed to examine the effect of income quartiles on the likelihood of holding equity assets for the whole sample. As a main dependent variable, an equity variable was created by summing two categories: IRAs/401(k)s and stocks. If a respondent had answered "yes" to either one of the two categories, retirement or stock accounts, it was coded 1, and 0 if otherwise. This dichotomous (binary) variable was included in the logistic regression model. Independent variables in the empirical model include the following variables: income percentiles, hourly wage rate, years of formal education, years of job tenure, employment status, perceived health, number of chronic illness, age, gender, race, marital status, having life insurance, and having a long-term care insurance.

The descriptive results reveal that only 36.7% of the older workers owned either IRAs/401(k)s or stocks and the average level of equities was $42,834 among those who owned equities. When the dollar amount and percentage of ownership in equity assets was compared across four income groups, the F-tests showed significant differences in the average value in equities. Specifically, the average level of dollar amount in equities for the top 10th group was $104,476, while that for the bottom 10th group was $5,533. As expected, equity ownership was relatively low for both bottom 10th and middle 40th groups. For example, only 7.8% of bottom 10th group owned equities, and 24.1% of bottom 40th group owned equities. On the other hand, about a half of the top 40th group owned equities, and about 67% of the top 10th group owned equities. Logistic regression results showed that all else being equal, older workers in the bottom 40th, middle 40th, and top 10th groups were more likely to hold equity accounts than the bottom 10th group. The logistic regression results also noted that education, work experience, health status, and marital status were statistically significant in predicting equity ownership among older workers.

This study indicates that there were striking differences in the equity ownership across income levels among older workers. The findings of this study suggest that, all else being equal, the higher income group was more likely to hold equities among older workers aged between 51 and 66. The findings of this study imply that financial education courses that teach low-income families the basics of investments (e.g., keep perspective, keep investing, diversified portfolio) could help low-income families to choose investment options that build wealth over a long-term period. The findings also imply that teaching guiding principles of investing designed for minority workers (e.g., those with lower levels of education, less job market experience, or unmarried workers) is crucial to help them financially prepare for retirement.

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Examining the Influence of Parental Financial Socialization on Young Adults in a Romantic Relationship

Yiting Li, M.A., Joyce Serido, Ph.D. MBA, Virginia S. Zuiker, Ph.D. AFC, University of Minnesota, and Soyeon Shim, Ph.D., University of Wisconsin-Madison

Key words: couples, emerging adulthood, financial behaviors, financial relationship satisfaction, financial socialization

Parents play an important role in shaping their children's financial behaviors (Jorgensen, & Savla, 2010; Shim, Barber, Card, Xiao, & Serido, 2010; Xiao, Ahn, Serido, & Shim, 2014). However, within the financial domain, parental influence on a young couple's financial relationship has not been examined. Extending *family financial socialization* theoretical framework, the authors examined the financial socialization influence of both parents and romantic partners on a young adult's financial behavior and in turn, how these socializing factors affect the young adult's perception of the couple's financial relationship using one wave (Wave 3) of the Arizona Pathways to Life Success for University Students (APLUS) data collected from a sample of young adults who were in a committed relationship (N = 274).

Using structural equation modeling, results showed that parental financial socialization and partner financial behaviors had a positive and direct effect on young adults' financial behaviors. In addition, results also showed that early parental financial socialization had a non-significant effect on young adults' current financial relationship, but partner financial behaviors had a positive and direct effect on young adults' financial relationship. The findings fill a gap on family financial socialization of young couples, indicating that parents are not the only financial socializing influence in young adults' lives and romantic partners become an important influence regarding financial matters.

Financial professionals who work with young couples might consider thoroughly how to offer financial education and services in multiple ways so as to match the different family and financial situations that said young adults represent.

References

Jorgensen, B. L., & Savla, J. (2010). Financial literacy of young adults: The importance of parental socialization. *Family Relations*, *59*, 465-478. doi: 10.1111/j.1741-3729.2010.00616.x

Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of family, work, and education. *Journal of Youth and Adolescence*, *39*, 1457-1470. doi: 10.1007/s10964-009-9432-x

Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies.* Advance online publication.

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Financial Education Needs of Immigrant Women: A focus on Caribbean Immigrants in the United States

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Key words: financial education, first-generation, immigrant, women

Immigrant women face multiple unique challenges to their financial well-being (Vesely, Goodman, Ewaida & Kearney, 2015). Immigrants also are more likely to be without a checking or savings account when compared to native-born Americans (Bohn & Pearlman, 2013; Herrick, 2009; Rhine & Greene, 2006). Furthermore, research on gender and money management has shown that women are less likely to understand financial concepts, and they often have lower risk tolerances than men (Bucher-Koenen et al., 2017; Fisher et al., 2017). This research project focuses on the financial education needs of Caribbean immigrant women in an effort to understand how financial education programs should be tailored to support their short-term and long-term goals.

This research project utilizes qualitative data from a study that focused on the banking experiences of first-generation, Afro-Caribbean, immigrant mothers in the United States. The primary goal is to explore how these immigrant women perceive and understand their financial lives in the US and what they hoped they had learned about money management prior to moving to the United States. The guiding research questions are: (a) what are the financial education needs of Caribbean immigrant women who have lived in the United States for ten years or longer? (b) How could exploring the needs of these immigrants help educators create effective financial education programs for immigrant populations? Semi-structured, in-depth interviews were conducted with ten first-generation, Caribbean immigrant women. This study employed Family Life Course theory to explore how they developed skills and knowledge about money management in the US.

Analysis of these questions suggested that financial education efforts should expand to focus on a wide range of money management techniques that include choosing the right financial services that match their goals. Notably, their goals may differ from traditional approaches to money management in the US. A focus on cultural nuances and understanding of different the approaches to personal finance could facilitate cultural competency around money for financial professionals. This also may influence effective delivery of financial education for immigrant populations.

Furthermore, the results show that immigrant women have a keen awareness of money management strategies that influence their overall financial health and wellness in the US. Based on these analyses, it is important to acknowledge that immigrant women required educational services that cover basic financial topics such as saving and choosing the right financial tools. They also need educational programs that focus on the implications of using formal or informal financial services. More research is required to design effective educational programs that support their day-to-day money management needs and financial goals. Future research should incorporate large-scale, longitudinal data to examine how behaviors may change over time and how financial education efforts support long-term outcomes for Caribbean immigrants.

References

Bohn, S., & Pearlman, S. (2013). Ethnic concentration and bank use in immigrant communities. *Southern Economic Journal, 79*(4), 864-885.

Bucher-Koenen, T., Lusardi, A., Alessie, R. & Van Rooij, M. (2017). How financial literate are women? An overview and new insights. *Journal of Consumer Affairs, 51*(2), 255-283.

Fisher, P. J., & Yao, R. (2014). Gender differences in financial risk tolerance. *Journal of Economic Psychology, 61*, 191-202.

Herrick, M. (2009). *Banking the unbanked: alternative financial services attract immigrants*. Lanham: Federal Information & News Dispatch, Inc.

Rhine, S. L. W., & Greene, W. H. (2006). The determinants of being unbanked for U.S. immigrants. *The Journal of Consumer Affairs, 40*(1), 21-40.

Vesely, C. K., Goodman, R. D., Ewaida, M., & Kearney, K. B. (2015). A better life? Immigrant mothers' experiences building economic security. *Journal of Family and Economic Issues, 36*(4), 514-530.

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Financial Knowledge and Stress: Making the Case for Targeted Graduate Financial Education

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Key words: financial education, financial knowledge, financial stress, graduate students

Abstract

Unprecedented educational debt levels and a lack of financial knowledge among undergraduate students has led many U.S. colleges and universities to develop financial education programs. However, there remains a significant unmet need when it comes to investigating the need for and providing financial education for *graduate* students. Graduate students represent a unique demographic within higher education and experience challenges distinct from those faced by traditional undergraduate students. Among the numerous stressors encountered by graduate students, one particular source of concern is managing the financial aspect of their multidimensional lives. This study explored the level of financial knowledge and the relationship between financial knowledge and financial stress among graduate students. Data was collected from a sample of graduate students at a large, public university in the southeast, and an OLS regression was used to model the outcome of financial stress as a dependent variable. Results suggest that financial knowledge is negatively related to financial stress, with knowledge about inflation and taxes being significantly associated with lower financial stress levels. Conversely, results suggest that perceived financial knowledge is positively and significantly related to financial stress. Discussion of results and implications for developing targeted financial education programs are presented.

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Financial Management Behaviors, Financial Concerns, and Relationship Happiness: A Comparison of Married and Cohabiting Respondents

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Financial issues differentiate between married and cohabiting couples. For example, financial stability is a key predictor whether couples will marry, with lower-income couples citing finances as a barrier for marriage (Dew, 2016; Gibson-Davis, 2009; Smock et al., 2005). Research has also demonstrated married couples have greater wealth and assets than cohabiting couples (Dew & Eggebeen, 2010; Mauldin et al., 2009). Financial pooling is often cited as a reason for this difference, as married couples are more likely to pool finances than their cohabiting counterparts (Heimdahl & Houseknecht, 2003). This pooling allows couples to take advantage of interest earnings (Dew, 2016) and potential tax advantages. While pooling is an important financial behavior to consider, might there be other behaviors that differentiate married and cohabiting couples?

As finances have also been linked to relationship well-being (Britt & Huston, 2012; Dew, 2007), examining financial management behaviors may be an important area of study. Positive financial management behaviors are related to greater financial satisfaction and lower financial concerns (Dowling et al., 2013) and mediate the relationship between financial concerns and relationship happiness (Dew & Xiao, 2013). Maintaining positive financial behaviors during times of economic uncertainty may also provide a buffer against financial stressors. Unfortunately, high levels of debt and low levels of savings place people in precarious situations, as highlighted by the recent economic recession (Rhee & Boivie, 2015). The current study explores whether there may be differences in how married and cohabiting respondents practice financial management behaviors, namely those related to cash, credit, savings, and insurance, and how these behaviors relate to debt and asset accumulation, financial concerns, and relationship happiness.

Using data from the Familial Response to Financial Instability Study (Dew & Xiao, 2011), the sample for the current study consists of 576 married (n = 489) and cohabiting (n = 87) participants. The results of this study suggest, among married respondents, the majority of management behaviors are related to debt and asset accumulation and financial concerns, while credit management and consumer debt are related to their relationship happiness. Among cohabiting participants, savings behaviors are related positively to asset accumulation, while insurance is related positively to consumer debt, suggesting cohabiters may be taking on debt to cover their insurance needs. Consumer debt is related negatively to financial concerns, but no variables examined are related to relationship happiness among cohabiters.

The results of the current study suggest potential differences in financial behaviors among married and cohabiting participants. These findings may suggest an important financial avenue for counselors and educators to discuss with couples approaching marriage. Among cohabiting couples, finances may not influence perceptions of relationship quality, but the financial state may present a barrier towards marrying. Promoting positive management behaviors may improve the financial state and assist couples in overcoming this barrier as they progress towards marriage. While promising, the current study is exploratory in nature and needs a longitudinal examination to better understand potential similarities and differences in financial management behaviors over time and how these behaviors and influences change over time.

References

Britt, S. L., & Huston, S. J. (2012). The role of money arguments in marriage. Journal of Family and Economic Issues, 33, 464-476. DOI 10.1007/s10834-012-9304-5.

Dew, J. P. (2007). Two sides of the same coin? The differing roles of assets and consumer debt in marriage. Journal of Family and Economic Issues, 28, 89-104. DOI: 10.1007/s10834-006-9051-6.

Dew, J. P. (2016). Revisiting financial issues and marriage. In J. J. Xiao (Ed.), *Handbook of Consumer Finance Research* [2nd Edition] (pp. 281-290). Switzerland: Springer International Publishing AG.

Dew, J. P., & Eggebeen, D. (2010). Beyond the wage premium: Fatherhood and men's asset accumulation. *Research in Human Development, 7*, 140-158. doi: 10.1080/15427609.2010.481541

Dew, J. P., & Xiao, J. J. (2011). The financial management behavior scale: Development and validation. Journal of Financial Counseling and Planning, 22(1), 43-59.

Dew, J. P., & Xiao, J. J. (2013). Financial declines, financial behaviors, and relationship satisfaction during the recession. Journal of Financial Therapy, 4, 1-20. DOI10.4148/jft.v4i1.1723.

Dowling, N. A., Corney, T., & Holies, L. (2013). Financial management practices and money attitudes as determinants of financial problems and dissatisfaction in young male Australian workers. *Journal of Financial Counseling and Planning, 20*(2), 5-13.

Gibson-Davis, C. M. (2009). Money, marriage, and children: Testing the financial expectations and family formation theory. *Journal of Marriage and Family, 71*, 146-160. doi: 10.1111/j.1741-3737.2008.00586.x

Heimdahl, K. R., & Houseknecht, S. K. (2003). Cohabiting and married couples' income organization: Approaches in Sweden and the United States. *Journal of Marriage and the Family, 65*(3), 525-538.

Mauldin, T., Mimura, Y., & Wilmarth, M. J. (2009). Savings behavior among cohabiting, married, and single parents. *Consumer Interests Annual, 55*, 117. Retrieved from https://acci.memberclicks.net/assets/docs/CIA/CIA2009/2009_mauldin.pdf

Rhee, N., & Boivie, I. (2015). *The continuing retirement savings crisis*. Washington, D.C.: National Institute on Retirement Security. Retrieved from the UC Berkeley Labor Center website: http://laborcenter.berkeley.edu/pdf/2015/RetirementSavingsCrisis.pdf

Smock, P. J., Manning, W. D., & Porter, M. (2005). “Everything’s there except money”: How money shapes decisions to marry among cohabitors. *Journal of Marriage and Family, 67*, 680-696. doi: 10.1111/j.1741-3737.2005.00162

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Household Collective Decision-Making and Consumer Debt

David Allen Ammerman, West Texas A&M University, Maurice MacDonald, Kansas State University

Abstract

This study explored the determinants of consumer borrowing by a couple as a function of collective bargaining between two partners with different intertemporal preferences. An accountant-shopper collective bargaining framework was developed for this purpose. A sample of households was extracted from *De Nederlandsche Bank* Household Survey, which allows for dyadic data analysis. Logistic regression was used to model the likelihood of a household reporting the use of consumer debt. Consistent with theoretical predictions, the bargaining power of the future-oriented accountant had a negative influence on the use of consumer debt; and the bargaining power of the present-oriented shopper had a positive influence on the use of consumer debt. Several implications for future research are discussed.

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Integrated Personal Finance: Treating Chronic Financial Trauma with Narrative Financial Therapy

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Key words: behavioral finance, counseling, integrated personal finance, trauma, relationships

Abstract

What is financial trauma? Money remains a taboo topic in culture and relationships. Pain saturated narratives center on money for many individuals, couples, and families. Various forms of trauma influence the development and breaking of neuro pathways within the brain, which then directly affects the decision making process. A hallmark of psychological trauma is a distortion in sense of self and a fundamental shift in psychophysiology, and in turn, this shift impacts impulse regulation through changes in the limbic region of the brain that manages affect regulation. This emotional influence limits couples' ability to address necessary financial conversations. Financial traumas often interrupt individual's and couples' ability to develop and maintain secure attachments in their relationships, and can become dysregulating in the lives of those individuals and couples as their traumas are explored.

The purpose of the current program of practice is to discuss the current research literature concerning psychological and financial trauma and its relationship to financial management behaviors. A financial counseling case vignette is analyzed to illustrate the impact of financial trauma on maladaptive financial management behaviors and relationships, as well as demonstrate an integrated form of personal finance practice to address financial trauma through a narrative financial therapy and counseling framework.

Addressing financial trauma is a complex process. Financial trauma also does not exist in a vacuum, but occurs within complex interlocking systems of social structure and meaning. This increases the need for adept and integrative financial counseling practices to understand the client's internal cognitive and affective structures, as well as understanding how stressors, psychological and emotional trauma, and financial management behaviors may be associated with one another. These relationships are often circular and chronic in nature.

Financial counseling practitioners utilizing a trauma-informed focus from a narrative financial therapy understanding of financial pathology will begin to destigmatize guilt and shame bound client narratives about inabilities to maintain positive financial and relational well-being. Financial counselors should use integrative methods from financial counseling and therapeutic disciplines to provide a systemic framework for understanding and addressing financial trauma. The primary elements of deconstruction, externalizing problems, and mapping from an interpersonal and holistic lens creates pathways for financial counselors to work with clients. These interpersonal relationship dynamics should be understood through narratives related to objective and subjective views of money, intergenerational processes, financially-related experiences, future relationships, and financial plans. Financial counselors must also understand the potential ethical and professional practice implications associated with working through financial traumas.

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Mortgage Debt in Retirement during 2000-2014

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Key words: financial education, homeowners, mortgage debt, retired elderly, retirement well-being

Typically, many homeowners have a financial goal of paying off their mortgage as they approach their retirement. The questions could be asked: Why do they still hold a mortgage? Who are they? The main objective of this study was to identify a profile of mortgage debtors among the retired elderly during the 2000-2014 period. Additionally, this study examined the trend of their mortgage debt behavior during this time period. This study focused on older homeowners who have retired from the labor force and who were 65 years or older. The findings of this study could provide financial professionals with information regarding socio-economic characteristics of homeowners who hold mortgage debt during their retirement years. Further, exploring factors associated with holding mortgage debt can provide implications for financial educators and insights for researchers and policy makers.

Using data from the 2000-2014 Rand Health and Retirement Study (HRS), the difference in socio- economic characteristics among retired individuals between those who hold mortgage debt and those who do not was examined by using T-tests and chi-square tests. Logistic regression analyses were performed to identify significant predictors associated with the likelihood of holding mortgage debt in retirement years. A binary variable (1 if respondents reported holding mortgages, 0 if otherwise) was created as a main dependent variable, and was included in the logistic regression models. To examine the effects of socio-economic characteristics on likelihood of holding mortgages, household income, family size, value of home, amount of consumer debt, age, education, gender, health status, race, marital status, and region were included as independent variables in the logistic regression models. The descriptive results indicated that the percentage of households over 65 who were still holding mortgage debt was 15.4% in 2000, 16.1% in 2002, 16.5% in 2004, 16.5% in 2006, 17.0% in 2008, 17.4% in 2010, 17.4% in 2012, and 17.4% in 2014. The results of logistic regression analyses show that those with a larger family size, greater home value, higher outstanding consumer debt, higher education (some college or more), and Black were more likely to hold mortgage debt during retirement, compared with those with a smaller family size, lower home value, lower consumer debt, less education, and White.

The largest financial asset of people over 65 is often their home, but it can also be a drain on their financial resources. Thus, understanding to what extent retirees hold mortgage debt and who they are could be important. There may be several reasons as to why individuals during retirement hold mortgage debt. One possible reason of holding mortgage debt in retirement could be an inability to pay off the debt. Another possible reason could be that retired elderly with financial knowledge intentionally wanted to hold mortgage debt for tax benefit purposes. A third reason could be that some elderly do not have much knowledge as to what could be their best solution given their financial circumstances. According to the findings of this study, there has been a rise in mortgage debt over the past decade, which could have implications for financial educators and policy makers. Because of the increasing costs of medical expenses and living expenses, monthly mortgage payments for the financially less savvy group could cause a financial burden or stress during retirement. In contrast, there might be another group of retired individuals who have more financial knowledge and use a mortgage for tax benefits or decide to put their resources into investments. The latter group could be able to control their finances and tolerate mortgage debt because they use mortgage debt for their ultimate financial benefit. Regardless of which group, further discussion on this this research topic is needed. While looking into retired elderly circumstances, personalized help might be necessary from financial counselors to meet the needs of those who do not know what to do about paying off their mortgages. Further, financial planners could develop and identify some strategic plans that could help or guide those who are holding mortgage debt with tax avoidance purpose, especially given the new tax law changes.

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Outcomes of a Virtual Professional Development Seminar

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Key words: online training, professional development, virtual professional development

Abstract

Financial professionals continue to seek opportunities to expand their knowledge and receive relevant information. This must be done in a manner that is cost effective and convenient. With increased capabilities of technology, opportunities exist to provide professional development online. Members of this Extension team were able to accomplish this task by providing a one day seminar that included six nationally recognized speakers.

The challenges of hosting an in person professional conference are multifaceted. Increasing complexity makes it is necessary to seek a professional service that deals with contracts, registration, meals, and hosting an event. This often leads to an increase in conference registration fees which creates a barrier for participation. In addition, you need to identify a location that is attractive and convenient. In doing so, you create financial barriers for participants through airline and hotel costs.

Virtual seminars provide relevant content without the additional costs of travel and lodging. According to the Training Industry Report (*Training*, 2017), 28% of training hours were delivered online or computer based technologies. Research supports positive outcomes with online delivery of education (Shea & Bidjerano, 2010). In our case, we were able to provide a professional seminar online for one third of the cost of hosting the conference the previous year at a hotel. Participants were able to save in travel, hotel, and meal costs.

The virtual professional development seminar involved 107 participants using the WebEx platform. Results indicate an increase in the extent to which participant's felt comfortable learning via a web based format after the conference. Before the conference 83% of participants (n=53) always or felt quite a bit comfortable learning via a web based format. After the conference 88% of participants (n=78) always or felt quite a bit comfortable. Post survey results indicate that 62% of participants (n=74) learned ways to support the financial health and economic success for all people. Similarly, 62% of participants (n=74) learned tools and techniques for use in financial education and counseling. When ask if participants planned to apply knowledge and/or skills gained with clients, 80% (n=70) indicated yes.

Hosting a professional development seminar can be accomplished in a virtual seminar at one third of the cost of a traditional conference. Results of participant surveys indicate an increase of knowledge, material that can be used with their clients and a comfort in using virtual for professional development.

References

Shea, P. & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of communities of inquiry in online and blended learning environments. Computers & Education, 55(4), 172101731.

Training (2017). 2017 Training Industry Report. Retrieved from https://trainingmag.com/trgmag-article/2017-training-industry-report/

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Positive Health and Financial Practices: Do Diet, Sleep, and Physical Activity Make a Difference?

Barbara O'Neill, Rutgers University

Key words: health, personal finance, wealth

This poster will describe a study of the relationship between three health-related practices, diet, sleep, and physical activity, and performance of ten positive personal finance practices. It was conducted to extend the work of Carr et al. (2015), who did not find an association between healthy eating or regular physical activity and five personal finance practices related to retirement planning. This study adds to existing literature by exploring relationships between a wider variety of health and financial practices.

Methods/Research

The hypotheses tested by this study were that respondents who report higher diet index, sleep, physical activity, and time index (sleep and physical activity combined) scores would have higher financial behavior scores than others. Data came from a 20-question online assessment tool that provides a simultaneous assessment of individuals' health and financial practices. This instrument has been used previously to study relationships between health and personal finances (O'Neill, Xiao, and Ensle, 2016). Respondents indicated one of four frequencies for self-assessed performance of health and financial behaviors: 1= Never, 2= Sometimes, 3= Usually, and 4= Always. The sample included responses received from July 1, 2015 through June 30, 2017. After excluding 85 non-U.S. residents from the original sample of 8,213 respondents, 8,128 observations were used. Male (48.8%) and female (51.2%) respondents were almost equally divided. The sample was primarily White (74.3%) and had a slightly higher educational and income level than typical Americans.

Results/Discussion

Mean values of the four health variables, sleep, physical activity, time index, and diet index, were 2.76, 2.77, 2.59, and 2.76, respectively. The mean value of the 10-question financial behavior index was 26.74 out of a possible score of 40. OLS regressions were used to examine associations between financial behavior and health behavior, controlling for demographic variables. In the *first model*, the independent variables were diet and time, plus demographic variables as controls. Both diet and time variables had positive associations with financial behavior. The coefficient estimate of the diet variable was more than triple the size of that of the time variable, suggesting that diet behavior has a greater association with financial behavior than the time variable, which is an index of sleep and physical activity combined. The *second model* was similar to the first except that it used the sleep and physical activity variables instead of the time index variable. After controlling for the demographic variables, the three health variables (diet, sleep, and physical activity) still showed significant associations with financial behavior.

Conclusions/Implications

There were positive associations found between financial practices and three key health practices: diet, sleep, and physical activity. Thus, health care conversations should be part of financial education and planning programs. Asking students or clients "Tell me what you do to take care of your health" is a good way to begin a conversation about relationships between health and personal finances.

References

Carr, N.A., Sages, R.A., Fernatt, F.R., Nabeshima, G.G., & Grable, J.E. (2015). Health information search and retirement planning. *Journal of Financial Counseling and Planning*, 26(1), 3-16. Retrieved from http://afcpe.org/assets/pdf/volume_26_1/pages_3-16.pdf

O'Neill, B., Xiao, J.J., & Ensle, K. (2016*). Propensity to plan: A key to health and wealth?* Journal of Financial Planning, 29(3), 42-50. Retrieved from https://www.onefpa.org/journal/Pages/MAR16-Propensity-to-Plan-A-Key-to-Health-and-Wealth.aspx

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Promoting Financial Wellness in Faith Communities Using the Social Ecological Model

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Key words: faith-based organizations**,** financial counseling, Social Ecological Model

Individuals experiencing financial difficulties often turn to religious organizations for help (Sneed, et.al, 2011). Faith leaders and volunteers need to know how to provide care and guidance through the accurate assessment of their financial situation and take appropriate action steps. Volunteers need to have the resources to implement a plan for stability, an understanding of financial services, and the skills to navigate sensitive money conversations. Faith-based organizations such as churches, synagogues, and mosques have as their core mission the spiritual well-being of their attendees. However, as they seek the greater good, this mission frequently intersects with public service, helping and empowering the needy, and family and community engagement (Daniels & Gustafson, 2016).

The social ecological model (SEM) provides a framework for mediating individual behavior change through the influence of interpersonal, organizational, community, and policy environments for sustained success. SEM is broadly applied in public health interventions. Additionally, religious practice and participation in a religious organization are associated with protective health behaviors (Williams & Sternthal,2007). SEM can also be applied to the financial well-being of individuals and is well suited to faith communities due to existent interpersonal connections, community support, values-based policies, and trust (Hermstad, et al., 2018) (Hira, 2012).

The study presented in this poster has two objectives:

- to investigate and evaluate evidence that the Consumer Financial Protection Bureau's (CFPB's) financial empowerment model for training social workers and other front-line workers is also efficacious for volunteers in faith-based organizations.
- to measure changes in financial knowledge, skills, and confidence of faith-based community members who receive counseling from workshop attendees.

In this preliminary study, a group of 15 volunteers from a congregation of 100 attended a two-hour training workshop using selective modules from Your Money, Your Goals, (YMYG) a Financial Empowerment Toolkit designed by the CFPB. Attendees had a goal to then counsel remaining congregants.

An assessment of pre- and post-training evaluations confirmed that workshop participants experienced increased financial knowledge as well as increased confidence in providing financial empowerment counseling. Guided focus groups are planned to gather qualitative data from their counselees. However, there were challenges. The volunteers were inadequately prepared to implement a formal counseling program, and faced obstacles agreeing on policies and guidelines. This lesson presented an opportunity for revision in our study procedures so that future workshops will be extended to include program implementation strategies. With qualified volunteer training, religious organizations can increase their ability to play a central role in the financial wellness of individuals and communities.

References

Daniels, J. R., & Gustafson, J. N. (2016). Faith-based institutions, institutional mission, and the public good. *Higher Learning Research Communications, 6*(2), 91-101. doi:10.18870/hlrc.v6i2.300

Hermstad, A., Honneycutt, S., Flemming, S., Carvalho, M., Hodge, T., Escoffery, C., Arriola, K. (2018). Social environmental correlates of health behaviors in a faith-based policy and environmental change intervention. *Health Education and Behavior*. 1-10. DOI:10.1177/1090198118757826

Hira, T. (2012). Promoting sustainable financial behavior: implications for education and research. *International Journal of Consumer Studies*, 36(2012), 502-507. DOI:10.1111/j.1470-6431.2012.01115.x

Sneed, C., Wise, D., Berry, A.A., Gault, J. (2011). Faith and finance: Empowering faith leaders to care for congregants in financial crisis. *The Forum for Family and Consumer Issues.* NC State University. Retrieved from https://projects.ncsu.edu/ffci/publications/2011/v16-n2-2011-winter/sneed-wise-berry-gault.php

Williams, D. R., & Sternthal, M. J. (2007). Spirituality, religion and health: Evidence and research directions. Medical Journal of Australia, 186(10 Suppl), S47.

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Recent Changes Make it More Beneficial for Financial Professionals to Partner with Housing Professionals

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Key words: financial counseling, financial management, home ownership, housing counseling,

Housing is typically an individual's largest monthly expense, and a mortgage is typically the largest debt incurred during an individual's lifetime. Financial professionals know successful money management is easier when clients make (or have made) wise affordable housing choices. When a financial professional is not a housing professional or when expertise on topics such as fair housing, eviction, mortgage default, a reverse mortgage, etc. is needed, clients can be referred to knowledgeable housing counselors with professional confidence.

By August 1, 2020, the United States Department of Housing and Urban Development (HUD) will require all housing counseling required by or provided in connection with all HUD programs be provided by HUD Certified Housing Counselors (HUD, 2018). To be certified, counselors must pass a standardized written exam and work for a HUD approved agency. This new certification requirement will benefit renters, prospective homebuyers, and existing homeowners alike. HUD believes a more knowledgeable housing professional will also provide more effective counseling services leading to better identification and resolution of housing issues including a greater ability to avoid housing related scams (HUD, 2016).

The HUD certification exam will cover six core competencies (HUD, 2016): (a) Financial Management, (b) Housing Affordability, (c) Fair Housing and Civil Rights, (d) Home Ownership, (e) Avoiding Foreclosure and Eviction, and (f) Tenancy (renting). (The poster and handout will cover each of these competencies in greater detail along with more details about certification requirements.) HUD agencies and counselors will have up to 36 months, beginning on August 1, 2017 when the exam became available (HUD, 2018), to comply with these new regulations. For education on the six core competencies, detailed information about certification, and to access the HUD Housing Counselor certification exam study guide and practice exam see: https://www.hudhousingcounselors.com/

With the implementation of these new regulations, financial professionals can more confidently partner with knowledgeable housing professionals to support their clients with their money management goals. There are estimated more than 8,000 counselors in about 2,650 HUD-approved counseling agencies who annually assist approximately two million clients (HUD, 2015). To find a HUD approved counseling agency in your area see: https://www.hud.gov/offices/hsg/sfh/hcc/hcs.cfm?weblistaction=summary

References

United Stated Department of Housing and Urban Development (HUD). (2018). *Everything you need to know about certification*. Retrieved from: https://www.hudexchange.info/programs/housing-counseling/certification/

United Stated Department of Housing and Urban Development (HUD). (2016). *Housing counseling: New certification requirements and final rule*. Retrieved from: https://www.hudexchange.info/programs/housing-counseling/certification/

United Stated Department of Housing and Urban Development (HUD). (2015). *Written testimony of Shaun Donovan*. Retrieved from: https://archives.hud.gov/testimony/2014/FY2015BudgetTest.pdf

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Teaching College Planning through an Age-based Curriculum

Jonathan Sparling, A.F.C. and Julie Shields-Rutyna, Massachusetts Educational Financing Authority (MEFA)

Key words: college planning, college savings, debt management, early college planning, financial fit

This poster session highlights a comprehensive outreach and engagement process that infuses all aspects of college financial planning over the span of a planner's lifetime. Through content, resources, and tools, we educate and inform parents, students, and other influential adults to make smart financial decisions around the college planning process.

We accomplish this through our age-based curriculum, which segments students and families into various groups. As students and families progress through their educational journey (beginning as early as newborn and ending with college enrollment), MEFA delivers relevant guidance to ensure students and families are "on track" with their college planning path.

Below are the various segments, relevant topics, and content formats we utilize to engage college planners during their educational journey.

Segment 1: Parents of children birth-5th grade: Topics include saving for college, learning about Expected Family Contribution, and understanding college costs, college savings options, 529 plans, and pre-paid tuition programs. Channels include:

- Email curriculum: timely content pointing to relevant news, key resources, and helpful guidance
- Tools and information on this organization's website
- Live and recorded webinars on college savings topics
- Robust online community on Facebook, Twitter. and LinkedIn
- One-on-one guidance

Segment 2: Parents of middle school students: Topics include saving for college and helping parents involve their children in the college planning process. Channels include:

- Email curriculum (same as above)
- Tools and information on this organization's website
- A free online college and career planning tool that allows middle and high school students to explore interests and talents in order to build academic and career plans.
- Webinars on saving for college, building an academic plan, taking skills assessments, and exploring careers.
- Robust online community on Facebook, Twitter. and LinkedIn
- One-on-one guidance

Segment 3: Parents of high school students: Topics include the college admissions process and ensuring a financially balanced college list, understanding the financial aid process and how financial aid is awarded, completing the FAFSA, searching for scholarships, and paying the college bill. Channels include:

- Email curriculum
- Tools and information on this organization's website
- Community Seminars: in-person seminar program, offered in collaboration with high schools and community-based organizations, provides presentations each year on college admissions, financial aid, and paying the college bill
- Webinars on various topics related to college admissions, financial aid, and paying for college costs
- Robust online community on Facebook, Twitter, and LinkedIn
- A free online college and career planning tool (should we match the description above?)
- One-on-one guidance

Segment 4: students in college and post college:

Topics include loan repayment options, debt management, refinancing, savings tips, and budgeting. Channels include email curriculum, webinars, social community, one-on-one guidance, and website information and tools, including calculators.

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Understanding a Client's Impulse to Help Others: How Self Efficacy Relates to Giving Money and Time Away

Shane Enete, Kansas State University/Biola University and Stuart Heckman, Kansas State University

Key words: charitable giving, generosity, self-efficacy, volunteer

It is often the case that a client's desire to help others through the giving of their money (charitable donations) and time (volunteer hours) is very strong, especially in America. According to the Almanac of American Philanthropy, the U.S., is the leading nation in charitable giving. According to the Charities Aid Foundation, the U.S. has the second highest volunteer score in the world. But, not every client prioritizes giving as an important goal in their financial plan. Why do some clients give, while others do not? This analysis explored the concept of self-efficacy empirically, showing that those with higher self-efficacy are positively associated with helping behavior (e.g., giving money or time), as predicted by an adapted Theory of Planned Behavior.

Personal efficacy expectations, or self-efficacy, refers to a person's estimate that they can achieve mastery of a given task. This is different from response-outcome expectations, which refer to a person's estimate that a given behavior will lead to certain outcomes (Bandura, 1977). Previous studies have shown that guilt, empathy, and self-efficacy all have positive impacts on the helping behavior of individuals towards charitable organizations (Bendaupudi et all., 1996; Cryder et al., 2013; Sharma et al., 2016; Basil et al., 2008). In all previous studies, relatively small experiments were conducted. This study will use the NLSY79 survey, which contains a nationally representative sample of 12,686 men and women. Given that previous research has shown that improving the perceived self-efficacy of an individual increases that individual's helping behavior, we hypothesize that there will be a positive association between self-efficacy and helping behavior, which are confirmed in this study.

The most significant implication from this study for financial planners is that planners can better predict and understand the charitable intentions of their client through measuring their client's perceived self-efficacy. If a planner identifies that their client is high in self-efficacy, they could both affirm and encourage their client's impulse to give their money and time away. In addition, if a planner seeks to cultivate a "giving while living" charitable intention in a client (e.g., paying fewer capital gains, or estate, taxes), the improvement of a client's self-efficacy could possibly lead to an increase in the willingness of a client to engage in helping behavior.

References

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.

Bendapudi, N., Singh, S. N., & Bendapudi, V. (1996). Enhancing helping behavior: An integrative framework for promotion planning. *The Journal of Marketing*, 33-49.

Cryder, C. E., Loewenstein, G., & Scheines, R. (2013). The donor is in the details. *Organizational Behavior and Human Decision Processes*, *120*(1), 15-23.

Sharma, E., & Morwitz, V. G. (2016). Saving the masses: The impact of perceived efficacy on charitable giving to single vs. multiple beneficiaries. *Organizational Behavior and Human Decision Processes*, *135*, 45-54.

Basil, D. Z., Ridgway, N. M., & Basil, M. D. (2008). Guilt and giving: A process model of empathy and efficacy. *Psychology & Marketing*, *25*(1), 1-23.

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Understanding the Experiences of Familial Identity Theft Victims

Axton Betz-Hamilton, Ph.D., AFC®, South Dakota State University

Key words: identity theft, phenomenology

Reported cases of identity theft are on the rise, and identity thieves stole an estimated $16.8 billion in 2017 alone (Javelin Strategy and Research, 2018). Identity theft can be categorized as financial, medical, criminal, child, or familial. Familial identity theft occurs when a family member obtains and uses the personal identifying information of another family member without his/her consent for personal gain.

Navarro and Higgins (2017) found familial identity theft victims were likely to have an annual household income under $75,000, be single, and be in their fifties. While Navarro and Higgins (2017) provide insights regarding familial identity theft victim demographic characteristics, no published studies have explored familial identity theft from a phenomenological perspective. However, in a phenomenological study of child identity theft victims, Betz (2012) found victims who had their identity stolen by a parent had more substantial and negative emotional and family relationship consequences than those who had a stranger steal their identity.

Given the increased incidence of identity theft, along with the significant financial, emotional, and family relationship consequences to victims that can be heightened in cases of familial identity theft, exploring victims' experiences with this crime is imperative to understand the full impact of this crime and to develop effective techniques for providing financial counseling services to victims. As such, the research question for this study was, "What are the experiences of familial identity theft victims?"

This study used a phenomenological design. Phenomenology is used to explore the "common meaning for several individuals of their lived experience" (Creswell, 2013; p. 76). Interview data were collected from six participants, which is an acceptable sample size for phenomenological studies (Creswell, 2013). There were four female and two male participants. The two male participants were brothers, and both were victimized by their father. Of the female participants, two were victimized by their father and two were victimized by their mother.

All interviews were audio-recorded and transcribed. The researcher began the data analysis process by reading each transcript multiple times to become familiar with each participant's story. During the reading of each initial interview transcript, the researcher developed follow-up questions, which were asked of each participant in a follow-up interview. Then, the researcher identified significant statements in each transcript that provided insight as to how the participants experienced familial identity theft (Creswell, 2013). These significant statements were categorized into larger "clusters of meaning" (Creswell, 2013; p. 82), and then further organized into broad themes that captured the essence of the lived experience of familial identity theft.

Four themes emerged from this study: Not Filing a Police Report, Negative Impacts, Positive Impacts, and Cultural Factors. Five of the six participants did not file a police report. Darwin did not due to the perpetrator serving as a local law enforcement officer and Scarlett did not because it was not the first time her perpetrator had been incarcerated: "He gets out of [jail] and is just as much of a criminal as before, so I didn't really see that as being a solution".

All six participants experienced negative impacts due to familial identity theft. The most common negative impacts were fear, anxiety, and trust issues. Scarlett described her fear of the Internal Revenue Service (IRS) after being contacted by them for failure to pay taxes on a business the perpetrator established using her identity:

> …I'm more afraid of the IRS than police officers, someone with a huge gun. I'm really afraid of them because I know they don't see me as a person…they have unlimited capacity to completely ruin my life if they wanted to, even if I haven't done anything wrong.

Regarding anxiety, Abby has "anxiety attacks very frequently" that she doesn't remember having prior to learning about the identity theft. Regarding trust issues, Scarlett stated, "I also have a very strong distrust of parents in general. [If] someone is a parent, I view them very suspiciously…" due to her experience with a parent who perpetrated identity theft against her.

Four participants indicated they experienced positive impacts. Charlie felt his experience with familial identity theft helped him be a better father:

> [It's] shown me what not to do as a parent in a whole spectrum of ways, obviously the financial. I would rather live in a cardboard box than affect [my child's] future financial situation, than to steal from [my child] so we can have a temporary roof over [our] head for the next 30 days.

Four of the six participants identified cultural factors that contributed to their familial identity theft experiences, including socioeconomic status (SES) and race. Scarlett indicated: "…we were pretty wealthy and we were White. And I feel that White wealthy families just aren't really investigated very thoroughly…"

Overall, findings indicate participants experienced both negative and positive impacts due to familial identity theft. As well, participants indicated socioeconomic status and being Caucasian influenced their experiences.

Given most participants in this study reported positive impacts, using a strengths-based approach in counseling familial identity theft victims may assist them in developing resources to successfully recover from the crime. Findings from this study indicate that others' perceptions of victims' families based on SES and/or being Caucasian had a detrimental influence on being accurately perceived as a victim and receiving appropriate assistance. Financial counselors are cautioned to be aware of their own biases and assumptions regarding clients' SES and race.

References

Betz, A. E. (2012). *The experiences of adult/child identity theft victims.* (Unpublished doctoral dissertation). Iowa State University, Ames.

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Identity Hawk. (n.d.). *Your identity thief could be your sibling or child.* Retrieved from http://www.identityhawk.com/Your-Identity-Thief-Could-Be-Your-Sibling-or-Child/

Identity Theft Resource Center. (2017). *Identity theft: The aftermath 2017.* Retrieved from https://www.ftc.gov/system/files/documents/public_comments/2017/10/00004-141444.pdf

Javelin Strategy and Research, (2018, February 6). *Identity fraud hits all time high with 16.7 million U.S. victims in 2017, according to new Javelin Strategy and Research study.* Retrieved from https://www.javelinstrategy.com/press-release/identity-fraud-hits-all-time-high-167-million-us-victims-2017-according-new-javelin

Navarro, J. C., & Higgins, G. E. (2017). Familial identity theft. *American Journal of Criminal Justice, 42*, 218-230.

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Who Needs a Financial Advisor? The Roles of Investment Confidence and Knowledge in Investors' Financial Decision-making

Lu Fan, University of Missouri; Lini Zhang, The Ohio State University; Haidong Zhao, Alliance Data Systems Corp.

Key words: financial advisor, financial decision-making, investment confidence, investment knowledge

How investors make decisions has been a topic of interest to researchers and scholars. Specifically, besides the actual investment product selection and trading behaviors, one significant factor is whether investors make their own decisions or hire financial advisors or brokers to assist with their decision-making.
A series of recent studies has indicated that seeking advice from financial professionals can boost individuals and households' financial well-being. For example, research has provided evidence for the value of financial professionals, such as reducing overall investment volatility (Grable & Chatterjee, 2014), fostering better debt management skills (Xiao, Sorhaindo, & Garman, 2005), and preventing losses (Hanna & Lindamood, 2010). On the other hand, other determinants of investor's behavior, such as psychological factors, have also been examined in previous studies (Sarwar & Afaf, 2016).

Based on the analyses of 2015 National Financial Capability Study and the supplemental Investor Survey, the results of this study suggest that investors with lower confidence in their investment abilities and lower investment knowledge (both subjectively and objectively) are more likely to rely on financial advisors and brokers to make investment decisions. In addition, investors who have long-term financial goals are more likely to rely on financial advisors and brokers to make investment decisions.

Financial advisors and financial planners will find this study relevant because helping clients build financial confidence and setting realistic long-term investment goals are significant in the process of financial service. This study also sheds light for policymakers by underscoring the importance of investment knowledge, literacy, and confidence in the market, and urges policymakers to navigate ways to improve the population's financial literacy and their confidence in the markets.

References

Grable, J. E., & Chatterjee, S. (2014). Zeta Estimates of Wealth Volatility and Financial Planning Horizon. *Ewha Journal of Social Sciences*, *30*(2), 5-24.

Xiao, J. J., Sorhaindo, B., & Garman, E. T. (2006). Financial behaviours of consumers in credit counselling. *International Journal of Consumer Studies, 30*(2), 108-121.

Hanna, S. D., & Lindamood, S. (2010). Quantifying the economic benefits of personal financial planning. *Financial Services Review, 19*(2), 111-127.

Sarwar, A., & Afaf, G. (2016). A comparison between psychological and economic factors affecting individual investor's decision-making behavior. *Cogent Business and Management, 3*(1). doi: 10.1080/23311975.2016.1232907

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Practitioner's Forum

10 Years of Blogging – How We Have Survived, and Thrived!

Karen M. Chan, Sasha L. Grabenstetter, and Kathryn L. Sweedler, Camaya Wallace Bechard University of Illinois Extension

Key words: blogging, cooperative extension, educational outreach, financial education, personal finance, social media

Financial education needs to be timely and engaging; blogging is an ideal means to achieve this educational goal. According to Pew Research Center's 2018 report, 77% of Americans go online on a daily basis. Blogging provides a platform for educators to establish and maintain an online presence. In this forum, we will examine the best blogging practices for educators and practitioners who wish to increase the financial knowledge of their audiences.

Target Audience

We focus on the financial changes and transitions of young adults through the early retirement years. The blog posts tend to be most relevant to people with lower to moderate incomes with earned income. To make this blog more effective, we focus on topics significant to individuals in the areas we serve. However, this information is relevant to multiple audiences and available worldwide.

Objective/Purpose

The bloggers aim to provide relevant, accessible, research-based financial education. Accessibility in this context means embracing flexible approaches that connect us to the communities and audiences we serve. A key goal is to develop a writing style that uses relatable, unbiased, sensitive and inclusive language that is easy to read and understand. The overarching objective of the blog is to help people take informed action to improve their financial lives.

Description

Our organization's blog focuses on demystifying financial topics that abound in our daily lives. The blog brings timely, research-based, unbiased educational information to readers regularly. Since January 2008, consumer economics educators have blogged to empower people to make positive financial choices. Unlike many financial blogs, our goal has not been to sell a product. Our primary goal is to educate readers across the lifespan, as financial knowledge requires lifelong learning. For example, the financial questions of a twenty-year-old are often different from those of someone approaching retirement. Our collaborative blog involves multiple writers, of different ages and backgrounds allowing us to provide an across-the-lifespan blog.

When we began in 2008, there were very few blogs from educational institutions, while there were already many commercial blogs designed to sell products. At that time, commonly accepted rules of blogging were to blog frequently, with one voice, and keep posts short. We decided to follow one of these rules, blog approximately once a week. Since then, 505 blog posts have been posted! In most years, we had four different bloggers – each with their own voice. Since November 2013, the blog has had over 350,000 views, approximately 80,600 per year. Through our experiences, we have learned strategies that increase the reach of individual blog posts including building a subscriber-base, using social media and an e-newsletter to promote posts, writing blog post titles that engage readers, and speaking to our audience.

Reference

Perrin, A., and Jiang, J. (2018, May 14). *About a quarter of U.S. adults say they are ‘almost constantly’ online.* Retrieved from www.pewresearch.org/fact-tank/2018/03/14/about-a-quarter-of-americans-report-going-online-almost-constantly/.

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Asegurando un Futuro Financiero en Familias Latinx: Key Concepts in Culturally Competent Approaches to Financial Literacy Education with Latinx Communities

Adrie Roberts, Utah State University Extension

Key words: cultural competency, financial literacy education, family-oriented programming, Latinx, Latinx families, Spanish

Target Audience

This presentation is targeted to financial educators interested in learning how to effectively reach out to the Spanish-speaking Latinx community with financial literacy classes.

Objectives/Purpose

This presentation will focus on suggestions and methods for reaching the Latinx community. Participants will learn about unique cultural beliefs and practices in the Spanish-speaking community that will assist the facilitator in providing a culturally appropriate financial education program.

Description

Asegurarando un Futuro Financiero en Familias Latinx is a series of three family finance workshops for Spanish-speaking members of the Latinx community. The classes are taught in Spanish by local Latinx finance experts in various fields. Aseguarando un Futoro Financiero en Familias Latinx emphasizes providing a family-oriented program that starts with dinner for the whole family, including a facilitators, prior to dividing into separate classes. Adults attend the adult finance classes. Teenagers attend a STEM education program. The children attend supervised activities designed for their age group. Thus, the family spends an educational evening in close proximity to each other, returning home with new knowledge and the satisfaction of having spent a productive evening together as a family. Through research and experience, we have learned that we need to design our workshops to be culturally sensitive in order for this audience to be willing to spend their evening with us after a long day at work and/or school.

Because of pre and post-test evaluation results, we believe we have been successful in assisting members of the Latinx community to make good financial decisions. In addition, we are able to have a trusted and recognizable presence in the Latinx community particularly among the local churches and elementary schools. We are esteemed by other organizations and agencies for providing this valuable educational programming. We believe we have been able to effectively reduce the dependency of several needy families by offering important family finance education to a population that often has difficulties in understanding and adjusting to the United States finance system. Our goal was to reach 180 families in three years. However, we were able to reach a total of 421 families in the three year period.

This forum will guide you through the process of planning and facilitating financial literacy education for Spanish speakers including advice for forming a Latinx advisory council, picking a cultural guide, finding teachers/speakers, advertising to the Latinx community, and ensuring that educational programming is culturally appropriate and sensitive. Academic research on this topic will also be provided to participants.

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Breaking Bad: Students and Student Loan Indebtedness

Paul Goebel, University of North Texas

Key words: student loan debt, student loan indebtedness, default rates, financial future solutions options

Target Audience

All practitioners, educators, and counselors

Objectives/Purpose

1. Understand research findings within the student loan debt field
2. Identify 3 primary, proactive approaches to helping students avoid student loan debt
3. Determine one goal to apply session information to their professional lives over the next twelve months

Description

According to research, there are more than 44 million borrowers with $1.3 trillion in student loan debt in the United States alone. The average student for the Class of 2016 is $37,172 in student loan debt, making it the most student loan-indebted group of graduates since the creation of the federal student loan program. Additional research has found that imprisoning a growing number of graduates with ever-increasing student loan debt will have farther ramifications on their personal financial futures and personal lives. Not to mention the long-term impact that will be felt by other sectors of society – philanthropy and community investment.

Borrowing by students and their families has increased over the years as social and economic pressure has grown as a college education has become the sole path to getting ahead. Even as states reduce their financial support for colleges and colleges raise their tuition. Borrowers now leave school owing on average about $34,000. That is up 70 percent from a decade ago. Loan delinquency climbed to 11.2 percent in the last quarter of 2016, the highest rate for all types of household debt. That means that student loan repayment is taking a back seat to other pressing financial demands, such as rent, mortgage payments, phone bills and credit card balances. More than one in ten borrowers are at least 90 days behind in repaying their student debt, which puts them in the "serious" debt category.

One thing that research has shown upon investigation of the student debt crisis is the extent to which it is a creature of this country's legacy of racial discrimination, segregation, and economic disadvantage patterned by race. Several research studies found that zip codes with higher population percentages of racial minorities had far higher student loan delinquency rates, and that the correlation of delinquency with race was actually most extreme in middle-class neighborhoods. The impact? Student loan debt is closely interconnected with the route to financial stability for racial minorities.

As financial planners, counselors, and educators we must be equipped with the knowledge, skills, and abilities to breaking bad – liberating students from student loan indebtedness. This session will explore the factors that have caused escalating trends in student loan indebtedness, while identifying opportunities and options to help students and families break the chains of ever-increasing and overwhelming student loan debt.

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“Build Financial Capability and Assets for All”: A Grand Challenge

Lissa Johnson and Margaret Sherraden, Washington University in St. Louis

Key words: curriculum; financial capability; financial vulnerability; grand challenge

Target Audience

The target audience includes those who are interested in research, education, policy, or practice in the area of financial education and services.

Objectives/Purpose

The purpose of this forum is to build awareness about the FCAB grand challenge network, share educational resources, and discuss opportunities for collaborative action, whether through building knowledge, sharing education or program materials, or working on policy issues. Ultimately, the objective is to refine systems and provide resources that can help vulnerable and marginalized families improve their financial wellbeing. The network offers a variety of ways to participate and collaborate as a researcher, practitioner, educator, or policymaker, both within and across sectors.

Description

Low income and vulnerable Americans increasingly face difficult financial challenges, yet have few places to turn for guidance. This forum will outline efforts to improve the preparation of social workers and other human service practitioners to provide appropriate guidance for low income and vulnerable Americans. We will provide an overview of ongoing efforts to build practitioner financial capacity, offer resources for practitioner use, and discuss collaboration opportunities. First, we will introduce an initiative in social work to “build financial capability and assets for all” (FCAB), which was chosen in 2016 as one of 12 national “Grand Challenges for Social Work.” We will discuss how it was selected and how a professional network has been developed in response to this call to action on the “most compelling and critical social issues of our day” (Uehara et al, 2015). Second, we will introduce practitioner tools and resources, including a new FCAB textbook (Sherraden, Birkenmaier, & Collins, 2018), training webinars, policy briefs, and clearinghouses for financial and economic education and training. We will also conduct an interactive practice exercise. Finally, we will brainstorm opportunities for collaboration with forum participants with the aim of generating partnerships that contribute to building financial capability and assets for all.

References

Johnson, E., & Sherraden, M.S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology & Social Welfare*, *34*(3), 119-145.

Sherraden, M.S. (2017). Financial capability. In C. Franklin (Ed.), *Encyclopedia of Social Work*. doi:10.1093/acrefore/9780199975839.013.1201

Sherraden, M.S., Birkenmaier, J., & Collins, J. M. (2018). *Financial capability and asset building in vulnerable households: Theory and practice.* New York, NY: Oxford University Press.

Uehara, E.S., Barth, R.P., Olson, S., Catalano, R F., Hawkins, J.D., Kemp, S., Nurius, P.S., Padgett, D.K., & Sherraden, M. (2014). Identifying and tackling grand challenges for social work (Grand Challenges for Social Work Initiative Working Paper No. 3). Baltimore, MD: American Academy of Social Work and Social Welfare.

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Building an Assessment Plan to Demonstrate the Power of Your Program

Patsy Collins, AFC®, Sam Houston State University

Key words: assessment, implementation, planning

Target Audience

All practitioners, educators, and counselors

Objective/Purpose

1. Learn how to combine assessment measures to prioritize program implementation and action items.
2. Learn how to maintain quality as your business or program grows.
3. Determine how to identify the type of reporting methodology should be utilized to best convey your message.

Description

Assessment is often defined as the process by which programmatic and learning improvements are identified to advance the client experience culled from diverse sources in order to develop a deeper understanding of what clients know, understand, and can do with their knowledge as a result of their counseling/coaching experiences.
This implies that assessment methodology can be as simple as any practitioner/educator's subjective judgment based on a single observation of student performance, or as complex as knowledge cited through a standardized pre-/post-test or focus group. Assessment findings are ever-changing due to the nature of the counseling/coaching experience. Assessment may affect decisions about the array of services, processes, and clients' educational needs, and program offerings.

Practitioners will often design their program's assessment tools based upon a nationally-standardized, reliable and valid instruments. Nationally-standardized instruments may not always 'fit' your program's needs. When an existing instrument falls short in its design or scope, the development of a valid program-specific measure can be found at the intersection of research and assessment practices.

This session, led by the leaders of two collegiate financial literacy programs, provides insights into practical designs and applications of assessment programs. These campuses have adapted assessment methodologies and instruments to meet their programs' assessment needs.

The presenters will walk audience members through the development and implementation of client-centered assessment programs that have adapted and aligned with the ever-changing institutional and divisional assessment requirements. Both programs can be easily replicated by other AFCPE members.

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Building Financial Security Through Tax Time Savings: Lessons from the Field

Darren Liddell, The Financial Clinic and Michael Dedmon, The Financial Clinic

Key words: 529 accounts, asset building, asset limits, children's savings accounts, college savings, EITC, free tax prep, refund splitting, savings, tax time savings, VITA

Target Audience

This forum is for practitioners in the financial security field, academics and researchers, and those working in public policy and administration. Increasing savings among low- and moderate-income populations (LMI) is a critical topic of interest, but the why and how of using the tax moment needs to be discussed more widely. A number of organizations working in financial security may be offering tax preparation or financial coaching services that could, depending on the state context, benefit directly from learning about the challenges and opportunities of increasing savings at tax time. Researchers as well would benefit from hearing the organization's experience increasing customer uptake of tax time savings options, and the challenges associated with research and evaluation of these efforts and their impact.

Objectives/Purpose

The purpose of the forum is to raise the profile of tax time savings as a pathway to financial security and long-term wealth creation for LMI families. The organization wants to share our knowledge and experience with practitioners, researchers, and public policy analysts in this issue area by focusing on combining tax refund splitting with contributions to 529 accounts in the organization's service area.

Description

In this forum, learn about the promise of tax time savings as a wealth building strategy for low- and moderate-income families, and hear staff from The Financial Clinic share how they fought to give New York state taxpayers a new opportunity to direct a portion of their state refund to a 529 college savings account. Whether you're a tax provider, a financial coach, a researcher or public policy professional, you'll gain more insight into how tax time savings can improve financial security and build long term wealth for working people, and you'll leave with valuable tips and factsheets relevant for your locality that will help you prepare the people you serve to take advantage of the tax moment to save for their future.

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Building Financial Skills and Confidence through Knowledge and Practice

Bobbie N. Gray and Luke W. Reynolds, Federal Deposit Insurance Corporation

Key words: economic inclusion, financial capability, financial education, financial inclusion, financial well-being

Target Audience

Professionals who can help improve the financial capability of people, including by connecting financial education to opportunities to develop positive banking relationships, such as:

- Personal finance researchers,
- Educators,
- Financial advisors, coaches, and counselors, and
- Military PFCs.

Objectives/Purpose

This session will equip AFCPE members with practical financial education resources and tools to teach financial concepts to individuals and families to help them build positive financial behavior, and ideas to incorporate hands-on learning to practice new skills. In particular, we will discuss an updated version of the FDIC's Money Smart for Adults, the national instructor-led financial education curriculum which has a demonstrated, positive influence on participants' financial behaviors and confidence. The September 2018 version is a complete revision that incorporates feedback from curriculum users and best practices informed by research. In updating the curriculum, we have kept many of the familiar features that have made it effective and worked well such as the instructor and participant guides, slide presentations, and a guide to presenting.

Description

The more people know about credit and banking services, the more likely they are to make informed decisions about money and improve their financial health and well-being. Practical hands-on experience with key financial concepts, combined with access to safe, affordable banking services, fosters greater financial stability for people and communities.

This interactive session focuses on a recently updated instructor-led financial education curriculum that can be used with clients in a classroom setting or one-on-one sessions. Recognizing the importance of financial education for everyone, the Federal Deposit Insurance Corporation created Money Smart for Adults in 2001 as a tool for organizations to use to help individuals with little or no banking experience. As part of its effort to keep the curriculum relevant and useful, FDIC released a completely revised curriculum for adults in September 2018. This update includes 14 modules on topics that include money values, banking, income and expenses, spending and saving plans, borrowing money and managing debt, protecting assets and increasing wealth, making housing decisions, and preparing for and recovering from disasters. The curriculum can be used as a standalone product or complement other resources. The curriculum can be customized to specific educational needs.

The workshop format will combine lecture with facilitated discussion and group interaction to orient participants to the new design and modules. Attendees will know the main features of the updated financial education curriculum, how to access it, and how to use it.

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Building Your Financial House - Readiness for Reentry

Holly Chase, PA Housing Finance Agency

Key words: ex-offenders, financial education, financial readiness, recidivism, veterans

Target Audience

Personal Financial Educators that work with at-risk populations

Objectives

1. To understand the financial challenges and education needs of ex-offenders reentering society.
2. To become familiar with the Building Your Financial House curriculum and adjustments made for the target audience.
3. To identify the actions taken by incarcerated veterans who participated in the program.

Description

Economic stability is major challenge for many ex-offenders returning to their communities. Depending on the cause and length of incarceration, they may never have had prosocial employment, adequate money management skills, or even provided for themselves. A reentrant that lacks basic financial readiness, i.e., money sources, knowledge, and skills, is less likely to make sustainable, prosocial choices and is at a greater risk of recidivism. Comprehensive financial education is an important tool to promote and foster financial readiness for successful reentry.

Building Your Financial House (BYFH) is being used with justice involved individuals both pre- and post-release. BYFH is a comprehensive financial readiness program that addresses establishing personal value, obtaining prosocial and sustainable employment, controlling income and expenses, building and protecting assets, navigating the financial system and products, and managing debt including restitution and fines. The seven-module program has been delivered within PA state correctional institutions' (SCI) Veteran's Services Units (VSU) to inmates approximately one year out from release since 2016. While recidivism data is being measured, inmate participants took an average of 23 specific financial actions to prepare for their release as a result of the program.

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Counseling Seniors About Medicare: Uninformed Choices Can Have Lasting Costs

Jack Tharp, Ed.D., Retired, Indiana University

Key words: choices, costs, insurance, Medicare, options, penalties

Target Audience

AFCs, counselors and volunteers serving seniors

Objective

This session, *Counseling Seniors About Medicare*, is designed to give personal finance practitioners an overview of Medicare and show how decision-making in the application process is sufficiently complex that many seniors need guidance from a knowledgeable counselor. Budgeting for health care is a key element of retirement planning, yet uninformed choices in the Medicare program can result in unnecessary long-term costs. Session participants will learn about the associated costs of Medicare including Medigap plans with an end objective to gain enough information to better assist senior clients approaching Medicare enrollment.

Description

Seniors who have not done their homework on Medicare have a picture of free and automatic broad health care; Medicare is neither. Seniors are confronted with a myriad of decision-points where missteps can result in added costs and unmet expectations. A fundamental problem is that most seniors exit a structured employer benefit program where health coverage decisions have been made for them and are then thrust into an environment where they must evaluate options and choices here-to-for not experienced. Financial advisors suggest retired couples should budget at least $12,000 annually for health care, a large portion of which is Medicare premiums.

Original Medicare is a 2-part program, Part A [hospitalization] and Part B [medical services]. Part B is not free; in 2018, seniors with an income below $85,000 pay a monthly premium of $134 (rising with income). One third of seniors opt for Part C, Medicare Advantage Plans, marketed as a lower cost alternative to Original Medicare. Advantage Plans package A and B along with extra benefits such as vision, dental, and frequently prescription drugs. Advantage Plans come with restrictions, specifically "in network" hospitals and doctors. Seniors who decide Original Medicare better fits their needs find Part B is not so comprehensive, covering about 80 percent of costs. Thus, to enhance Part B coverage, there is supplemental Medigap insurance. Both Medigap insurance and Advantage Plans are private sector products; the choices abound and confusion is a by-product. Part D prescription drug coverage was added to Medicare as a benefit in 2003. The cost of drug insurance plans vary, aligned with one's 'formulary". Yet, for many seniors, Part D is the single-most important Medicare benefit.

Enrollment in Medicare is not simple; there are multiple start dates based upon individual circumstances. About two-thirds of seniors are automatically enrolled as a result of collecting Social Security. Other Medicare eligible are directed to the IEP, initial enrollment period; still working at age 65, one follows SEP, special enrollment rules. And when plan changes are needed, there is AEP, annual enrollment. Miss an enrollment date…go without coverage for up to a year. And then there are penalties for not enrolling in Part B and Part D when expected. Low-income seniors on a fixed budget cannot afford enrollment penalties and seniors that can…well they just get "plain mad" for not knowing.

Personal finance counselors have an important role to play in assisting seniors in the realm of Medicare, providing guidance which can lead to informed decisions that best fit a client's health needs and budget.

Reference

Centers for Medicare & Medicaid Services (2017). *Medicare & You 2018.* CMS Product No. 10050-53

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Delivering Financial Counseling to Families with Low Incomes through the Federal Government's Largest Wealth-Building Program for Families with Low Incomes

George Reuter, Director of Learning and Knowledge Management, Compass Working Capital

Key words: coaching, cost-benefit, credit, evaluation, families, federal, housing, HUD, low-income, outcomes

Target Audience

Individuals or institutions with an interest in extending their expertise to families with low incomes, and/or in conducting research with an outside research partner to evaluate the impact of a financial counseling program

Objectives/Purpose

To encourage practitioners to consider how their expertise in financial counseling could be leveraged to support families with low incomes to become more financially secure and to reach major financial goals through the federal Family Self-Sufficiency (FSS) program

Description

The presenting organization is a nonprofit whose mission is to support families with low incomes to build assets and financial capabilities as a pathway to greater economic opportunity, and out of poverty. Since 2010, the organization has operated an asset building and financial capability model for the U.S. Department of Housing and Urban Development's (HUD) Family Self-Sufficiency (FSS) program. FSS is the federal government's largest asset building program for families with low incomes. The program removes a disincentive tied to how rent is calculated for households receiving assistance, by enabling families to capture as savings any increase in rent triggered by an increase in work. The organization's program model couples the FSS program's powerful rent-based savings mechanism with the key aspects of the organization's financial coaching and savings programs: aspirational program marketing focused on clients' dreams and aspirations, financial education, and individualized, client-driven financial coaching and counseling to help participants chart and follow a path to reach their financial goals and become more financially secure.

A rigorous evaluation of the organization's FSS programs was recently completed by a leading, global research firm. The initial report on the study found that participants in the organization's FSS program earned more and received less welfare payments than their matched peers. Participation in the program was associated with an average increase of $6,305 in household earnings, and an average decrease of $496 in household welfare income. Participants also achieved positive credit and debt outcomes that exceeded benchmarks, including an average credit score increase of 23 points and an average decrease of $764 in derogatory debt.

The research team also conducted an interim cost-benefit analysis of the same program, and found that participants gained more than $10,000 in increased income over a five-year period as a result of participation in the program, at a net cost to the government of only $276 per participant.

Despite the FSS program's strong core design and documented success in certain jurisdictions, it remains an underutilized tool for promoting economic mobility and financial security among families with low incomes across the country. Congress and the Administration recently approved bipartisan legislation that will streamline and improve the FSS program and make it easier for more families to access the program. These changes, along with a renewed interest at HUD in the program's potential, have created conditions by which practitioners have the opportunity to help shape and advance this powerful program to benefit a broader share of eligible families in communities across the country.

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¡Dinero para todos! New Resources for Financial Education in Spanish

Jennifer Abel, Virginia Cooperative Extension

Key words: Spanish financial education resources

Target Audience

The presentation is geared toward financial educators who serve Hispanic populations who are more comfortable receiving financial information in Spanish.

Objective/Purpose

This presentation will provide participants with current resources that will allow them to meet the financial education needs of their Hispanic clientele who prefer to receive their information in Spanish.

Description

As of July 1, 2016 people of Hispanic origin made up 17.8% of the U.S. population, making them the nation's largest ethnic or racial minority. As financial educators, many of us are likely finding a growing demand for our programs among recent Latino immigrants. As they are learning to navigate American financial systems, it can be helpful to provide reliable and non-biased information in Spanish.

This workshop will focus on providing new tools for financial education in Spanish and reviewing the best government and university sources for non-biased, research-based resources. New tools include games, activities, and worksheets. Inspired by the University of Illinois Cooperative Extension's Bean Game that is part of their All My Money curriculum, the presenter has created a revised Spanish version of this activity that helps people learn about prioritizing needs and wants. In the activity, participants work in small groups to make spending choices in 21 expense categories. Once they have made their choices, they draw a Chance Card and revise their spending choices based on the card they drew. For example, they might draw a card that says "Flood damages furniture and clothing. Reduce by 3 beans if insured by renter's/homeowner's insurance; reduce by 11 beans if not insured." This activity serves as a good supplement to classes and presentations on budgeting and goal setting.

Other resources that will be shared with participants include fact sheets on record keeping and storage suggestions for important paper records, a worksheet on controlling spending leaks, i.e. taking note of the small daily expenses that can add up to a lot over time (e.g. daily soda purchases from the convenience store), and saving strategies tip sheets.

In addition to sharing financial education resources, the presenter will also offer ideas on how to reach out to the Hispanic community and cultural differences that can influence how the financial education is delivered.

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Empowering the Rider and Taming the Elephant: Helping Clients Succeed on their Financial Journey

Cherie Stueve, Kansas State University

Key words: behavioral finance, financial decision-making, psychology

Target Audience

Financial practitioners, financial educators, financial literacy programmers

Objectives/Purpose

By using the impactful visual metaphor of the elephant and the rider (Haidt, 2006), we help bridge the gap between research and practice to examine what research says about financial decision-making in a way that is accessible to practitioners. In addition, we will offer recommendations for how these findings can be applied to practice. Financial practitioners, educators, and program developers will learn how to (a) understand the elephant and rider metaphor for dual-system cognitive processing, (b) understand the strengths and weaknesses of the emotional elephant and the rational rider, (c) understand how the metaphor can be used in practice to discuss decision-making with clients, and (d) help clients design and manage their environments in order to empower the rider and tame the elephant (James, 2011).

Description

Books such as *Nudge* and *Thinking, Fast and Slow* have helped familiarize the public with some of the cognitive processes that underlie financial decision-making. However, these processes are complex and can be difficult to understand. Haidt (2006) developed a visual metaphor useful for making this subject more accessible to the layperson: the elephant and the rider. The elephant represents an individual's subconscious, background cognitive processes. The rider represents an individual's conscious and deliberate reasoning. The elephant is big, powerful, and capable of processing information rapidly to make intuitive judgements. The rider is comparatively small and weak, but capable of solving complex problems. The rider can evaluate the intuitive responses of the elephant, but requires much mental energy to do so (Stanovich & West; 2000). Individuals often do not have sufficient energy for the rider to remain in control of the elephant, leading them to make decisions based on intuition and rules-of-thumb. This is not inherently bad – intuition can be cognitively efficient – but it does open individuals to making cognitive errors and mistakes. Practitioners can provide helpful strategies for taming and training their inner elephant. In essence, this helps clients improve their intuition, and gives them strategies to manage their environment so that the elephant has limited choices when it is inevitably in control of decision-making.

In this workshop, you will learn more about the elephant and rider metaphor and how it can be used to expand your understanding of client behavior, as well as brought into discussions with clients. Additionally, examples of common financial decisions will be discussed in light of the elephant and rider model. We will then discuss practical solutions (e.g., anticipating and managing the environment, or making a pre-commitments) that can help your clients keep their inner elephant channeled into making good financial decisions when it is inevitably in control. You will leave the session with a greater appreciation for why clients make the financial decisions they do, and will take with you specific approaches for conversing with your clients about their decision-making and techniques maintaining financial discipline. These skills can be used with clients, in developing a literacy program, or when delivering a financial literacy workshop. Finally, you will have the opportunity to ask questions and propose ideas for future research directions.

References

Haidt, J. (2006). *The happiness hypotheses*. New York: Basic Books.

James, R. N. (2011). Applying neuroscience to financial planning practice: A framework and review. Available at SSRN 1968995.

Stanovich, K.E., & West, R. (2000). Individual differences in reasoning: Implications for the rationality debate. *Behavioral and Brain Sciences, 23*, 645-726.

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Engaging Limited-Resource Participants in Financial Education Through Activity-Based Lessons

Karen Lynn Poff, Virginia Tech

Key words: activity-based learning, financial education, limited-resource audiences, personal finance

Target Audience

Financial educators who work with limited-resource audiences and are interested in activity-based financial education. The information is especially applicable for those who provide education through volunteers.

Objectives/Purpose

1. Financial educators will learn ways to engage participants in financial education through activity-based lessons.
2. Financial educators will implement activity-based lessons with limited-resource participants in their communities.
3. Limited-resource participants will better understand financial concepts through involvement in interactive learning activities.

Description

Financial education for limited-resource audiences can be challenging. As an educator, I personally have the skills to assess the needs of an audience and develop presentations, discussions, and lessons to meet those needs. But with the onset of our volunteer-led financial education programs I discovered that the volunteers need tangible, structured tools to effectively lead financial education for limited resource audiences. Even though the volunteer training covers adult education concepts, most of the volunteers do not have the skills to assess the needs of a group and create appropriate content. Because limited-resource audiences learn best through hands-on activities and relate better to lessons that specifically address their economic realities, I developed financial education kits for our volunteers. The kits provide structured tools to effectively determine the needs and lead financial education for these audiences. The pre-assessment activity uses bingo chips labeled “Yes” and “No” to gather information in a user-friendly, non-threatening manner. The answers to the pre-assessment enable the volunteers to select applicable lessons that fit within the time-frame and number of learning sessions available. The lessons communicate financial concepts to limited-resource audiences through the experiential learning model, using interactive methods instead of presentations as much as possible. Volunteers borrow their county’s kit and return it when the series is finished. Because volunteers teach the majority of the lessons, the program reaches more participants across the five-county area.

This workshop will introduce participants to several unique methods for assessing needs and communicating financial concepts to small groups. The first 10-15 minutes will provide an overview of the financial lesson kits, after which participants will engage in a hands-on demonstration of some of the lessons. The workshop will conclude with a summary of program evaluations outlining impacts of these lessons for limited-resource audiences. In addition to quantitative data which demonstrates that participants improve their financial behaviors, comments from the evaluations have revealed both knowledge and attitude changes.

Reference

United States. (2016). Your money, your goals: A financial empowerment toolkit for social services programs.

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Engaging with History: Highlighting the Financial Implications of Redlining and Subprime Lending to engage Financial Professionals into Action

Schane D. Coker, M.S., AFC- AFSC/Magellan Federal

Key words: awareness creates opportunity, African American experience, redlining, subprime lending, financial professionals, inclusion, action planning, disenfranchisement

Target Audience

The target audience for this session was financial professionals working with a diverse clientele, particularly those clients who either have been or continue to be direct victims of Historic Financial and Social Disenfranchisement.

Objectives/Purpose

Four Objectives were met:

- Provide a brief yet specific overview of Redlining and how it gave birth to Subprime Lending
- Identify the Financial Instability created by both of these events in US History and their specific effects on African American Households
- Provide Financial Professionals with practical steps and ideas to engage with the Historically Disenfranchised Communities to create and improve their Economic voice through Financial Literacy
- Learn how to use History as a Teaching and Engagement tool when working with clientele from diverse backgrounds

Description

The first 30 minutes of the session began with a detailed, yet specific overview into what Redlining and Subprime Lending are and how they took place in US History. In particular, we went over what happened in these two events, how they both affected the African American community, and what types of ramifications they faced the as a result leading up into current times. The Financial Instability experienced by the households in the African American community was also discussed and regarding the effects of Redlining and Subprime Lending.

The remaining 20 minutes of the session were devoted to an interactive question and answer portion with the audience surrounding Redlining and Subprime Lending. Some of the questions that were presented for the audience to discuss, answer, or think about included, "How they as Financial Professionals can engage in reversing or minimizing the widespread effects of Redlining & Subprime Lending", "How the information presented can be used to better engage with clients from diverse or different backgrounds from that of the Financial Professional", and "How can the values and guidelines employed by Association of Financial Counseling, Planning, and Education (AFCPE) be utilized to provide Financial Literacy to persons from any walk of life."

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Enhancing Financial Counseling by Redefining Savings Outcomes

Nicky Grist and Katie Plat, Cities for Financial Empowerment Fund

Key words: behavior change, behaviors, cities, coaching, counseling, data, data collection, goals, low-income, outcomes, retention, saving, savings, training, women

Target Audience

Municipal Financial Empowerment Centers (FECs) provide free, professional, one-on-one financial counseling as a public service. The FEC model emphasizes accountability through data-driven management. It focuses on banking, credit, debt and savings outcomes that are intended to represent real changes in clients' financial stability. FECs are open to the public without eligibility requirements, but most clients are referred through their participation in other social services.

In 2017, the Cities for Financial Empowerment Fund (CFE Fund) researched and pilot-tested enhanced savings outcomes. Over 300 people in two cities received counseling through this pilot: 81% were female and 62% were African American, 61% had at least some post-secondary education (including 43% with at least 4 years of college), and 61% were renters. In City A, 86% of clients were employed with median income of $26,736 and median age of 35; in City B, 61% were employed with median income of $21,444 and median age of 42.

Objective/Purpose

Data previously collected in five cities had revealed that clients were less likely to increase savings than make other financial improvements, that counselors were aware of these differences, and that the way that the savings outcome was constructed was potentially obscuring or limiting client success. Therefore, the pilot goals were to operationalize the field's best thinking about how low-income people save, to tell a more complete story about the impact of financial counseling, to learn whether changing the data system would affect the way financial counselors work and the results their clients achieve, and to inform the expansion of the FEC model to additional cities.

Based on early data about FEC clients' savings, the savings outcome had been defined as a savings increase of at least 2% of annualized monthly income within a program year, or save enough to replace about one week's income. The pilot tested five alternatives: a) client sets aside more for the future, b) client has more set aside for the future, c) client achieves savings goal target amount, d) client uses savings towards the goal purpose, e) client adopts at least one of nine new savings behaviors.

Description

Testing these outcomes for six months in two cities revealed that counselors spent more time on average discussing savings with their clients, and achieved greater results, than they had previously. More pilot clients (32%) saw greater savings increases (average $1,543) than similar clients who were counseled using traditional protocols (5%, average $1,040). Compared to the previous year, 67% more clients achieved the traditional FEC savings outcome. Pilot clients set their personal savings goals 50% higher than the traditional outcome. Almost half of pilot clients adopted new savings behaviors. The average number of sessions per client increased by 30%, and 124% more savings clients returned for multiple sessions, compared to the prior year. Clients gained greater understanding of and confidence about saving. The data better captured the role of financial counselors as coaches, and provided constructive guidance for both experienced and new counselors.

The pilot demonstrates that clients can achieve significant savings outcomes within two to three counseling sessions conducted within less than six months. However, outcomes related to clients' personal savings goals will most likely take at least six months to achieve: pilot clients' target dates averaged six months in the future although the median target date was less than five months out.

As a result of the pilot, the CFE Fund modified its counselor training recommendations and the data system used by sponsored FECs. The CFE Fund's approach to researching and pilot-testing outcomes, particularly with regard to the design of data collection tools, should be replicated for other financial outcomes. Research questions could include: Does tracking behavior change as a program outcome lead to greater changes in financial status? Do behavior changes stick or lapse, and how frequently should they be monitored? How can technology support the collection of data about savings activity for a broadly diverse target audience?

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Exceeding Expectations – The Synergy of Personal Finance and Positive Psychology to Boost Well-Being in Retirement Planning

Dr. Cynthia Crawford, University of Missouri Extension and Dr. Frances C. Lawrence, University of Missouri

Key words: behavioral economics, behavioral finance, retirement planning, personal financial planning, positive psychology, well-being

Target Audience

The initial project year focused on 30,000 faculty and staff at all four campuses and at the system level of the University of Missouri. In 2018, the target audience was expanded, with a second version of the course, to people in the workforce in Missouri. To date, over 600 people have enrolled in the course and the impact has exceeded expectations.

Objectives/Purpose

The presentation focused on:

- An introduction to positive psychology
- How the groundbreaking application of research draws from both positive psychology as well as best practices and research in personal financial planning.
- The online course includes expected topics such as goal setting, assessing current financial status, reviewing credit reports, facts about the University retirement programs, taxes in retirement, Social Security, saving and investing, estate planning, insurance and other financially-related topics. What is unique is the addition of well-researched well-being content from positive psychology, including positive emotions, engagement, relationship, meaning, accomplishment, forgiveness and gratitude. A remarkable number of participants accepted the challenge to boost their well-being in retirement by beginning to incorporate action solutions now and in their remaining working years.
- The researchers reported program impact at the behavior change level and the action solutions that faculty and staff implemented to increase their well-being. Short-term outcome evaluation and long-term impact evaluation indicated that participants incorporated a number of action solutions such as increasing money invested for retirement and greater attention to positive emotions. The presenters highlighted how positive psychology content was incorporated with financial education and evaluation data that indicates there is a synergistic educational effect when the two are combined.
- It is important to be able to quantify the impact of financial planning education. The session reported how the project documented $62,000 additional was saved/invested per month as a result of taking the course.
- Public value to the University and to society was also articulated.
- Finally, they described how positive psychology could enhance and distinguish the practice of AFCPE members in all related professional pursuits.

Description

How to get an “A” in retirement is Missouri Extension’s initial effort at delivering human environmental sciences family financial education, and specifically retirement planning education, exclusively online. The initial target audience was faculty and staff at the four-campus University system and was part of a wellness incentive program. In just two years, well over 600 employees have enrolled in the course and the impact results have exceeded all benchmarks. The measurable impact is stellar.

What has been particularly effective at perking participant’s interests to the point there are always waiting lists, keeping participants engaged and producing stellar outcomes? The presenters suggested one key is the way that the course combines both financial planning and positive psychology for synergistic energy that would not be present without the interdisciplinary approach of these two scientific fields.

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Financial Education Evaluation Toolkit® - Applying Evaluation Concepts and an Enhanced Evaluation Toolkit User Experience

Peggy Muldoon and Billy Hensley, Ph.D., National Endowment for Financial Education (NEFE)

Key words: assessment, evaluation, financial education, outcomes, standards

Target Audience

Researchers, extension and non-profit educators, high school teachers, coaching program directors, financial industry leaders working in community outreach, financial coaches, financial counselors, program administrators, professionals in financial planning.

Objectives/Purpose

The National Endowment for Financial Education's (NEFE) Financial Education Evaluation Toolkit® has been fully redesigned to help financial educators understand evaluation concepts and efficiently apply them to their educational programs to easily document the impact their programs have on learners. Measuring the success of a program through documenting its impact is essential for financial educators to ensure that financial education programs meet the needs of their students and to secure support from stakeholders. Learn about the vastly redesigned and user friendly Toolkit, while also learning about the importance of evaluation and how to use the Toolkit to create assessments for learners of all ages and capabilities. This session will demonstrate a hands-on presentation of the updated Toolkit.

Description

The session will focus on NEFE's Financial Education Evaluation Toolkit®. Attendees will learn:

- What is financial education program evaluation? (purpose and goals of evaluation)
- Why they should evaluate their programs (benefits and importance of program evaluation)
- How to evaluate a financial education program (determine what outcomes should be used)
- How to evaluate the data (how to use the evaluation findings)

In addition, the redesigned Evaluation Toolkit will be demonstrated. New features include:

- Pre-populated test templates for the NEFE High School Financial Planning Program modules
- Questions that align with Jump$tart's national standards in K-12 personal finance education
- New question types and formats to fit the needs of educators and learners of all ages
- Grading component - evaluations are automatically scored so you can easily collect and measure data
- Easy to use interface that simplifies the assessment creation process

The demonstration will be followed by a discussion of how to apply the Evaluation Toolkit to the participants' audience.

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Gender and Personal Finance

Martie Gillen, University of Florida and Barbara O'Neill, Rutgers University

Key words: financial education, personal finance, gender, women

Target Audience

Personal finance professionals who teach and/or counsel women.

Objective/Purpose

The purpose of this practitioner's forum session is twofold 1) to enhance attendees understanding of the relationship between gender and personal financial decision-making and 2) to provide free resources and activities that can be used in professional practice.

Description

The first half of this practitioner's forum session will explore research on relationships between gender and personal financial decision-making, including financial behaviors and risk tolerance beginning with teens and progressing through the life cycle. We will also discuss the effects of gender on financial circumstances such as income levels. The second half of the session will discuss women's unique financial planning challenges and present content and learning activities from the recently updated book *Money Talk: A Financial Guide for Women.*

Below are some examples of relevant research about gender and personal finances:

- ♦ Key findings of Junior Achievement's 2014 Teens and Personal Finance Survey reveal a gender gap across numerous money-related topics. Specifically, boys and girls view budgeting, college plans, and anticipating future earnings in very different ways (Junior Achievement, 2014). Researchers found that stereotypical beliefs play a role in the formation of the gender gap in financial literacy among teenagers (Driva, Lührmann, & Winter, 2016).
- ♦ For adults and regardless of age, gender differences are present for very basic as well as more advanced measures of financial literacy (Bucher-Koenen, Lusardi, Alessie, & Van Rooij, 2017). Gender differences exist in savings behaviors. Specifically, determinants of short-term and regular saving behavior were found to differ by gender (Fisher, 2010). Gender differences also exist in financial risk tolerance (Fisher, & Rau, 2017).
- ♦ In 2016, women who were full-time wage and salary workers had median usual weekly earnings that were 82% of those of male full-time wage and salary workers (U.S. Bureau of Labor Statistics, 2017). Since 2004, the women's-to-men's earnings ratio has remained in the 80 to 83% range (U.S. Bureau of Labor Statistics). Women are more likely than men to work part time or take time out of the workforce (American Association of University Women, 2018). When it comes to having children, mothers typically are paid less (the "motherhood penalty") while fathers typically are paid more (the "fatherhood bonus") (American Association of University Women).
- ♦ Despite the relative importance of Social Security for older women, their benefits are typically smaller than men's. Social Security benefits are calculated based on an individual's earnings history, but women generally have lower pay during their working years and spend fewer years in the paid labor force than men (U.S. Joint Economic Commission, 2016). As a result, the average monthly Social Security benefit for female retirees is 79% of what it is for male retirees (U.S. Joint Economic Commission).

The fourth edition of *Money Talk: A Financial Guide for Women* was published in April 2018. It is available in print and available for free downloading. This 188-page book has five sections: *Financial Basics, Insurance Basics, Investing Basics, Investing for Retirement,* and *Planning for Future Life Events.* Selected slides from a PowerPoint presentation developed to accompany the book will be presented.

References

American Association of University Women. (2018). *The simple truth about the gender pay gap.* Retrieved from https://www.aauw.org/research/the-simple-truth-about-the-gender-pay-gap/

Brennan, P., & O'Neill, B. (2018). *Money talk: A financial guide for women*. Ithaca, NY: PALS Publishing.
Bucher-Koenen, T., Lusardi, A., Alessie, R., & Van Rooij, M. (2017). How financially literate are women? An overview and new insights. *The Journal of Consumer Affairs*, *51*(2), 255-283.
Driva, A., Lührmann, M., & Winter, J. (2016). Gender differences and stereotypes in financial literacy: Off to an early start. *Economics Letters*, 146, 143-146.
Fisher, P. (2010). Gender differences in personal saving behaviors. *Journal of Financial Counseling and Planning, 21* (1), 14-24. Retrieved from
https://afcpe.org/assets/pdf/volume_21_issue_1/pattiejfisher.pdf
Fisher, P., & Rau, Y. (2017). Gender differences in financial risk tolerance. *Journal of Economic Psychology*, 61, 191-202.
Junior Achievement. (n.d.). *2014 teens and personal finance survey.* Retrieved from https://www.juniorachievement.org/documents/20009/36541/JA+2014+Teens+Personal+Finance+Survey.pdf/8ae8038d-f2bd-461e-9faa-23f1a6f19f58
U.S. Bureau of Labor Statistics. (2017). *Highlights of women's earnings in 2016.* Retrieved from https://www.bls.gov/opub/reports/womens-earnings/2016/pdf/home.pdf
U.S. Joint Economic Commission. (2016). *Gender pay inequality consequences for women, families and the economy.* Retrieved from https://www.jec.senate.gov/public/_cache/files/0779dc2f-4a4e-4386-b847-9ae919735acc/gender-pay-inequality----us-congress-joint-economic-committee.pdf

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Helping Financial Counseling Clients Overcome Money Anxiety

Ryan H. Law, Utah Valley University, Ann House, University of Utah

Key words: communication skills, money anxiety, money mindfulness, physical environment, stress

Target Audience

The target audience includes financial counselors, planners and educators who work with clients in any capacity.

Objectives/Purpose

According to Britt (as quoted in Jacques, 2013), it is important to deal with our client's money anxiety or stress because, "…people who are stressed are very short-term focused. They don't plan for the future. If you can reduce stress, you can increase planning" (para. 8). The CFP Board (2012) found that only 31% of families have created a comprehensive financial plan, and that financial plans benefit people at all income levels. This session will review evidence-based techniques and tools to help reduce client's money anxiety so we can increase planning with them.

Description

Since 2007 money has topped the list of sources of stress for Americans, with almost two-thirds reporting that money caused them very significant or somewhat significant stress (American Psychological Association, 2017). Money is also the leading cause of stress in relationships (Vincent, 2015), with 70% of married couples arguing about money (Money, 2014) and money issues topping the list of reasons couples divorce (MagnifyMoney, 2017). In this session presenters will review the statistics about money anxiety and discuss methods financial counselors, planners and educators can utilize to help their clients overcome money anxiety including education, the physical office environment, money mindfulness and communication skills.

References

American Psychological Association. (2017, November 1). *APA Stress in America survey*. Retrieved from http://www.apa.org/news/press/releases/2017/11/lowest-point.aspx

CFP Board. (2012, July 23). *2012 household financial planning survey*. Retrieved from http://www.cfp.net/docs/news-events---research-facts-figures/2012_household_financial_planning_survey.pdf?sfvrsn=2

Jacques, S. (2013, July 12). *Researcher find correlation between financial arguments, decreased relationship satisfaction*. Retrieved from https://www.k-state.edu/media/newsreleases/jul13/predictingdivorce71113.html

MagnifyMoney. (2017, February 13). *21% of divorcees cite money as the cause of their divorce, MagnifyMoney survey shows*. Retrieved from https://www.magnifymoney.com/blog/featured/money-causes-21-percent-divorces925885150/

Money. (2014, June 1). *Poll: How husbands and wives really feel about their finances*. Retrieved from http://time.com/money/2800576/love-money-by-the-numbers/.

Vincent, S. (2015, February 4). *Love and money: People say they save, partner spends, according to SunTrust survey*. Retrieved from http://investors.suntrust.com/news/news-details/2015/Love-and-Money-People-Say-They-Save-Partner-Spends-According-to-SunTrust-Survey/default.aspx

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How to Start A Financial Coaching Business That Fits Your Personal, Professional & Profit Goals

Dominique' Reese, Armed Forces Services Corporation

Key words: business, entrepreneur, financial coaching, goals, profit

Target Audience

The target audience includes financial coaches, financial counselors, financial planners and financial advisors. While all can benefit from this session, those who will benefit most are those who are interested in creating streams of income using their financial coaching skill set.

Objective/Purpose

The purpose of this forum is to help attendees understand how to start a financial coaching business that works for them. Given last year's conference, where we learned about opportunities to become independent practitioners, it's timely and topical to present how to do just that. Starting any business can be a challenge, let alone, a financial coaching business that fits your lifestyle, personal and professional goals. While we know how to do our jobs as counselors and coaches, we may not know how to start a business and/or how to work the business side of what we do. This forum will explore the benefits of independent private practice, what to sell in your practice, who to work with, how to reach them, and how to get paid to do the work we do with clients.

Description

How to Start A Financial Coaching Business That Fits Your Personal, Professional & Profit Goals will explore how you can start a financial coaching business that fits the lifestyle you want to live, not only the career you strive to build. The content will include a power point presentation, several handouts and Q &A style, combined with lecture style for delivery. There is one presenter and she will organize the attendees into small groups to facilitate the forum.

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Investment Scams: Helping Your Clients Avoid Fraud

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

Key words: fraud, investments, investment fraud, red flags, scams, securities fraud, senior fraud

Target Audience

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

Objectives/Purpose

The purpose of the presentation is to raise practitioners' awareness of the warning signs and patterns of common investment scams so that they may better help their clients avoid losing their hard-earned money to investment fraud.

After this presentation, participants will:

- Know the warning signs of investment fraud
- Understand how to identify Ponzi schemes, microcap fraud, advance fee fraud, affinity fraud, crypto-currency fraud, and other emerging investment scams
- Know how to use the SEC's free investor resources, tools, and calculators

Description

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 advisors, 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. **Investor.gov** is the agency's online resource for individual investors.

The presentation, with PowerPoint slides and videos, will cover how to identify and avoid investment scams. With a basic understanding of how fraudsters operate, investors can avoid fraud and grow their hard-earned money. Topics will include the red flags of investment fraud, common scams used by fraudsters, and questions to ask before investing.

Discussion will also provide an overview of the free resources on Investor.gov, including investor alerts on emerging frauds, tools to check financial professionals and sources for researching companies.

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A Love & Money Curriculum

Sonya Britt-Lutter, Emily Koochel, Camila Haselwood, Kansas State University

Key words: love, money, relationships, stress

Target Audience

The program is designed for couples between the ages of 25 and 45 years old who are in the early years of a relationship (married or living together for seven years or less). The curriculum is meant to be used between a facilitator and a couple, rather than a larger group setting. It may be adapted for use in a group setting, although issues of privacy and respect will need to be addressed. The findings of this study indicate that financial counselors and planners, marriage and family therapists, and non-professionals can use the curriculum to produce positive results for couples' relationships.

Objective/Purpose

To provide practitioners with an evidence-based curriculum that produces positive results for couples' relationships.

Description of Content and Method

A love and money curriculum was developed through the lenses of the stress and coping theory (Lazarus & Folkman, 1987) to guide couples through conversations about the role money plays in their relationships. A unique element of this curriculum is the underlying focus on physiological stress. With heightened stress comes more negative communication, which can stand in the way of developing a purposeful long-term financial plan. Facilitators guide couples through conversations about the multiple dimensions of money—core beliefs, emotional, cultural, behavioral, and practical—and how they influence the couple's relationship.

This curriculum contains five lessons designed to help couples improve their financial communication. Each lesson contains a teaching, and activities developed to help couples better understand the topic. Couples are then encouraged to practice implication of the material at home between lessons. Couples have reportedly enjoyed completing activities on their own, but expressed the benefit of having someone to facilitate conversations they would not have otherwise had. This was summarized nicely by one of the couples who stated, "I appreciated the activities where you would fill out various questions for myself AND what I thought my husband would say. It not only gave us a chance to share our own answers but also allowed me to see where I was misreading my husband. It provided a lot of clarity. I also appreciated having someone there to facilitate. I feel like we answered questions in a more robust way than had it just been the two of us."

Minimum and Maximum Time Required

Each of the five lessons is expected to take one hour in length for a total of five hours per couple. There was little variation in time required with the initial testing of the curriculum.

Suggestions on How Researchers Can Help To Further Improve the Program

Two studies have been conducted to date with six different facilitators to test the reliability of the curriculum in producing positive outcomes for couples. Results indicate that across all facilitators, couples experienced a reduction in the stress finances put on their relationship and increased happiness with their finances and communication. Stress reduction was sustained three months following the conclusion of the curriculum for the initial couples and results for the second group of couples will be available in September. All couples involved in the testing of the curriculum have been recruited specifically for the study and were offered a monetary incentive. It would be ideal to test the curriculum across more diverse groups of couples and couples actively seeking financial counseling versus being recruited for a study.

Reference

Lazarus, R., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*(3), 141-169.

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Making Assessment Work for Everyone!

Sandra Huston, Texas Tech University

Key words: assessment

Target Audience

Anyone who provides a learner/client service.

Objective/Purpose

The purpose of this session is to highlight how adopting a relevant and systematic assessment process can truly be a tool for service improvement, by addressing recipient benefit and provider performance. Attendees of this forum should be able to:

1. Identify WHAT to assess and WHY
2. Determine HOW to assess and evaluate results
3. Use results to improve service provision for both users and providers

Description

Are you required to document the impact of your work? Are you asked for "numbers" to provide a rationale for continued funding? Are you interested in understanding more about how effective the service you provide is? Are you currently using an assessment tool that doesn't really do much for any stakeholder? If the answer to any of these questions is "yes" – this will be a forum session that you will want to attend.

In this practitioners' forum, we will walk you through our assessment process from start to finish, including:

1. What motivated our decision on how/what to assess
2. How we selected/designed our assessment instruments
3. How we collect our data
4. Who we collect our data from
5. How we analyze the collected data
6. What we do with the results

Our particular application of this assessment process is within the context of an undergraduate-level personal finance program. We will show you how this process has developed over the last 5 years and how we rely on this process to inform and improve: learner experiences, instructor performance, individual course content, and program-wide policies and procedures. Although the application of our assessment process is specific to higher education, we will show you how this assessment process can be adapted for any type of service provision – clients, community information sessions, other education programs, etc.

Suggestion on How Researchers Can Help to Further Improve the Program/Project Tool Researchers attending this session could focus on using the scientific process to help determine:

1. Reliability and validity of assessment instruments (i.e., do the instruments selected measure what is intended and is this replicable?)
2. Using time 1 as a baseline, compare results from subsequent data collections to determine if strategies developed and implemented from baseline results have a measurable impact on service recipients.
3. Determine which strategies developed from assessment results have the greatest magnitude of effect on eliciting service improvements.

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Making the TCJA Personal: A Workplace Lunch and Learn Income Tax Seminar

Barbara O'Neill, Rutgers University

Key words: income taxes, financial education, taxes, financial planning

Target Audience

The target audience for this workshop is professionals who teach or counsel people about federal income taxes, do income tax preparation directly for clients, or direct volunteer income tax assistance programs. The workshop will provide useful background and materials that can easily be replicated by attendees.

Objectives/Purpose

1. Participants will learn basic income tax planning terms so they can fully appreciate TCJA changes.
2. Participants will learn key provisions of the Tax Cuts and Jobs Act that affect personal finances.
3. Participants will learn financial planning strategies to mitigate the financial impact of the TCJA.
4. Participants will learn about income tax planning resources.

Description

One of the biggest events affecting financial planning in 2018 and beyond is the Tax Cuts and Jobs Act (TCJA), which was signed into law by President Trump on Dec. 22, 2017. The TCJA will impact individual tax payers and businesses on a scale that has not been seen in over 30 years (i.e., Economic Recovery Tax Act of 1981). Some key TCJA tax law changes that affect personal financial planning include:

- Eight-year period of lower individual tax rates (2018 through 2025) with seven temporary tax rate brackets ranging from 10% to 37% and elimination of personal exemptions during this time period.

- Chained CPI (consumer price index) will be used for indexing, resulting in lower inflation adjustments.

- Nearly double the standard deduction ($12,000 for singles; $24,000 for married couples filing jointly) and an enhanced child tax credit of $2,000 per qualifying child; $1,400 of the credit is refundable.

- $10,000 cap for SALT deductions (e.g., state income tax and municipal property tax) for taxpayers who itemize and a repeal of all miscellaneous deductions previously subject to the 2% of adjusted gross income (AGI) floor (e.g., union dues, unreimbursed business expenses, and tax preparation fees).

- The moving expense deduction was suspended (2018-2025) except for expenses of service members.

- Interest on home equity loans is not deductible (2018-2025) with no grandfathering for existing loans.

- The estate tax exclusion was raised to $11.2 million for individuals and $22.4 million for married couples (with proper planning to double the individual exemption; i.e., portability) from 2018 through 2025.

It is not enough for financial educators and counselors to simply explain key features of the TCJA to consumers. They must also provide viable financial planning options to deal with the new income tax landscape (e.g., better ways to donate to charities). This workshop will describe a "lunch and learn" income tax workshop that was developed for employees in a high living-cost state whose residents were more severely impacted by TCJA provisions than many people who live elsewhere in the United States.

The presentation will include the same 36 slides presented at the workplace income tax seminar. Topics covered in the presentation include basic income tax planning terms, types of U.S. taxes, marginal tax rates, tax credits vs. tax deductions, charitable gifting, tax withholding and W-4 forms, and the alternative minimum tax (AMT). The presentation will then cover key features of the TCJA (i.e., the key features listed above and others such as a lower medical expense deduction threshold for two years, higher AMT exemption amounts, and expanded qualified uses for 529 plan savings) followed by specific tax planning strategies. For example, to cope with the SALT cap, people could consider: downsizing to a smaller home where they currently live, moving to a more "tax friendly" state with lower income and property taxes, or resigning themselves to having to pay higher taxes and needing to adjust their income tax withholding accordingly. Seminar evaluation results will also be shared, including new knowledge gained by participants and planned behavior changes as a result of attending the income tax seminar.

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A Multi-Disciplinary Approach: Finances and the Compulsive Gambler

Sara Croymans, University of Minnesota Extension; Shirley Anderson-Porisch, retired, University of Minnesota Extension and Sheryl Anderson, Project Turnabout Vanguard Center for Compulsive Gambling Recovery

Key words: compulsive gambling, financial counseling, financial management, problem gambling

Target Audience

The target audience are gamblers in a residential treatment program and their family members. This proposed practitioner's forum is intended for those working with addicted gamblers and those who could potentially work with addicted gamblers.

Objectives/Purpose

The purpose of this practitioner's forum is to provide information on the role of financial counseling with addicted gamblers. The objectives are to:

1. Raise awareness of problem gambling and its potential impact on family finances.
2. Become familiar with a treatment program that integrates a family financial component.
3. Identify financial strategies and resources to utilize with gamblers.

Description

According to the National Council on Problem Gambling nearly 1% of the U.S. population (approximately 2 million adults) meet criteria for serious gambling problems, while an additional 4-6 million individuals (2-3% of the U.S. population) would be classified as having moderate gambling problems. This hidden addiction has an estimated national social cost to families and communities due to bankruptcy, divorce, job loss, home loss, and criminal justice costs associated with problem gambling of approximately $6.7 billion each year (Huble, 2018). A compulsive gambler can be defined as "anyone whose gambling causes psychological, financial, emotional, marital, legal, or other difficulties for themselves and the people around them" (NCPG & NEFE, 2000).

This session will provide resources for financial counselors and practitioners to help their clients determine if they have a gambling problem. Potential impacts of gambling on family finances will be discussed. A unique gambling treatment program that integrates a family financial component in collaboration with Accredited Financial Counselors will be highlighted. Treatment program strategies that address the dimension of a multi-disciplinary approach will be identified.

References

Huble, C. (2018, February 27). *March is Problem Gambling Awareness Month.* [News release]. Retrieved from https://www.ncpgambling.org/march-is-problem-gambling-awareness-month-2/

National Endowment for Financial Education & National Council on Problem Gambling. (2000). *Personal Financial strategies for the loved ones of problem gamblers*. Retrieved from https://www.calproblemgambling.org/wp-content/uploads/2012/06/Personal-Financial-Strategies-for-the-Loved-Ones-of-Problem-Gamblers-1.pdf

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Supporting Credit Inclusion: Financial Product and Credit Scoring Innovations

Carmina Lass and Morgan Spears, Credit Builders Alliance

Key words: credit, credit reports, credit scores, financial inclusion

Target Audience

The target audience for this session includes financial coaches and counselors working with clients on credit related issues.

Objectives/Purpose

Building financial and credit inclusion requires recognition of the unique needs of specific populations that have been historically excluded from the financial mainstream. In response, lenders—in particular non-profit and community based financial institutions, and the credit industry itself, are innovating to meet the credit needs of these often low-income and minority consumers. Participants will:

- Learn how lenders are innovating at local and national levels to support financial inclusion through the creation of original small dollar financial products; and
- Understand shifts in credit reporting and the development of more inclusive credit scoring algorithms in order to expand credit access.

Description

The credit reporting industry as we know it today has been grounded in the reporting of traditional financial products, namely, credit cards, loans and mortgages. These products have been most commonly offered to consumers through mainstream financial institutions (banks and credit unions). Yet, in recognizing that millions of Americans are "credit invisible," lacking a credit report or credit score, we know that traditional credit reporting excludes a subset of primarily low-income and minority consumers, and that these same consumers are not always turning to mainstream financial institutions to meet their credit needs.

This session will take a two-pronged approach to explore the credit needs of specific populations and how these needs are being met through innovations in lending and through changes within the credit reporting industry itself.

First, the session will consider innovations in lending and supportive services in order to address the particular credit considerations and needs of key target populations including:

- Undocumented individuals;
- Individuals re-entering into society following incarceration;
- Individuals with disabilities;
- Survivors of domestic violence; and more.

Next, the session will explore the evolution of the credit industry itself and shifts toward financial inclusion through changes such as:

- Reporting of positive rental date on consumer credit reports;
- The growing use and of alternative data in credit scoring risk models;
- Policy level movement around credit inclusion such as through the introduction of the Credit Access and Inclusion Act.

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Student Loan TIPS – Texting Intervention Project

Lorna Wounded Head, South Dakota State University Extension, Erica Tobe, Michigan State University, Kathy Sweedler, University of Illinois Extension, Carrie Johnson, North Dakota State University, Mary Jo Katras and Joyce Serido, University of Minnesota Extension, Elizabeth Kiss, Kansas State University, Suzanne Bartholomae, Iowa State University, Graham McCaulley and Andrew Zumwalt, University of Missouri, David Evans, Purdue University

Key words: college students, student loan repayment, texting intervention

Target Audience

Cooperative extension professionals, and financial counselors, coaches and educators who work with young adults.

Objectives/Purpose

1. Provide student loan borrowers timely information about student loan repayment via text message.
2. Increase awareness and knowledge about student loan repayment.
3. Empower students to access resources to make decisions about student loan repayment.
4. Assess the effectiveness of providing student loan borrowers repayment information via text messages.
5. Develop an educational tool for Cooperative Extension professionals.

Description

Eleven North Central Region universities implemented a text messaging campaign to provide resources to recent college graduates in order to increase awareness and knowledge about student loan repayment. Text messaging, as an information dissemination model for family financial issues, has been used in national efforts such as America Saves. Building on their success, this campaign follows a similar model as an information delivery source for student loan borrowing and repayment issues.

Undergraduate students from universities within the North Central region who were preparing to graduate were invited to complete a baseline survey developed by the research team. Participants who provided their cell phone number were asked to participate in the texting campaign. The survey company Qualtrics was used to administer the text messages. Text messages were sent over an 8-week period, prior to the start of repayment. Two follow-up messages were sent approximately two – four weeks after the anticipated start of repayment. The post survey was administered one week after the final text messages were sent.

Based on our experience, the research team has developed an educational toolkit that can be used by professionals who work with consumers who are in the process of student loan repayment to replicate the project or to use the resources in their own work. The toolkit includes information and procedures on how to implement the project and is accessible online. One component of the toolkit is a series of four podcasts with content about student loan repayment. Content was garnered from the participants' text message comments and responses to the post survey regarding questions and concerns about the loan repayment process. The podcasts will equip financial professionals with information to address specific needs of borrowers that is not currently addressed in published resources.

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Taking the Confusion Out of Understanding and Estimating Health Care Costs

Maria Pippidis, University of Delaware Cooperative Extension, Jesse Ketterman Jr., University of Maryland Extension, Lisa McCoy, University of Maryland Extension, Virginia Brown, University of Maryland Extension, Bonnie Braun, University of Maryland Extension, Chenzi Wang, University of Maryland Extension

Key words: estimating health care costs, health insurance, health insurance literacy, health insurance terms

Target Audience

Health insurance consumers of all ages are the target audience for the Smart Use Health Insurance™ – Understanding and Estimating Health Care Costs module.

Objective/Purpose

According to Consumers Union, consumers struggle with health insurance decisions due to low health insurance literacy and complexity of products (Consumers Union, N.D.). The purpose of Smart Use Health Insurance™ – Understanding and Estimating Health Care Costs module is to help participants 1) better understand the types of health care costs, 2) explore ways to identify where to find health care cost information and 3) practice how to estimate and plan for costs using a case study. Case studies are used to assist participants in practicing how to estimate and plan for health care costs.

Description

Smart Use Health Insurance™ - Understanding and Estimating Health Care Costs is a 1 to 1.5 hour learning module developed to help consumers reduce confusion, increase capability, and increase confidence and skills needed to better comprehend health care expenses. It was researched, developed, peer reviewed and pilot tested. The interactive module is grounded in health insurance literacy, social cognitive theory, stages of change/readiness, and adult learning theories. The module is offered as a consumer workshop, train-the-trainer and professional development session in face-to-face workshop and webinar formats. National train-the-trainer professional development sessions have enabled experienced educators to implement the module in multiple states and to a variety of clientele.

Using a PowerPoint slide deck, interactive activities, discussion and a case study, the module content reviews important health insurance terms and types of out-of-pocket health care costs, identifies important documents necessary for estimating health care costs and concludes with a case study activity that enables participants to practice what they just learned. Local resources, publications, case study material and blank worksheets are provided to attendees. Different case studies have been prepared for general audiences, farm audiences and Medicare audiences. A pre and post-test evaluation study shows statistically significant increases in participant's confidence in understanding health insurance cost terms, estimating the total health care costs, and determining how much they need to save to cover their health care expenses. (N=175).

References

Consumers Union. (n.d.). Better health insurance choices. *Consumers Union*. Retrieved from https://consumersunion.org/topic/health-care/better-health-insurance-choices/

Ketterman, J., Pippidis, M., Brown, V., Braun, B., & McCoy, L. (in press). Understanding and estimating health care costs. *The Forum for Family and Consumer Issues (FFCI), 21*. On-line: https://projects.ncsu.edu/ffci/

Kim, J., Braun, B., & Williams, A. D. (2013). Understanding health insurance literacy: A literature review. *Family and Consumer Sciences Research Journal, 42*, 3-13.

Loewenstein, G., Friedman, J. Y., McGill, B., Ahmad, S., Linck, S., Sinkula, S. Beshears, J., Choi, J., Kolstad, J., Laibson, D., Madrian, B., List, J., Volpp, J.K. (2013). Consumers' misunderstanding of health insurance. *Journal of Health Economics, 32*, 850–862.

Quincy, L. (2012). What's behind the door: Consumers' difficulties selecting health plans. *Consumers Union*. Retrieved from http://consumersunion.org/wp-content/uploads/2013/03/Consumer_Difficulties_Selecting_Health_Plans_Jan2012.pdf

The Regence Group. (2008). Regence survey shows steep health plan learning curve 09/22/2008. *The Regence Group.* Retrieved from http://news.regence.com/releases/regence-survey-shows-steep-health-plan-learning-curve

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Tales from a Former Debt Collector

Sasha Grabenstetter, AFC®[1], University of Illinois Extension

Key words: consumer rights, credit, debt collections, personal finance

Target Audience

When was the last time you or a client of yours received a debt collection phone call? Do you have questions about how to deal with a debt collector and the collection process? Do you want to learn more about debt collection from a former debt collector? If yes, then join in a discussion about debt collection practices and learn how to serve your clients better. This presentation is targeted towards attendees who work with people (either individually or in a small group) who may deal with debt collection on a semi-regular basis.

Objective/Purpose

Debt collection is a practice used by all forms of businesses and entities including universities, banks and credit unions, hospitals, telecommunication companies, and credit card companies. A key goal is to gain better understanding of the Fair Debt Collections Practices Act and learn how to dispute a debt with a collection agency. Participants will also learn what to do if a debt collector verbally threatens them in addition to picking up some "golden rules" when dealing with a debt collector or agency.

Description

According to Hunt and Adams, "Researchers have noted that on an annual basis the debt collection industry makes over one billion consumer contacts." Clients, program participants and other individuals we serve may be being called by debt collectors more often than we think and seeking out information from unreliable sources such as friends and family.

Participants in this session will have a more thorough understanding of debt collection from the eyes of a former debt collector, including what to do and not to do when a collector comes calling, as well as ways to help clients in a debt collection situation.

In addition, the presenter will discuss the Fair Debt Collection Practices Act, common misconceptions about debt collection and debt management resources for clients in the event the debt becomes unmanageable. Participants will also leave with a worksheet to assist future clients disputing a legitimate debt from a collection agency.

Once Participants have learned about debt collection, the Fair Debt Collection Practices Act and more, they can then use the information as they see fit with a client or group, in as little as fifteen minutes or in a longer one hour discussion.

References

Hunt, R. (2013, June 6). Understanding the model: The life cycle of a debt. *Presentation at Life of a Debt: Data Integrity in Debt Collection--An FTC – CFPB Roundtable.*

Adams, J. (2016.) The role of third-party debt collection in the U.S. economy. *ACA International White Paper.*

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The Power of Word: A Tool for Your Toolkit

Diana Kyu Yacob, Diana Kyu, LLC

Key words: coaching, counseling, empowerment power, encouragement, words

Target Audience

The target audience include financial counselors, coaches, and therapist, but attendees of any field will be able to utilize the techniques taught in this session.

Objective/Purpose

This is a workshop designed to teach a powerful technique that practitioners can use during their client sessions. The purpose is to leave attendees encouraged and empowered to impact their world one person at a time.

Description

Sometimes clients are unmotivated, having a bad day, etc. You may feel like the session was a wash and nothing was accomplished. In this session you will learn about the power of words and how to use and deliver them in a way to transform your sessions. You are essentially learning to become a thermostat to change the temperature of any room. Your clients will leave the session in a better mood, empowered, and very thankful! A few demonstrations will be done on willing attendees. There will be a group exercise and then attendees will be given the opportunity to practice with each other.

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Thrift Savings Plan's Role in Blended Retirement System

Mei Shan Josephine Kammer and Stewart Kaplan, Federal Retirement Thrift Investment Board

Key words: auto-enrolment, auto-reenrollment, blended retirement system, thrift savings plan, TSP, BRS, BRS opt-in eligibility, traditional TSP vs Roth TSP, service contributions,

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 counselors and educators to serve as a foundation from which they can build their own TSP curriculum. The training will provide an overview of the TSP's role in the Blended Retirement System.

Description

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.

Blended Retirement System (BRS) is a new retirement system for some members of the uniformed services. It reduces the percentage of the annuity which they get if they serve 20 years or more but, in-turn, members covered by BRS receive TSP contributions from their employing service. Anyone who joins the uniformed services on January 1, 2018, or later is automatically enrolled in BRS. Members who have fewer than 12 years of service on December 31, 2017, may opt into BRS; if they choose the new system over the old. Those with more than 12 years of service are not eligible for BRS. Uniformed service members are eligible to create and maintain a TSP account whether they opt-in to the BRS or not.

Topics covered in this session include: TSP contribution rules under the Blended Retirement System (BRS); BRS opt-in eligibility; tax treatments of traditional and Roth contributions; service automatic and matching contributions; auto-enrolment and auto-reenrollment; TSP lifecycle funds and efficient frontier; and TSP expense ratio. We will discuss how participating in the TSP can benefit career military members as well as those who do not expect to qualify for a military retirement benefit. We will also go through scenarios using the BRS comparison financial calculators and TSP financial calculators.

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When I'm 65: Educating and Engaging Communities about Retirement Realities

Don Blandin, President and CEO, Investor Protection Trust

Key words: community resources, investor education, investor protection, retirement, survey findings

Target Audience

The engagement program will target grassroots organizations in local communities as well as Accredited Financial Counselors (AFC®), professionals in financial planning, military fleet support services and all areas of financial and investor education. Session attendees will receive a copy of the age group-specific booklets, the ***When I'm 65*** DVD set and other toolkit resources.

Objective/Purpose

The presentation on the Georgia ***When I'm 65*** program will include highlights and feedback from investor education and protection events in Georgia, key findings from a statewide survey focused on Georgia residents who are struggling to plan or save for retirement and an overview of the national toolkit resources available to all States for noncommercial use in workshops, classes and other educational events. We will provide an overview of booklets which offer retirement planning strategies customized for three different age groups. The "Starting to Save for Retirement" is designed for young professionals starting their careers as well as those approaching their prime earning years, the "Ramp Up Savings for Your Retirement" booklet is for adults at the midpoint of their career and the "Getting Closer to Retirement" booklet is for adults approaching retirement age. We will also present new videos covering topics including how to build an investment portfolio, steps to take toward funding an individual's future and ways to save and invest for college. We encourage audience input on how we can address retirement challenges, including challenges in educating individuals about the changing realities of retirement. In addition, we will review the www.WI65.org/Georgia website and show engagement videos produced by Detroit Public Television and the Georgia Securities Division.

Description

Following previous Practitioner's Forum sessions regarding the ***When I'm 65*** program, we will present plans, developments and survey results for the Georgia ***When I'm 65*** program as well as new national ***When I'm 65*** toolkit resources. Resources include three booklets focusing on retirement planning strategies for various age groups, the community discussion guide, event toolbox and videos for use in local workshops and to be shared across digital platforms. We will facilitate an audience discussion on how to expand the program to more communities and make program resources more accessible to AFCPE® members, AFC®s, extension educators and other professionals in the investor education and financial education fields. We will encourage ideas for continued research to help us identify saving and investing challenges and how we can address them. We plan to invite representatives from various States to share experiences from the ***When I'm 65*** program and IPT forum, as well as recommendations for continued education. The discussion will build on last year's session and explore how the States can work together through the ***When I'm 65*** program and other initiatives. We also plan to share investor education and protection insight from discussions during the Investor Protection Trust's Communicating and Engaging with Diverse Stakeholders in a Complex World" forum and 25th anniversary celebration, which will be held September 13-15, 2018.

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Where Did That Financial Behavior Come From? Genogram, A Tool That Works!

Andi Wrenn, MA, AFC®

Key words: behavioral finance, counseling, tool, family map, genogram

Target Audience

Financial professionals that work with individuals, couples, families, and groups can find this tool useful when working with any clientele. Whether clients are seen in an ongoing series of sessions, or one time only, this tool can be used to assist both the professional and the client to see the family dynamics, values, and biases they have been exposed to. Members of academia and those who develop research and studies can formulate a plan to find measurable outcomes and uses of the Genogram tool in relation specifically to financial planning, counseling, and coaching. Development of a digital tool or app related to the financial aspects of the use of this process could greatly benefit many in the financial profession.

Objective/Purpose

The objective of this presentation is to educate financial professionals on how to utilize a tool to use with individuals, couples, or families. Several things can be focused upon with the use of the Genogram; biases, family history, patterns, pledges, values, dreams, communication, financial behaviors, hardships, addiction, and financial influencers.

The audience will be shown how to use the tool and have a participatory activity in which they practice using the symbols and diagrams to complete a genogram. There will be examples of genograms used with a variety of client types. An introduction to some of the apps available will also be provided for those who wish to use technology in client sessions.

Description

A genogram is a tool that was initially used by counseling professionals as a graphic representation of a family tree that displays detailed information on relationships among individuals. It is an intergenerational map of the family and relationships. Genograms show social and family dynamics that link family members. It is collaborative tool to use with clients to inform the client and professional alike. It is a visual way to describe family systems. A genogram is a point in time diagram.

Social workers, therapists, and financial professionals are just some of the professions that use genograms. For most people their financial decisions and behaviors are related to values and biases that have come about due to their upbringing and life experiences. Grandparents, parents, other family members, and close friends can have a huge influence on financial decisions. These family relationships influence the choices made and are a model of what to do, or what not to do with their finances. Genograms play a role in working with clients in the financial arena as the process of creating a genogram makes the client more aware of their financial values and biases through a physical form. It is a tool to help "see" the whole picture of family dynamics and the role related to finance.

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Research Papers

Applying Human Capital Framework to College Student's Financial Well-Being

Sonya Britt-Lutter, Christopher Moore, Juan Gallardo, and Andrew Scott, Kansas State University

Abstract

This study examined the association between financial knowledge and application of knowledge with financial behaviors and financial well-being among college students. Using path analysis, indicators of financial knowledge and application (i.e., financial mastery and being a first-generation student) had a significant impact on financial behavior, which in turn had a significant impact on financial well-being. These findings show support for the human capital framework as applied to financial literacy and financial well-being.

Key words: financial anxiety, financial stress, mastery

Introduction

Financial literacy is the ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pension (Lusardi, Michaud, & Mitchell, 2017). Objective financial knowledge is one component of literacy, but confidence and application are also integral parts as self-confidence which are important drivers of behavior (Anderson, Baker, & Robinson, 2017). Self-confidence affects financial literacy by impacting the way an individual processes information and in the decision-making (Arellano, Camara, & Tuesta, 2014).

Financial education and counseling can be viewed as one solution to increasing self-confidence as it relates to financial literacy. Increasing financial literacy among the US population is of major importance as it has been linked to many financial decisions affecting assets, debt, and net wealth holdings (Lusardi & Mitchell, 2014). Education focused on factual knowledge and building the skills necessary to improve financial behaviors reinforces positive cash and credit behaviors, which should improve decision making (Sanders Woodyard, Robb, & Babiarz, 2017). The purpose of this study is to examine the influence of financial counseling on the financial behaviors of college students and how those behaviors go onto influence perceptions of financial well-being.

Theoretical Framework and Related Literature

Often there is a discrepancy between an individual's actual knowledge and individual's self-perception or confidence (Asaad, 2015), which ultimately influences financial behaviors (Anderson et al., 2017). This relationship can be explained, in part, through Huston's (2010) framework of financial literacy and well-being. From a human capital perspective, it is expected that increased education (counseling) would have a positive effect on knowledge and behaviors. Huston (2010) elaborated on a human capital perspective by showing the hypothesized relationship between increased human capital with financial behavior and financial well-being controlling for cultural, economic, and behavioral influences (See Figure 1).

As framed by Huston (2010), financial literacy is a combination of knowledge and application of knowledge. Objective knowledge is the factual information that an individual knows about a certain topic that can be measured with questions that have objective right or wrong answers (Krawczyk, Stephenson, Perez, Lau, & Rosberger, 2013). Objective financial knowledge is expected to enable individuals to better allocate lifetime resources in a world of uncertainty (Lusardi et al., 2017). Yet, a certain level of application or experience is needed to translate the knowledge into positive financial behaviors as illustrated in Figure 1.

The need for the application piece of financial literacy is highlighted through research showing that simply having greater financial knowledge does not translate to better financial behaviors. For instance, males tend to report higher financial knowledge (Goldsmith & Goldsmith, 2006; Lusardi & Mitchell, 2011), but worse financial behaviors

(Henry, Weber, & Yarbrough, 2001). According to Danes and Haberman (2007), when women find themselves in financial education situations, they tend to gather new knowledge while men simply reinforce old knowledge.

New-to-college students are likely to gain more from financial education opportunities that expose them to unfamiliar concepts since the first years of college constitute an important transitional stage of development within the larger transitional period (Archuleta, Dale, & Spann, 2013). Financial education and counseling can provide part of the application practice that students need to be successful with their personal finances. Many college students are not yet financially independent, but are actively learning the skills needed to be financially independent (Shim, Barber, Card, Xiao, & Serido, 2009). For instance, freshmen may be handling money independently for the first time and first generation students may not have a reliable family source to ask student loan questions. In general, first generation students tend to have higher financial literacy needs, but are less likely to seek financial counseling as a way to improve their exposure to personal finances (Eitel & Martin, 2009).

Financial education has been shown to lead to increased financial knowledge, literacy, and behaviors (Hastings, Madrian, & Skimmyhorn, 2013). Financial education significantly impacts financial behavior, and to an even larger extent, financial literacy (Kaiser & Menkhoff, 2017). Students who received mandatory financial education in high school had more favorable savings rates during the ages of 35-49, which were considered to be the peak earning years, than those students who did not receive the same level of financial education (Bernheim & Garrett, 2003).

Despite the research pointing toward the need to increase financial education, other studies have shown that financial education may not have the greatest effect on financial behaviors perhaps because of a missing link to application of knowledge. A research study suggested that previous financial experiences may be more influential on behaviors than the amount of financial education someone receives (Lyons, Chang, & Scherpf, 2006). Another study showed that personal experiences may influence the impact level of financial education (Hilgert, Hogarth, & Beverly, 2003), meaning that the experiences that each individual has early in life may impact how they make financial decisions more than exposure to financial education. There is evidence that there may not be a lasting effect from financial education (Anthes & Most, 2000). Research has indicated that financial education should be given at specific “teachable moments” in someone’s life in order to have the greatest positive effect (Kaiser & Menkhoff, 2017).

Seeking financial counseling early in college impacts the development of future financial behaviors because the exposure to financial counseling is associated with positive financial behaviors (Augustin & Martin, 2017) and generally better financial outcomes (DeBassa, 2013). Specific financial behaviors—such as checking for the lowest interest rate before borrowing, actively saving, following a spending plan, and keeping financial goals—have been shown to be positively related to lower reported levels of financial stress and increased financial well-being (Gutter, Garrison, & Copur, 2010). The early exposure to the attainment of financial capability—financial knowledge, skills, and access to financial services—may also contribute to a smooth transition into adulthood (Wu, Despard, & Chowa, 2017).

Data

The data used in this study was obtained from a sample of 2,014 college students who sought free peer-based financial counseling from an on-campus financial counseling center at a large Midwestern university (population of approximately 24,000) between November 2009 and December 2017.

Students are made aware of the financial counseling center through new student orientation, a visit from a staff member during one of their classes, posters around campus, or word of mouth. Students schedule their counseling session online, indicate their “presenting issue” or primary reason for scheduling the appointment, and complete a brief intake questionnaire. Students are then matched with a trained peer financial counselor who has knowledge in the presenting issue indicated on the intake questionnaire. Other data gathered on the intake questionnaire include personal and financial background information.

Students are required to give consent for their intake questionnaire (stripped of identifying information) to be used for research purposes. There is a possibility that students who elected not to have their data used for research purposes differ from the sample retained for research analysis, although it is not possible to test this hypothesis because the researchers do not have access to any data for the clients who opted not to have their data used for research.

Two months after the initial appointment, clients are sent an electronic follow-up survey nearly identical to the intake questionnaire to assess for changes in financial knowledge, attitudes, and behaviors. An interval of two months was selected in order to allow enough time for the development of potential changes and to ideally follow a student within the same semester. Approximately 13% of the participants who elected to have their data used in research completed the two-month follow-up survey.

Demographic data for the sample are shown in Table 1. In general, the sample differs significantly from university in that females, Whites, and first generation students are over-represented.

Variable Measurement

Financial Knowledge. The commonly used measure of objective financial knowledge (i.e., the Lusardi and Mitchell (2011) questions) were not available in the dataset and the objective financial knowledge questions available in the data did not have good reliability as a single measure, so subjective financial knowledge was used. Knowledge was self-rated on a scale of 1 to 10 where 1 indicates low perceived knowledge relative to peers and 10 indicates very high knowledge relative to peers.

Financial Application. Financial application was measured with four items. It was hypothesized that having a full or part-time job and having a credit card (regardless of balance status) would be examples of students' experience with money. Students who work full or part-time (including seasonal work) were coded 1, otherwise 0 if they reportedly have no job. Students were coded 1 for having a credit card, otherwise 0. It is not possible to detect whether the card was jointly owned with someone else.

Next, a mastery scale that asked students their level of agreement with the following seven items were 1 = almost never and 7 = almost always: (a) there is really no way I can solve some of my problems, (b) I am being pushed around in my life, (c) there is little that I can do to change the important things in my life, (d) I can do anything I set my mind to, (e) I am helpless in dealing with the problems of life, (f) what happens to me in the future depends on me, and (g) I have little control over the things that happen to me. As a summated score, the Cronbach's alpha was .81.

Finally, financial application was proxied with whether the student was a first generation college student (i.e., did they have experience/guidance in navigating the college experience) to get a rough estimate of prior exposure to personal finance concepts associated with college life (namely, student loans). First generation students were coded 1, otherwise 0.

Financial Behaviors. Students reported their frequency of engagement in a number of financial behaviors on 1 to 5 point scale where higher scores indicated more frequent engagement. (a) I made myself aware of the amount of money I owe; (b) When I borrow money (e.g., for a car, big purchase, or credit cards) I shop around for the lowest interest rate; (c) I have a weekly or monthly spending plan that I follow; and (d) I have specific short-term or long-term written financial goals. A principal component analysis indicated that the four items loaded onto one factor with factor loadings of .40 or higher. Using the factor score allows for items contributing more to the financial behavior factor to be weighted higher than items contributing less to the overall factor. The Cronbach's alpha associated with the four items as a factor score was .65.

Financial Well-Being. Financial satisfaction was the closest available proxy for financial well-being and was measured on a 1 to 10 point scale where higher scores indicated higher satisfaction with one's financial situation.

Analyses

A path analysis was used to first explore the predictors of positive financial behavior and then use that to predict financial satisfaction among college students who had sought financial counseling. The model to be tested is shown visually in Figure 2.

Results

Table 2 shows the descriptive statistics of the multivariate analysis. The average subjective financial knowledge score is 4.74 for the sample. With a standard deviation of 1.87, subjective financial knowledge varied greatly from observation to observation. In regard to financial experience, 76% of observations has some form of employment and 58% had a credit card. Regarding financial confidence, the average perceived mastery score for the sample is 29.86, as a summation of the seven unique financial confidence questions in the survey.

Perceived financial mastery scores could be as low as 7 or as high as 49, and this sample has an average perceived financial mastery score of 29.86 with a standard deviation of 4.44. Also, 54% of the sample identified as first-generation college students. The average financial behavior value for the sample is .10, which is near 0 as expected from a principal component analysis factor score. Average financial satisfaction for the sample is 4.57 on a 10 point scale.

The path analysis results are shown in Table 3 with significant results shown in the path diagram in Figure 3. The results indicated that students with higher perceived experience as measured by financial knowledge were significantly more likely to exhibit positive financial behaviors ($b = .365$, $p < .001$). The other two measures of financial experience, being employment and credit card usage, had no statistical association with financial behavior. Students with greater confidence as indicated by their level of mastery were significantly more likely to exhibit positive financial behaviors ($b = .173$, $p < .001$) and students with hypothesized less confidence as indicated by first generation status were significantly less likely to exhibit positive financial behaviors ($b = -.124$, $p < .001$). As predicted, positive financial behavior was significantly associated with financial satisfaction ($b = .272$, $p < .001$). None of the control factors had a significant influence on financial satisfaction.

Limitations

The generalizability of the results are limited for several reasons. The self-selection bias of the sample is concerning, since the data was obtained from college students seeking free financial counseling. In addition to the self-selection bias, the generalizability of this study is limited because the sample includes students from a large Midwestern public university. Students at other universities could differ significantly from the profile and needs of students in the sample. Furthermore, the sample of students at this large Midwestern is different than the overall student population, especially in terms of gender and student loan balance as indicated in Table 1.

We also do not have a good understanding if the students' financial needs are significantly different than that of the overall university. Furthermore, not all students who sought counseling opted to have their data included in research analysis, meaning those in the sample may be different than the larger group of college students seeking free financial counseling. It is quite possible that only highly satisfied and highly dissatisfied clients are included in the analyses and those in the middle opted out of participation. The limitations and generalizability issues should not be taken lightly; however, the findings are valuable in showing outcomes associated with financial counseling.

Conclusion and Implications

The significant relationships in the path analysis, as visualized in Figure 3, provide meaningful affirmation of the Huston (2010) human capital framework. Under this framework, financial literacy, as comprised by financial experience and financial confidence, leads to financial behavior and eventually financial well-being. The path analysis in the study showed the positive effects of objective and subjective financial knowledge on well-being, as well as the negative effects associated with being a first-generation college student. Path analysis also depicted the impact of financial behaviors as a driver of financial satisfaction.

Interestingly, subjective financial knowledge has a significant impact on financial behavior, while other proxies of financial experience, such as employment status and credit card usage did not. This implies that subjective financial knowledge is more important in driving positive financial behavior and financial well-being than hands on financial experience. Otherwise stated, subjective financial knowledge was a bigger driver of financial well-being among college students than work history or credit card ownership. Since subjective financial knowledge was the only significant component of financial experience, universities should provide more opportunities for students to grow their subjective financial knowledge such as with peer financial counseling.

The study also adds to the literature by finding support to showcase how the knowledge and application components of financial literacy influence financial behaviors. This study confirmed how the perception of knowledge of one's finances, whether objective or subjective, played a vital role in the behaviors associated with proper financial planning again supporting the need for financial counseling options for college students. Financial counselors are encouraged to take into consideration that perception matters when working with clients.

While data were collected from college students, findings can be relative to real world application in the financial counseling field due to the focus on financial literacy, application, and behaviors. Financial counselors will potentially have clients with similar characteristics as those delineated in this study. Individuals who possess similar characteristics such as marital status, age, ethnicity, generational affiliation (i.e., millennials and generation z), among others, can be most impacted by the results of the study. Giving financial counselors an idea of how to approach this specific demographic can be extremely beneficial to becoming more effective financial counselors.

Efforts to improve financial well-being should be focused on improving the financial behaviors of individuals. Particularly, financial counselors can have an impact on financial well-being if they tailor their services to improving the financial behaviors and subjective financial knowledge of clients.

References

Anderson, A., Baker, F., & Robinson, D. (2017). Precautionary savings, retirement planning, and misperceptions of financial literacy. *Journal of Financial Economics, 126*(2), 383-398. doi: 10.1016/j.jfineco.2017.07.008

Anthes, W. L., & Most, B. W. (2000). Frozen in the headlights: The dynamics of women and money. *Journal of Financial Planning, 13*(9), 130-142.

Archuleta, K. L., Dale, A., & Spann, S. C. (2013). College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety. *Journal of Financial Counseling and Planning, 24*(2), 50-62.

Arellano, A., Camara, N., & Tuesta, D. (2014). The effects of self-confidence on financial literacy. *BBVA Research Working Paper*, 14-28.

Asaad, C. (2015). Financial literacy and financial behavior: Assessing knowledge and confidence. *Financial Services Review, 24*(2), 101-117.

Augustin, L., & Martin, T. (2017, September 22). Is early exposure to financial education associated with positive financial behaviors? Retrieved from CFP Board: https://ssrn.com/abstract=3040260

Bernheim, D. B., & Garrett, D. M. (2003). The effects of financial education in the workplace: Evidence from a survey of households. *Journal of Public Economics, 87*, 1487-1519.

Danes, S. M., & Haberman, H. R. (2007). Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Journal of Financial Counseling and Planning, 18*(2), 48-60.

DeBassa, S. C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, 6(2), 1-21.

Eitel, S. J., & Martin, J. (2009). First-generation female college students' financial literacy: Real and perceived barriers to degree completion. *College Student Journal, 43*(2), 616-630.

Goldsmith, R. E., & Goldsmith, E. B. (2006). The effects of investment education on gender differences in financial knowledge. *Journal of Personal Finance, 5*(2), 55-69.

Gutter, M. S., Garrison, S., & Copur, Z. (2010). Social learning opportunities and the financial behaviors of college students. *Family and Consumer Sciences Research Journal, 38*(4), 387-404.

Hastings, J., Madrian, B., & Skimmyhorn, W. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics, 5*, 347–373.

Henry, R. A., Weber, J. G., & Yarbrough, D. (2001). Money management practices of college students. *College Student Journal, 35*(2), 244-249.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin, 89*(7), 309-322.

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

Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *World Bank Policy Research Working Paper Series* (8161), 1-77. Retrieved from https://ssrn.com/abstract=3016931

Krawczyk, A., Stephenson, E., Perez, S., Lau, E., & Rosberger, Z. (2013). Deconstructing human papillomavirus (hpv) knowledge: Objective and perceived knowledge in males' intentions to receive the HPV vaccine. *American Journal of Health Education, 44*(1), 26-31.

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

Lusardi, A., & Mitchell, O. S. (2011). *Financial literacy and planning: Implications for retirement wellbeing* (No. w17078). National Bureau of Economic Research.

Lusardi, A., Michaud, P., & Mitchell, O. (2017). Optimal financial knowledge and wealth inequity. *Journal of Political Economy, 125*(2), 431-477.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *The Journal of Consumer Affairs, 44*(2), 358-380. doi:10.1111/j.1745-6606.2010.01173.x

Lyons, A. C., Chang, Y., & Scherpf, E. (2006). Translating financial education into behavior change for low-income populations. *Journal of Financial Counseling and Planning, 17*(2), 27-45. Retrieved from https://ssrn.com/abstract=2232122

Sanders Woodyard, A., Robb, C., & Babiarz, P. J. (2017). Knowledge and practice: Implications for cash and credit management behaviors. *Family and Consumer Sciences Research Journal, 45*(3), 300-314.

Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2009). Financial socialization of first-year college students, the roles of parents, work, and education. *Journal of Youth Adolescence, 39*(12), 1457-1470.

Wu, S., Despard, M., & Chowa, G. (2017). The roles of parents in introducing children to financial services: evidence from Ghana-youth save. *Journal of Family and Economic Issues, 38*(3), 453-462.

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Figure 1. Human capital theory framework as it relates to personal finance education (Huston, 2010)

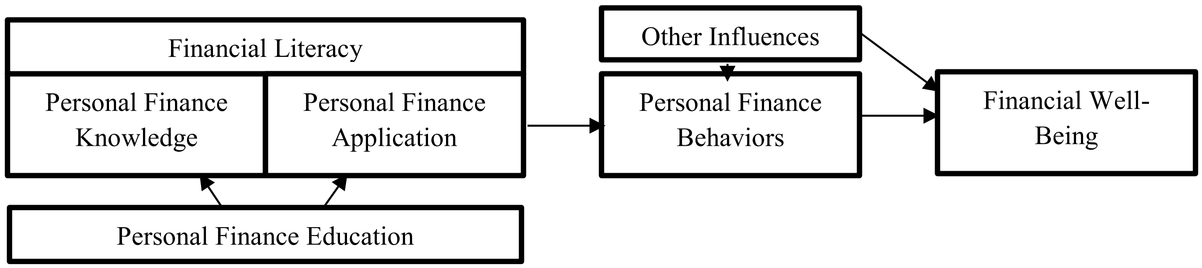


Table 1. Student client profile

	Intake Survey (N = 2,014)	University Comparison (2016 data)
Indicator	***M* (*SD*)**	***M***
Male	.31 (.46)	.51
White	.83 (.37)	.75
Year in school		
Freshman	.09 (.28)	
Sophomore	.12 (.32)	
Junior	.16 (.37)	
Senior	.45 (.50)	
Graduate	.15 (.36)	
First generation	.52 (.50)	.27
	*missing data for 43% of sample	Based on UG only
Have student loans[1]	.61 (.49)	
Student loan balance (if applicable)	$32,223 ($45,506)	
	Range $1-470,100	

Note: [1]Student loan data presented for informational purposes only. Data was not used to proxy experience since the majority of students have yet to start repayment.

Figure 2. Empirical model based on Huston (2010) framework

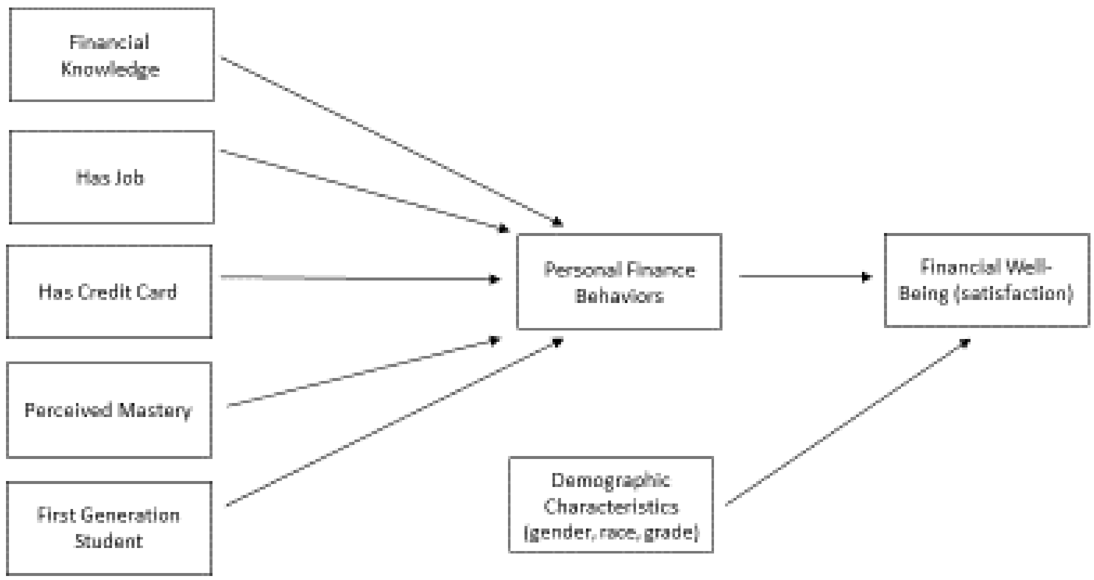


Table 2. Descriptive statistics of the multivariate analysis sample (N = 689)

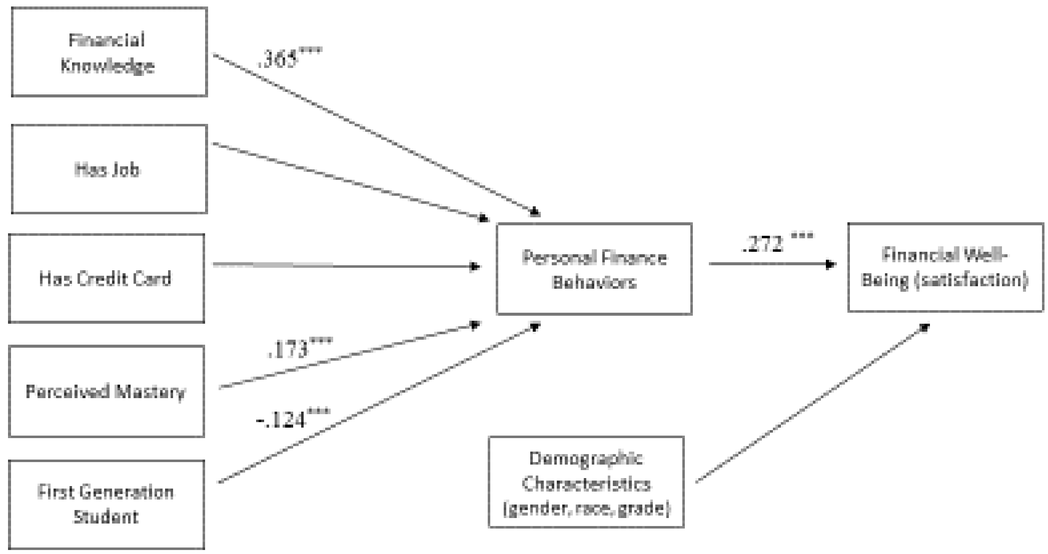
Indicator	***M* (*SD*)**
Financial knowledge	4.74 (1.87)
Has job	.76 (.43)
Has credit card	.58 (.49)
Perceived mastery	29.86 (4.44)
First generation	.54 (.50)
Financial behavior factor score	.10 (.99)
Male	.31 (.46)
White	.83 (.37)
Grade[1]	3.42 (1.27)
Financial satisfaction	4.57 (2.21)

Notes: [1]1 = freshman, 2 = sophomore, 3 = junior, 4 = senior, 5 = graduate student.

Table 3. Standardized path analysis results

Outcome		Predictor	Estimate	Standard Error	*p*-value
Financial Behavior	**<===**	**Financial knowledge**	**0.365**	**0.033**	**<.001**
	<===	Has job	-0.052	0.034	0.126
	<===	Has credit card	-0.037	0.035	0.294
	<===	**Mastery**	**0.173**	**0.034**	**<.001**
	<===	**First generation**	**-0.124**	**0.035**	**<.001**
Financial Satisfaction	**<===**	**Financial behavior**	**0.272**	**0.035**	**<.001**
	<===	Male	0.035	0.037	0.345
	<===	White	0.052	0.037	0.160
	<===	Grade level	0.039	0.037	0.288

Figure 3. Path analysis results: Standardized parameter estimates for significant effects



Association among Financial Risk Tolerance and Locus of Control, Sensation-seeking for Pre-Retiree Baby Boomers

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Abstract

Financial risk tolerance is an important concept for a financial planner to recommend financial products. As the baby boomer generation approaches retirement, research to determine how these individuals perceive financial risk tolerance has grown exponentially. The present study examines the relationship between financial risk tolerance and locus of control and sensation seeking of the baby boomers.

Key words: financial risk tolerance, locus of control, pre-retiree baby boomers, sensation seeking

Introduction

Financial Risk tolerance is an important concept for a financial planner to recommend financial products. It also has many practical significances in everyday money matters. For example, client's financial risk tolerance helps a financial planner to determine the appropriate risk and return parameters of an investment portfolio. Grable and Joo (2004) note that risk tolerance can best be thought of as a person's willingness to take part in a behavior in which one or more outcomes are both uncertain and potentially negative.

As risk tolerance may be more of a characteristic of an individual than of a situation, various psychological, demographic, and economic characteristics of individuals have been investigated as possible determinants of financial risk tolerance. Several researchers examined the relationship between demographic variables and financial risk tolerance, for example, gender (Bajtelsmit, Bernasek, & Jianakoplos, 1999), age (Hallahan, Faff, & McKenzie, 2003), education level (Grable, 2000), income and wealth levels (Bernheim, Skinner, & Weinberg, 2001), and marital status (Roszkowski, Snelbecker, & Leimberg, 1993). A substantial body of other research indicates that the tendency to take risk is associated with personality, for example, Type A personality (Carducci & Wong, 1998), Myers-Briggs Type Indicator (Filbeck, Hatfield, & Horvath, 2005), risk propensity in different domains, such as sex, addictions, outdoor, and others (Chauvin, Hermand, & Mullet, 2007; Nicholson, Soane, Fenton-O'Creevy, & Willman, 2005). Chitra and Sreedevi (2011) find that personality traits had an impact on the choice of investment method, and that the personality impact was stronger than that of demographic variables. Soane, Dewberry, and Narendran (2010) state that personality directly influences risk-taking attitudes in the domains of social, ethical, recreation, and gambling. Grable and Joo (2004) suggested that measures of sensation seeking, aggressiveness, self-esteem, personality, locus of control, social development, and knowledge should continue to be included in further investigation into financial risk tolerance.

The reductionist model of risk taking is the predominant theory behind the research of the association between personality and risk-taking behavior. This model seeks to identify an underlying cause of risk taking. The behavior of persons who persistently search for highly stimulating experiences has been attributed to low arousability, also described as low cortical or autonomic responsiveness, or, more specifically, a low level of activation of a behavioral inhibition system, experienced as a relatively low level of anticipatory anxiety (Levenson, 1990). According to this model, a person engaging in a risky behavior seeks to increase their unusually low arousal to a pleasurable level. To achieve a pleasurable arousal level, such individual seeks stimulation that may seem risky and dangerous to the ordinary person. On the other hand, Irwin (1993) presents a model of risk-taking attitudes and behaviors that classifies the predisposing factors that influence risk-tolerance attitudes into two categories: environmental and biopsychosocial factors. Examples of environmental factors include socioeconomic status, family situation, and social transitions. Whereas, example of biopsychosocial factors include characteristics such as age, gender, personality traits, birth order, and ethnicity.

In this study, we used new data to weigh in on previous findings about locus of control and sensation seeking in order to contribute to the financial industry's understanding of personality-driven risk attitude. The relationship between risk tolerance and personality traits, such as locus of control (Wong & Carducci, 2016), sensation seeking (Wong & Carducci, 2016), personality dimensions of extraversion, conscientiousness, agreeableness, emotional stability and openness (Wong & Carducci, 2013) is an established fact. However, these studies were based on university students whose average age was 23.9 (Wong & Carducci, 2016) and 25.2 (Wong & Carducci, 2013). The primary purpose of this study was to replicate the tests employed by Wong and Carducci (2016) to further examine their conclusions in a baby boomer generation context in order to determine if their findings were unique to the sample used or more generalizable across generational contexts. Wellner (2000) defines baby boomers as individuals born between 1946 and 1964. As the baby boomer generation approaches retirement, research to determine how these individuals perceive financial risk tolerance has grown exponentially. Only 17% of boomers reporting that they are currently very optimistic about their own financial future (Ameriprise, 2012).

The present study tries to determine the relationship between financial risk tolerance and some personality traits, such as sensation-seeking, locus of control of the baby boomers. Two questions are of central interest:

1) Do baby boomers with internal locus of control have higher financial risk tolerance?
2) Do sensation seeking baby boomers have higher financial risk tolerance?

Understating the financial risk tolerance exhibited by the baby boomer generation can be useful for financial planning practitioners in designing the investment portfolios for this generation. This understanding can also assist financial counselors in developing recommendations to improve financial wellness of the baby boomers.

Literature Review

Several researchers were interested in the association among risk tolerance, sensation seeking, and locus of control. Crisp and Barber (1995) studied perceived risk of HIV infection and demonstrated that people with an internal locus of control are sensation seekers to a greater extent than those external in locus of control. Wong & Carducci (2016) asserted that, intuitively, there should be some relationship between risk tolerance, sensation-seeking, and locus of control because they all have uncertainty in common. Due to these observations, we find it sensible to study the effect of sensation-seeking and locus of control on financial risk tolerance together.

Sensation-seeking has been defined as the need for varied, novel, and complex sensations and experiences and the willingness to take physical or social risks for the sake of such experiences (Corter & Chen, 2006). From this definition it is clear that sensation-seeking leads to risk taking. Nicholson et al. (2005) asked 2,700 participants how frequently they engaged in various risky behaviors in six domains, one of which was finance. Although Nicholson et al. intended to study the Big Five, they realized that one particular facet of the extraversion trait, sensation-seeking, surfaced as a primary predictor of risk propensity in four of the six domains (including finance), as well as for the overall risk-taking scale. As a result of their study, Nicholson et al. proposed three nonexclusive types of risk takers: (a) stimulation seekers for whom risks are intrinsically gratifying, (b) goal achievers who bear major risk due to their drive for gain, and (c) risk adaptors who have been drawn to roles that involve risk due to their skills and interests. The first group essentially consists of individuals who are very high in sensation-seeking, and the research team remarks that only this group is truly risk seeking while the other two groups are simply risk bearing. Furthermore Nicholson et al. assert that even though the stimulation seekers are a minority group, they are of significant proportions in society. The findings of this study are quite promising for our purposes, as they show sensation-seeking is an excellent predictor of risk taking. However, since their dependent variable only measured whether a risk was actually undertaken, not how willing a respondent would be to hypothetically taking a risk, Nicholson et al.'s findings do not precisely determine how sensation-seeking affects risk tolerance. Another study with relevant findings is that of Grinblatt and Keloharju (2008). They found that sensation-seeking was related to higher trading frequency- again, the dependent variable was how frequently a risk was actually taken instead of whether a risk would hypothetically be taken, but the two are similar enough that this study shows promise for sensation-seeking being a determinant of financial risk tolerance.

One recent study provides strong support for a direct link between sensation-seeking and financial risk tolerance. Using data from 255 students at a public university, Wong & Carducci (2016) found that the direct relationship was so strong that it was not mitigated by the effects of gender, age, GPA, and college academic standing. They reasoned that taking financial risks provided an opportunity to emotionally experience the fear of loss and love of gain that drives sensation-seekers (Wong & Carducci, 2016). On the other hand, (Corter & Chen, 2006) found no correlation between scores on their Risk Tolerance Questionnaire and a measure of sensation-seeking. Their data was much less generalizable since they tested only 63 graduate students studying business, but their work does recall the question of whether risk-taking behavior is situation-specific or a general personality trait. Overall, there is plenty of evidence that sensation-seeking is a determinant of financial risk tolerance, but the literature is not entirely consistent.

As for locus of control, many previous studies have found significant results supporting its relationship to financial risk tolerance. Locus of control is a psychological construct that captures a person's belief about whether consequences are a result of their own personal behavior, abilities, and efforts (internal locus of control) or due to external factors such as luck, fate, or other people (external locus of control). Like sensation-seeking, the logical relationship between locus of control and financial risk tolerance is clear- the more one believes one has control over one's outcomes, the higher risk one should be willing to tolerate (Wong & Carducci, 2016). In other words, people with an internal locus of control believe they can influence outcomes to their benefit, so they should perceive less ex ante outcome variance and be more willing to try their hand at risky investments (Salamanca, Fouarge, de Grip, & Montizaan, 2016).

Internal locus of control has been shown to be a determinant of investment in human capital accumulation (Coleman & DeLeire, 2003), financial wellness (Prawitz & Cohart, 2016), life satisfaction (Buddelmeyer & Powdthavee, 2016), enterprising personality (Suárez-Álvarez & Pedrosa, 2016), and perceived employability (Bargsted, 2017). First, higher investment in human capital accumulation means those with an internal locus of control should tend to obtain more formal education, where education has been shown to be positively related to financial risk tolerance (Chang, DeVaney, & Chiremba, 2004; Grable & Joo, 2004; Sung & Hanna, 1997). Next, (Prawitz & Cohart, 2016) used hierarchical regressions to find that competency in managing personal finances and locus of control orientation were major determinants of financial wellness, explaining a combined 42.2% of the variance; this finding relates to financial risk tolerance because those who are more financially stable or satisfied with their financial situation have the capability to take on more risk. Buddelmeyer and Powdthavee (2016) used a major Australian survey to see that individuals with strong internal locus of control are psychologically insured against multiple negative life events, including a major worsening in finances; this psychological insurance may be a reason behind why individuals with an internal locus of control would be willing to take on more financial risks. For enterprising personality, the relationship to financial risk tolerance is obvious- entrepreneurs are known for being willing to tolerate financial risks. Finally, Bargsted (2017) study in Chile on perceived employability may indicate that those who have an internal locus of control are more optimistic or overconfident about risks, which could in turn indicate higher risk tolerance.

Much past work has also been done specifically with financial risk as the dependent variable. Salamanca et al., (2016) used a large Dutch survey to show that household heads with a strong internal locus of control are more likely to hold equity, and that the share of equity held in their portfolio is relatively larger. They argued that the underlying mechanism is a lower perception of variance in equity, which makes these investments more attractive to these household heads relative to investors with more external loci of control. As an attempt to prove their proposed mechanism, the research team also demonstrated that internal locus of control generally increased the likelihood of selling (not buying) financial options, since perceiving less risk in equity should make financial options seem overvalued and better to sell. Salamanca et al. (2016)controlled for multiple potential confounders, notably a few which relate to previous findings mentioned above- financial literacy, overconfidence, and optimism. Financial literacy is a potential confounder since higher financial literacy is a form of human capital accumulation, which as mentioned above has been shown to be driven by locus of control (Coleman & DeLeire, 2003). Controlling for subjective financial literacy did not change the main results. For overconfidence, its relationship with investing in equity is significantly positive, but controlling for overconfidence also did not alter the main results. Lastly, optimism's relationship with investing in equity was weakly significant, and inclusion of optimism did not affect the marginal effect of internal locus of control (Salamanca et al., 2016). Controlling for these three potential confounders showed that none of them are proxies for locus of control, and although the four variables are related, each has a significant relationship with financial risk tolerance.

Whereas Salamanca et al. (2016) used actual engagement in risky investments as their outcome variable, two more recent studies directly measured financial risk tolerance. Buddelmeyer and Powdthavee (2016) performed a supplemental regression on an individual's willingness to take financial risks with their spare cash and found that individuals with internal locus of control are more likely to take financial risks with an expectation of receiving substantial returns. The effect was noticeably stronger in men than in women. Wong & Carducci (2016) also saw a gender difference, with only the male group's risk tolerance being directly affected by locus of control. They reasoned that this was due to males having higher internal control (an observation from their data). Like they did with sensation-seeking, Wong & Carducci also tested for differences in subgroups for age, GPA, and academic standing. They found that the relationship between financial risk tolerance and locus of control held across both GPA subgroups but was only found in the older age and upperclassmen subgroups- here, the researchers reasoned that maturity is the common denominator. Thus, compared to sensation-seeking which was significantly related to financial risk tolerance across all four demographic types, locus of control does not have as strong of a relationship with financial risk tolerance. However, as the studies mentioned above show, the literature is fairly consistent in finding a locus of control as a significant determinant of risk tolerance.

Methods and Model

The present study uses the data from the National Longitudinal Survey of Youth 1979 (NLSY79), which is a longitudinal project that covers a sample of American youth born between 1957 and 1965 (aged 53-61 in 2018 and aged 49-57 in 2014). Even though it is a longitudinal project, we only used the 2014 wave in the present study, as both risk tolerance and locus of control variables are measured only in 2014. As we limited our sample to baby boomers (who were born between 1957 and 1964), the total sample size in the present study is 4,162.

In this study, risk tolerance is the dependent variable. The respondents were asked to evaluate their degrees of risk tolerance and rate themselves from 0 to 10, where 0 means "unwilling to take any risks" and 10 means "fully prepared to take risks". The rest are independent variables (Table 1). Baby boomers in present study could be divided into two categories, core boomers (from 1957 to 1959) and trailing boomers (from 1960 to 1964).

Locus of control represents respondents' believes of their degree of controlling over the life. The higher the score, the more external locus of control a respondent has. People with external locus of control believe that what happened in life relies on others, such as luck and chance, while people with a strong internal locus of control believe that they have control over their own life (Rotter, 1966, 2004). The locus of control in our model is the sum of four Rotter's locus of control scales (Rotter, 1966, 2004). The four scales include the degree of control over the direction of own life, the importance of planning, the importance of luck, and degree of influence over own life.

NLSY79 does not measure sensation seeking directly, therefore we used a dummy variable asking about whether ever used drugs or not is used as a proxy for the sensation seeking variable. The rationale behind using this proxy is supported by Zuckerman and Kuhlman (2000), who found that although sensation seeking was significantly related to participation in a number of risky activities including drinking, smoking, drug use and sex; among the five personality measures of sociability, sensation seeking, anxiety, aggression, and activity, drug use was significantly predicted by sensation seeking.

The dataset is analyzed using ordinary least squares (OLS) regression model, even though the dependent variable, risk tolerance, is measured on an ordinal scale. (Williams, 2016) suggests that the ordinal scale dependent variable can be treated as a continuous variable particularly when the dependent variable has five or more categories.

In this study, to identify factors associated with risk tolerance and study the racial influence and gender influence on risk-taking attitude, we adopt two models.

$$Model\ 1: Risk\ Tolerance = f\begin{pmatrix} Boomer, Log(Income), Age, Employment\ Status, Marital\ Status, \\ Having\ Business, Gender, Race, Sensation\ Seeking, Locus\ of\ Control \end{pmatrix}$$

$$Model\ 2: Core\ Boomers'\ \ Risk\ Tolerance = f\begin{pmatrix} Log(Income), Age, Employment\ Status, Marital\ Status, \\ Having\ Business, Gender, Race, Sensation\ Seeking, Locus\ of\ Control \end{pmatrix}$$

$$Model\ 3: Trailing\ Boomers'\ \ Risk\ Tolerance = f\begin{pmatrix} Log(Income), Age, Employment\ Status, Marital\ Status, \\ Having\ Business, Gender, Race, Sensation\ Seeking, Locus\ of\ Control \end{pmatrix}$$

Results

Descriptive Analysis

On average baby boomers are risk-neutral, where mean and median of risk tolerance are respectively 4.83 and 5.00. Males are significantly more risk tolerant (5.18) than females (4.52). On average, both males and females baby boomers (1.01 and 1.08) have an internal locus of control. However, females are significantly more external than males. Among races, Blacks predominantly have an external locus of control (mean score 1.20), followed by people of other races (1.19), and Whites have an internal locus of control (0.95). Based on Table 2, on average, risk tolerance for core boomers (4.79) are less than trailing boomers (4.86), and both core boomers and trailing boomers

(1.06 and 1.04) have an internal locus of control. Besides, among core boomers, 5.47% core boomers and 4.68% trailing boomers are sensation seeking person.

OLS Results of Risk Tolerance
The results (Table 3) suggest that there is no significant difference in risk tolerance of the core and trailing baby boomers. In the overall model, locus of control is significantly and negatively associated with risk tolerance of baby boomers. Baby boomer individual with a higher degree of external locus of control has lower risk tolerance score. This means a baby boomer with an external locus of control would be more risk-averse. Conversely, a baby boomer with an internal locus of control has higher risk tolerance score. However, when we examined the relationship for core and trailing baby boomer cohort separately, the relationship is evident only in the trailing baby boomer cohort. Sensation seeking has a significant positive association with risk tolerance. A baby boomer individual who is a sensation seeker has significantly higher risk tolerance than one who is not a sensation seeker.

Gender and race significantly affect risk tolerance. Female baby boomers are significantly less willing to take risks than males. Compared with White baby boomers, Blacks are significantly more risk tolerant overall and specific for trailing boomers. Age has no significant influence on risk tolerance, as they are from the same cohort. One percent increase in income would lead to 0.08-point increase for overall baby boomers indicating that the higher the income, the more risk tolerant a baby boomer become, *ceteris paribus*. However, the influence is more pronounced in the core baby boomer cohort. Unemployed baby boomers have higher risk tolerance than working people. Married baby boomers have significantly lower risk tolerance than never married for both kinds of baby boomers. Baby boomers who own business have significantly higher risk tolerance than those who do not own business.

Discussion

The present study extends the paper of Wong and Carducci (2016) in which authors studied university students' risk tolerance to the baby boomer generation. We used the large-scale NLSY 79 data instead of primary survey data. The study indicates that baby boomers' locus of control, sensation seeking are important personality traits that have significant influences on their risk tolerance. These results are consistent with the paper of Wong and Carducci (2016). Therefore, influences of these personality traits are consistent in different generations.

A baby boomer individual who display an external locus of control are likely to have low risk tolerance score. Financial planners and counselors can use this knowledge as another way to identify financially at-risk clients. Having an internal locus of control is generally associated with better life outcomes than having an external locus of control. Helping clients understand that they do have control of their financial future is a great first step in building a strong financial plan.

Sensation seeking baby boomer individual is likely to have high risk tolerance score. Sensation seeking has been shown to be linked to the more general trait of impulsivity and has been shown to influence a wide variety of problematic financial behaviors, such as gambling, high credit card uses (Worthy, Jonkman, & Blinn-Pike, 2010). Sensation seeking is a construct that may be considered as holding present hedonism time perspective. These people live for current enjoyment. For financial counselors and planners, a key step to help sensation seeking clients is to help them with developing and adhering to a budget.

References

Ameriprise, F. (2012). *Money across generations IISM study-family first*. Ameriprise Financial.
Bajtelsmit, V. L., Bernasek, A., & Jianakoplos, N. A. (1999). Gender differences in defined contribution pension decisions. *Financial Services Review*, *8*(1), 1–10.
Bargsted, M. (2017). Impact of personal competencies and market value of type of occupation over objective employability and perceived career opportunities of young professionals. *Revista de Psicología Del Trabajo y de Las Organizaciones*, *33*(2), 115–123. https://doi.org/10.1016/j.rpto.2017.02.003
Bernheim, B. D., Skinner, J., & Weinberg, S. (2001). What accounts for the variation in retirement wealth among US households? *American Economic Review*, *91*(4), 832–857.
Buddelmeyer, H., & Powdthavee, N. (2016). Can having internal locus of control insure against negative shocks? Psychological evidence from panel data. *Journal of Economic Behavior & Organization*, *122*, 88–109.
Carducci, B. J., & Wong, A. S. (1998). Type A and risk taking in everyday money matters. *Journal of Business and*

Psychology, *12*(3), 355–359.
Chang, C.-C., DeVaney, S. A., & Chiremba, S. T. (2004). Determinants of subjective and objective risk tolerance. *Journal of Personal Finance*, *3*(3), 53–67.
Chauvin, B., Hermand, D., & Mullet, E. (2007). Risk perception and personality facets. *Risk Analysis*, *27*(1), 171–185.
Chitra, K., & Sreedevi, V. R. (2011). Does personality traits influence the choice of investment? *IUP Journal of Behavioral Finance*, *8*(2), 47.
Coleman, M., & DeLeire, T. (2003). An economic model of locus of control and the human capital investment decision. *Journal of Human Resources*, *38*(3), 701–721.
Corter, J. E., & Chen, Y.-J. (2006). Do Investment Risk Tolerance Attitudes Predict Portfolio Risk? *Journal of Business and Psychology*, *20*(3), 369–381.
Crisp, B. R., & Barber, J. G. (1995). The effect of locus of control on the association between risk perception and sexual risk-taking. *Personality and Individual Differences*, *19*(6), 841–845.
Filbeck, G., Hatfield, P., & Horvath, P. (2005). Risk aversion and personality type. *The Journal of Behavioral Finance*, *6*(4), 170–180.
Grable, J. E. (2000). Financial risk tolerance and additional factors that affect risk taking in everyday money matters. *Journal of Business and Psychology*, *14*(4), 625–630.
Grable, J. E., & Joo, S.-H. (2004). Environmental and biopsychosocial factors associated with financial risk tolerance. *Financial Counseling and Planning*, *15*, 1.
Grinblatt, M., & Keloharju, M. (2008). Sensation Seeking, Overconfidence, and Trading Activity. *Journal of Finance*, 47.
Hallahan, T., Faff, R., & McKenzie, M. (2003). An exploratory investigation of the relation between risk tolerance scores and demographic characteristics. *Journal of Multinational Financial Management*, *13*(4–5), 483–502.
Nicholson, N., Soane, E., Fenton-O'Creevy, M., & Willman, P. (2005). Personality and domain-specific risk taking. *Journal of Risk Research*, *8*(2), 157–176.
Prawitz, A., & Cohart, J. (2016). Financial Management Competency, Financial Resources, Locus of Control, and Financial Wellness. *Journal of Financial Counseling and Planning*, *27*(2), 142–157.
Roszkowski, M. J., Snelbecker, G. E., & Leimberg, S. R. (1993). Risk tolerance and risk aversion. *The Tools and Techniques of Financial Planning*, *4*(1), 213–225.
Rotter, J. (2004). Locus of control. *Cognitive Approach Wrap Up Begin Emotions and Personality. Lecture Notes Psych A*, *305*.
Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, *80*(1), 1.
Salamanca, N., Fouarge, D., de Grip, A., & Montizaan, R. (2016). Locus of Control and Investment in Risky Assets. In *IZA Discussion Papers, No. 10407* (p. 50). Bonn: Institute for the Study of Labor (IZA).
Soane, E., Dewberry, C., & Narendran, S. (2010). The role of perceived costs and perceived benefits in the relationship between personality and risk-related choices. *Journal of Risk Research*, *13*(3), 303–318.
Suárez-Álvarez, J., & Pedrosa, I. (2016). The assessment of entrepreneurial personality: The current situation and future directions. *Papeles Del Psicólogo*, *37*(1), 62–68.
Sung, J., & Hanna, S. D. (1997). Factors Related to Risk Tolerance. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2234
Wellner, A. S., (2000). Generational divide: are traditional methods of classifying a generation still meaningful in a diverse and changing nation? *American Demographics*, 22, (*10*), 60-64.
Williams, R. (2016). Understanding and interpreting generalized ordered logit models. *The Journal of Mathematical Sociology*, *40*(1), 7–20.
Wong, A., & Carducci, B. (2013). Does personality affect personal financial risk tolerance behavior? *IUP Journal of Applied Finance*, *19*(3), 5.
Wong, A., & Carducci, B. (2016). Do sensation seeking, control orientation, ambiguity, and dishonesty traits affect financial risk tolerance? *Managerial Finance*, *42*(1), 34–41.
Worthy, S. L., Jonkman, J., & Blinn-Pike, L. (2010). Sensation-Seeking, Risk-Taking, and Problematic Financial Behaviors of College Students. *Journal of Family and Economic Issues*, *31*(2), 161–170.

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Tables

Table 1

Continuous Variables Used in Logistic Regression

Name	Min	Max	Mean	Std. Dev.
Risk Tolerance	0	10	4.83	2.73
Log(Income)	0	12.82	10.63	1.10
Age	49	56	52.64	2.24
Locus of Control	0	4	0.97	0.97

Categorical Variables Used in OLS Regression

Name	Levels	Proportion%
Education	High School or below	50.16
	College	49.84
Region	Northeast	16.25
	North Central	28.28
	South	37.6
	West	17.86
Gender	Male	50.53
	Female	49.47
Race	White	83.30
	Black	13.85
	Other	2.85
Job	Working	80.79
	Unemployed	14.21
	Retired	2.29
	Homemaker	2.71
Marital Status	Never Married	11.88
	Married	60.74
	Others	27.38
Having Business	1	17.44
	0	82.56
Baby Boomers	Core Boomers	25.76
	Trailing Boomers	74.24

Notes: "Others" in marital status denotes people who are separated, divorced or widowed.

Table 2

Continuous Variables Used in Logistic Regression

	Mean Risk Tolerance	Mean Locus of Control	Sensation Seeking	
			0	1
Core Boomer	4.79	1.06	94.53%	5.47%
Trailing Boomer	4.86	1.04	95.32%	4.68%

Table 3

Coefficients of Each Variable in OLS Regression

Risk Tolerance	Model 1: Overall	Model 2: Core Boomer	Model 3: Trailing Boomer
Intercept	5.42***	18.79*	5.30***
Boomer (Core boomer base)			
Trailing Boomer	-0.13		
Log (Income)	0.08*	0.26***	0.03
Age	-0.02	-0.29	-0.01
Gender (Male base)			
Female	-0.60***	-0.52***	-0.62***
Race (White base)			
Black	0.35***	0.27	0.37***
Other	0.25	-0.21	0.36*
Employment Status (Working base)			
Unemployed	0.42**	0.32	0.42**
Retired	0.45	1	0.03
Homemaker	0.75	-0.22	0.93*
Marital Status (Never Married base)			
Married	-0.32**	-0.53*	-0.27*
Others	-0.13	-0.25	-0.09
Having Business (no business base)			
1	1.07***	0.73***	1.16***
Sensation Seeking (no sensation seeking base)			
1	0.77***	1.06**	0.70***
Locus of Control	-0.14***	0.07	-0.20***

Notes: 1. Locus of Control: A high score = External Locus of Control; A low score = Internal Locus of Control."Others" in marital status denotes people who are separated, divorced, or widowed. 2. Number of observations are 4,162 for Model 1, 857 for Model 2, 3,305 for Model 3.

Change in Financial Knowledge Post Peer Financial Counseling

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Abstract

This study tested the effectiveness of peer-based financial counseling in changing financial knowledge. We examined mean differences in financial knowledge scores from a financial counseling intake survey to a two-month follow-up survey. Results suggest that financial counseling had positive effects on financial knowledge. Most notable, this study focused on the impact of financial counseling across various sub-groups. Before financial counseling there was great disparity in financial knowledge among sub-groups, and after financial counseling this disparity mostly disappeared. Financial counseling seems to create balance in financial knowledge among sub-groups, as significant differences in financial knowledge among sub-groups largely vanish after counseling.

Key words: financial counseling, financial knowledge

Introduction

Many studies have investigated the effectiveness of financial education and financial counseling. In another vein, researchers have investigated inequities in financial knowledge among sub-populations, such as gender, race, or age. This study seeks to bring these two lines of research together by investigating the impact of financial counseling on specific sub-populations.

Often there is a discrepancy between an individual's actual knowledge and an individual's self-perception or confidence (Asaad, 2015). An individual's actual knowledge, also commonly referred to as objective knowledge, is the factual information that an individual knows about a certain topic that can be measured with questions that have correct and incorrect answers (Krawczyk, Stephenson, Perez, Lau, & Rosberger, 2013). Objective knowledge, particularly when it comes to finances, enables individuals to better allocate lifetime resources in a world of uncertainty and imperfect insurance (Lusardi, Michaud, & Mitchell, 2015).

Researchers from Ohio State University found that there is a great need for financial education in the United States, and even prescribed a comprehensive method for creating a program (Fox, Bartholomae, & Lee, 2005). A study utilizing the 1997 National Longitudinal Survey of Youth showed that college educated males were 45% more likely to understand risk and diversification in an investment portfolio than a female with less than a high school education (Lusardi, Mitchell, & Curto, 2010). Financial education has been shown to lead to increased financial knowledge, literacy, and behaviors (Hastings, Madrian, & Skimmyhorn, 2013). Financial education significantly impacts financial behavior, and to an even larger extent, financial literacy (Kaiser & Menkhoff, 2017). Students who received mandatory financial education in high school had more favorable savings rates during the ages of 35-49, which were considered to be the peak earning years, than those students who did not receive the same level of financial education (Bernheim & Garrett, 2003).

Despite the research pointing toward the need to increase financial education, other studies have shown that financial education may not have the greatest effect on financial outcomes. A study showed that personal experiences may influence the impact level of financial education (Hilgert, Hogarth, & Beverly, 2003), meaning that the experiences that each individual has early in life may impact how they make financial decisions more than exposure to financial education. There is evidence that there may not be a lasting effect from financial education (Anthes & Most, 2000) and that financial education should be given at specific "teachable moments" in someone's life in order to have the greatest positive effect (Kaiser & Menkhoff, 2017).

Seeking financial counseling at an early age generally impacts the development of future financial behaviors because higher financial literacy, or higher self-confidence, in personal financial knowledge tends to create better financial outcomes (Augustin & Martin, 2017; DeBassa, 2013). The early exposure to the attainment of financial capability—financial knowledge, skills, and access to financial services—may also contribute to a smooth transition into adulthood (Wu, Despard, & Chowa, 2017).

In studies of college student financial education, age is often proxied by class rank. Britt, Canale, Fernatt, Stutz, and Tibbetts (2015) found that freshmen have more financial stress than students with higher class ranks. Chen and

Volpe (1998) discovered that lower class ranks and observations with ages less than 30 years old have lower levels of financial knowledge. These previous articles examining financial stress and financial knowledge indicate that younger college students could stand to gain from financial education.

Women, in general, tend to report lower levels of financial knowledge, are less confident in dealing with personal financial matters, and place much less value on understanding personal finance (Chen & Volpe, 2002). The pairing of findings between low financial knowledge and low value placed on understanding is particularly interesting, as the sub-populations with the lower level of knowledge are observed to have less inclination to seek financial knowledge. Although, according to Danes and Haberman (2007), when women find themselves in financial education situations they tend to gather new knowledge while men simply reinforce old knowledge.

Webster and Ellis (1996) took another angle showing that women have lower self-expressed self-confidence in financial issues than men. Each of these previous studies and their differing flavors of investigating gender and financial knowledge point to further investigation of the effectiveness of financial education on women, singled out from the rest of the population. These previous studies indicate that female college student could stand to gain more form financial education than their male counterparts.

Lyons (2004) found that minority students take on more financial risk and are more likely to default on loans. Both Allen and Jover (1997) and Munro and Hirt (1998) alleged that minority students are riskier in handling money. Murphy (2005) added that race negatively impacts financial acumen. Some college administrators and policy makers call for targeted financial education program marketing to minority students, and these previous studies indicate that minority college students stand to gain from financial education.

Chen and Volpe (1998) articulated that non-business majors have less financial knowledge than business majors. Robb and Sharpe (2009) added that business majors are less likely to have revolving credit than their non-business major counterparts. This previous research indicates that non-business majors could stand to gain from financial knowledge education.

Of the variables in question in this study, family education is the variable that has been studied the least. Eitel and Martin (2009) found that first-generation students have higher financial literacy needs, but may not seek counseling and education. Much like females, first-generation college students could stand to gain greatly from financial education, but place less value on that education.

Previous research certainly notes disparities in financial knowledge among sub-populations and also shows the positive effectiveness of financial interventions across entire populations. This study continues the investigation by comparing the financial intervention effectiveness among various sub-populations.

Data

The data used in this study was obtained from a sample of 2,014 college students who sought free peer-based financial counseling from an on-campus financial counseling center at a large Midwestern university (population of approximately 24,000) between November 2009 and December 2017. The sample and method of analysis are modeled after Britt et al. (2015).

Students are made aware of the financial counseling center through new student orientation, a visit from a staff member during one of their classes, posters around campus, or word of mouth. Students schedule their counseling session online, indicate their “presenting issue” or primary reason for scheduling the appointment, and complete a brief intake survey. Students are then matched with a trained peer financial counselor who has knowledge in the presenting issue indicated on the intake survey. Other data gathered on the intake survey include personal and financial background information.

Students are required to give consent for their intake survey (stripped of identifying information) to be used for research purposes. There is a possibility that students who elected not to have their data used for research purposes differ from the sample retained for research analysis, although it is not possible to test this hypothesis because the researchers do not have access to any data for the clients who opted not to have their data used for research.

Two months after the initial appointment, clients are sent an electronic follow-up survey nearly identical to the intake survey to assess changes in financial knowledge, attitudes, and behaviors. An interval of two months was selected in order to allow enough time for the development of potential changes and to ideally follow a student within the same semester. Approximately 13% of the participants who elected to have their data used in research completed the two-month follow-up survey.

Demographic data for the sample are shown in Table 1. In general, the sample differs significantly from university in that females and Whites are over-represented (university is 51% male and 77% White).

Variable Measurement

Subjective Financial Knowledge. Respondents were asked to rate their own knowledge of five personal finance topics on a scale from 1 to 5, 1 meaning they know nothing about the topic, 2 meaning they know very little about the topic, 3 meaning they know some about the topic, 4 meaning they know a fair amount about the topic, and 5 meaning they know a lot about the topic. Specifically, the survey asked respondents to identify how much they know about: (a) interest rates, finance charges, and credit terms; (b) credit ratings and credit files; (c) managing finances; (d); investing money; and (e) what is on credit report. Subjective financial knowledge, measured by these five questions, is a proxy for financial confidence.

Objective Financial Knowledge. Objective financial knowledge was measured with six questions designed to assess understanding of credit reporting, insurance premiums, retirement needs, and investments. Specifically, the questions asked the following: (a) you may obtain a free copy of your credit report each year; (b) higher insurance deductibles lead to lower insurance premiums; (c) an annuity is a contract issued by a financial institution that guarantees a series of payments over a lifetime; (d) a mutual fund is an investment company that invests its shareholder's money in a diversified portfolio of securities; (e) social security and company pension plans are sufficient to meet retirement needs; and (f) over 20 years, you will earn more money to invest in bonds compared to stocks social security, and securities. Respondents were given a score of 1 for correctly answering the true/false items, otherwise 0.

Analyses

A series of paired sample *t* tests were used to determine the difference in subjective knowledge from the intake survey with the two-month follow-up survey. Since sub-groups were categorical and the result of the subjective knowledge questions was continuous (5-point scale) paired *t* tests were the best method for comparing mean differences in the variables based on gender, first generation status, race, major, and class rank.

A series of chi-square tests were used to determine differences in objective financial knowledge from the intake survey with the two-month follow-up survey. Since sub-groups were categorical and the result of the objective knowledge questions were also categorical (the respondent answered either correctly or incorrectly) chi-square tests sample were the best method for comparing mean differences between the variables based on gender, first generation status, race, major, and class rank.

The remaining tables show the differences in financial knowledge before and after financial counseling for various sub-groups. In each case, the significant differences between the sub-groups that existed before counseling were diminished or completely eradicated after counseling. In regard to subjective financial knowledge questions, the values indicated on the tables show the mean score on the 5-point scale for the sub-group. *P* values indicate the significance in mean differences (*t* tests) between the sub-groups within a survey. In regard to objective financial knowledge questions, the values indicated on the tables show the percentage of each sub-group that answered the question correctly. *P* values indicate the significant differences (chi-square tests) between sub-groups within a survey.

Table 2 shows the differences in subjective and objective financial knowledge before and after financial counseling for males and females. Before financial counseling, men had more financial confidence regarding four financial topics. Scores on four of the five subjective financial knowledge questions were significantly different at the 95% level, favoring men in every case. After financial counseling, no significant differences between men and women existed at the 95% confidence level.

More specifically, prior to financial counseling, the mean score reported on subjective knowledge of interest rates by males was 2.93. The mean reported score for females prior to financial counseling was 2.59, which is significantly different than the mean score for males ($p < .001$). After financial counseling, the mean score for males was 3.31 and the mean score for females was 3.14. Subjective knowledge increased in both genders, and notably the difference between males and females mean scores were no longer statistically different ($p = .29$). All differences in subjective knowledge were erased at the time of the follow-up survey.

Also noted in Table 2, before financial counseling, males scored significantly higher on the objective questions regarding mutual funds and insurance deductibles. After financial counseling, a significant difference remained on only one topic. For example, prior to financial counseling, 89% of males answered the mutual fund question correctly and 83% of females answered the question correctly. This difference is statistically significant ($p < .001$). After financial counseling, on the two-month follow-up survey 93% of males answered the mutual fund question correctly and 92% of females answered the mutual fund question correctly. These values were not statistically significant ($p = .79$).

Table 3 breaks the sample into two sub-groups based on race, being either White or non-White. Before financial counseling there were two areas of significant differences in subjective financial knowledge and three areas where objective financial knowledge differed significantly, based on being White versus non-White. After counseling, three subjective areas were significantly different which is actually an increase in disparity, and zero areas of statistical difference in objective financial knowledge. Prior to financial counseling whites had higher objective financial knowledge regarding credit reporting, insurance deductibles, and social security. After financial counseling, objective financial knowledge scores among whites and non-whites were similar, with no statistical differences.

Table 4 shows significant differences in financial knowledge based on major. Before counseling, business majors were more confident in four of the five subjective financial knowledge areas. Afterward, business majors still scored significantly higher in only four subjective areas. Business majors had more financial confidence than non-business majors both before and after counseling. On the objective side, business majors scored significantly different than non-business majors in two areas before counseling and only one area after counseling. While investigating the differences between sub-groups bases on major, subjective knowledge differences seem to persist, while differences in objective knowledge were reduced.

Table 5 shows significant differences in financial knowledge based on class rank, which is a substitute for age. Before counseling upperclassmen were more confident in four of the five subjective financial knowledge areas than underclassmen. Afterward, upperclassmen scored significantly higher in only three subjective areas. On the objective side, upperclassmen scored significantly different than underclassmen in three areas before counseling and only one area after counseling. Although not directly tested, this change may imply that financial counseling is a substitute for financial experience that is gained with age. Not reported in this manuscript, differences in financial confidence and objective financial knowledge among undergraduate students and graduate students yielded similar results, where statistical differences declined after counseling.

Table 6 shows that before counseling there were two subjective financial knowledge categories with significant differences in scores between first generation college students and continuous generation college students. After counseling, all significant differences in subjective knowledge vanished. Oddly, there was a significant difference between first generation and continuous generation students on one objective question, credit report, before counseling and two significant differences after counseling, being understanding of social security and stocks.

In summary, as illustrated in Tables 2 through 6, the significant differences in subjective and objective financial knowledge were diminished after financial counseling for multiple sub-groups. The significant differences that existed before counseling deteriorated and/or vanished completely after counseling occurs. Table 7 illustrates the main findings of this study. Financial counseling helped weaken subjective financial knowledge inequalities among gender, major, class rank, and family education level. Financial counseling helped weaken objective financial knowledge inequalities among gender, race, major, and class rank.

Discussion, Limitations, and Implications

While the results presented in the tables above shed light on understanding the effectiveness of financial counseling for college students, the study certainly has limitations. The generalizability of the study is of concern as the sample size was relatively small with 266 participants completing follow-up surveys. In addition, the study occurred in a large public university campus in the Midwest. The student population of this university may not be fully representative of other universities' student population.

Also, the demographic sample used in this study is not completely representative of the campus population as female students, white students, and human services majors were all oversampled. Additionally, observations of effectiveness are limited to students that attended financial counseling and both opted into the research study and completed the two-month follow up survey. It is possible that the reported results differ from those students who opted out of the research study or failed to complete the follow up survey.

Despite these limitations, this study did uncover some unique findings regarding the impact of financial counseling among college student sub-populations. Adding to the understanding of the effectiveness of financial counseling, significant differences among sub-groups largely weakened or vanished after peer-based financial counseling. Previous research seems to confer that women, non-whites, young students, non-business majors, and first-generation students are disadvantaged in financial knowledge. This study shows that these disadvantaged populations stand to gain more from financial counseling than their counterparts. Otherwise stated, participating in financial counseling levels the playing field for these disadvantaged groups, as the effectiveness of financial counseling is disproportionately advantageous for these groups.

Using these findings, policy makers and educational administrators should target these populations for financial counseling programs, as they stand to gain the most. Rather than simply providing access to financial counseling, policy makers and administrators should consider recruiting and incentivizing these groups, especially considering some of these groups may be less apt to seek financial counseling on their own.

Future studies may wish to further investigate the impact of other financial interventions on specific demographics. This methodology could be applied to financial education classes and training, as a replacement for financial counseling. Additionally, future studies may wish to investigate longer-term follow-up surveys to test for retention of knowledge.

Conclusion

Peer-based financial counseling appears to have a positive effect on an individual's financial knowledge and financial confidence. Most notably, peer-based financial counseling displayed an increase of knowledge among sub-groups in numerous financial categories. For example, prior to financial counseling men showed a greater perception of financial confidence, but after counseling no significant differences existed between men and women at the 95% level. A similar trend was also evident in the interpretation of scores between business and non-business majors, white and non-white individuals, upper-class and under-class, as well as first-generation and continuous generation students.

Financial counseling has been shown to increase financial knowledge for the most disadvantaged sup populations, and counselors can feel confident that their efforts are not going unnoticed. Financial counselors and educators should focus their efforts on reaching underrepresented populations in an endeavor to positively impact society. Also, Professional financial counselors and educators should seek to reduce the gap in both objective and subjective financial knowledge among sub-groups to broaden and deepen their client bases.

References

Allen, J. L., & Jover, M. A. (1997). Credit card behavior of university students: Ethnic differences. *Consumer Interest Annual*, *43*, 162-170.

Anthes, W. L., & Most, B. W. (2000). Frozen in the headlights: The dynamics of women and money. *Journal of Financial Planning, 13*(9), 130-142.

Asaad, C. (2015). Financial literacy and financial behavior: Assessing knowledge and confidence. *Financial Services Review, 24*(2), 101-117.

Augustin, L., & Martin, T. (2017, September 22). *Is early exposure to financial education associated with positive financial behaviors?* Retrieved from CFP Board: https://ssrn.com/abstract=3040260

Bernheim, D. B., & Garrett, D. M. (2003). The effects of financial education in the workplace: Evidence from a survey of households. *Journal of Public Economics, 87*, 1487-1519.

Britt, S. L., Canale, A., Fernatt, F., Stutz, K., & Tibbetts, R. (2015). Financial stress and financial counseling: Helping college students. *Journal of Financial Counseling and Planning*, *26*(2), 172-186.

Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, *7*(2), 107-128.

Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, *11*(3), 289.

Danes, S. M., & Haberman, H. (2007). Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Journal of Financial Counseling and Planning, 18*(2), 48-60.

DeBassa, S. C. (2013). Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, 6(2), 1-21.

Eitel, S. J., & Martin, J. (2009, June). First-generation female college students' financial literacy: Real and perceived barriers to degree completion. *College Student Journal, 43*, 616-630.

Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs, 39*, 195–214. doi: 10.1111/j.1745-6606.2005.00009.x

Hastings, J., Madrian, B., & Skimmyhorn, W. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics, 5,* 347–373.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: the connection between knowledge and behavior. *Fed. Reserve Bullet, 89*(7), 309-322.

Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *World Bank Policy Research Working Paper Series* (8161), 1-77. Retrieved from https://ssrn.com/abstract=3016931

Krawczyk, A., Stephenson, E., Perez, S., Lau, E., & Rosberger, Z. (2013). Deconstructing Human Papillomavirus (HPV) knowledge: Objective and perceived knowledge in males' intentions to receive the HPV vaccine. *American Journal of Health Education, 44*(1), 26-31.

Lusardi, A., Michaud, P., & Mitchell, O. (2015). Optimal financial knowledge and wealth inequity. *Journal of Political Economy, 125*(2), 431-477.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs, 44*(2), 358-380. doi: 10.1111/j.1745-6606.2010.01173.x

Lyons, A. C. (2004). A profile of financially at-risk college students. *Journal of Consumer Affairs*, *38*(1), 56-80.

Munro, J., & Hirt, J. B. (1998). Credit cards and college students: Who pays, who benefits? *Journal of College Student Development*, *39*(1), 51-57.

Murphy, A. J. (2005). Money, money, money: An exploratory study on the financial literacy of black college students. *College Student Journal*, *39*(3), 478-489.

Robb, C. A., & Sharpe, D. L. (2009). Effect of personal financial knowledge on college students' credit card behavior. *Journal of Financial Counseling and Planning, 20*(1), 25-43.

Webster, R. L., & Ellis, T. S. (1996). Men's and women's self-confidence in performing financial analysis. *Psychological Reports*, *79*(3_suppl), 1251-1254.

Wu, S., Despard, M., & Chowa, G. (2017). The roles of parents in introducing children to financial services: Evidence from Ghana-youth save. *Journal of Family and Economic Issues, 38*(3), 453-462.

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Table 1. Student client profile

	Intake Survey (N = 2,014)	Two-Month Follow-Up Survey (N = 266)	University Comparison (2016 data)
Indicator	***M* (*SD*)**	***M* (*SD*)**	
Male	.31 (.46)	.26 (.44)	.51
Age	22.35 (4.89)	22.11 (4.92)	19 and under .27
			20-24 .52
			25-39 .17
			40 and over .04
Race			
White	.83 (.37)	.88 (.33)	.75
Hispanic	.04 (.20)	.03 (.16)	.06
Black	.06 (.24)	.03 (.16)	.04
Asian	.03 (.18)	.02 (.15)	.02
Other	.03 (.16)	.03 (.16)	.13
Year in school			
Freshman	.09 (.28)	.05 (.22)	Not available
Sophomore	.12 (.32)	.08 (.28)	Not available
Junior	.16 (.37)	.17 (.38)	Not available
Senior	.45 (.50)	.41 (.49)	Not available
Graduate	.15 (.36)	.24 (.43)	Not available
Academic college			
Agriculture	.09 (.29)	.12 (.33)	.14
Arts and Sciences	.19 (.40)	.20 (.40)	.28
Business	.11 (.31)	.12 (.32)	.14
Education	.05 (.21)	.03 (.17)	.06
Engineering/Architecture	.09 (.29)	.06 (.25)	.21
Human Sciences	.19 (.39)	.19 (.40)	.13
Veterinary Medicine	.04 (.19)	.03 (.18)	
First generation	.52 (.50) *missing data for 43% of sample	.52 (.50) *missing data for 55% of sample	.27
Single	.91 (.29)	.89 (.32)	.95
Have children	.07 (.26)	.08 (.27)	Not available
Have student loans	.61 (.49)	.59 (.49)	Not available
Student loan balance (if applicable)	$32,223 ($45,506) Range $1-470,100	$2,414 ($8,047) Range $1-60,000	Not available

Table 2. Gender Differences in Financial Knowledge

Survey	Intake Survey			Two-Month Follow-Up Survey		
Indicators	Male	Female	*p* value	Male	Female	*p* value
Subjective Knowledge						
Rates	2.93	2.59	< .001	3.31	3.14	.29
Credit	2.57	2.35	< .001	2.96	2.86	.53
Managing	3.04	2.97	.14	3.56	3.47	.55
Investing	2.49	2.18	< .001	2.43	2.41	.89
Report	2.45	2.29	.02	3.19	3.10	.66
Objective Knowledge						
Credit Report	90%	87%	.09	77%	66%	.10
Deductible	71%	64%	.01	84%	74%	.11
Annuity	66%	64%	.42	77%	71%	.31
Mutual Fund	89%	83%	< .001	93%	92%	.79
Social Security	79%	80%	.84	82%	82%	.99
Stock v. Bond	63%	59%	.11	78%	64%	.04

Table 3. White versus Non-White Differences in Financial Knowledge

Survey	Intake Survey			Two-Month Follow-Up Survey		
Indicators	White	Non-White	*p* value	White	Non-White	*p* value
Subjective Knowledge						
Rates	2.70	2.64	.41	3.24	2.74	.02
Credit	2.44	2.90	.05	2.93	2.55	.10
Managing	3.02	2.78	< .001	3.57	2.96	< .001
Investing	2.29	2.18	.16	2.46	2.07	.08
Report	2.35	2.25	.27	3.17	2.81	.17
Objective Knowledge						
Credit Report	88%	83%	.01	68%	72%	.70
Deductible	68%	54%	< .001	77%	71%	.44
Annuity	65%	67%	.55	73%	67%	.52
Mutual Fund	85%	81%	.11	92%	89%	.57
Social Security	81%	72%	< .001	83%	69%	.07
Stock v. Bond	60%	60%	.90	68%	66%	.87

Table 4. Academic Major Differences in Financial Knowledge

Survey	Intake Survey			Two-Month Follow-Up Survey		
Indicators	Business	Non-Business	*p* value	Business	Non-Business	*p* value
Subjective Knowledge						
Rates	2.95	2.66	< .001	3.67	3.11	< .001
Credit	2.6	2.39	.01	2.28	2.80	.04
Managing	3.21	2.96	< .001	3.85	3.44	.01
Investing	2.56	2.24	< .001	2.75	2.37	.09
Report	2.48	2.31	.10	3.60	3.06	.03
Objective Knowledge						
Credit Report	86%	88%	.48	62%	70%	.36
Deductible	67%	66%	.79	100%	73%	< .001
Annuity	64%	65%	.89	65%	74%	.34
Mutual Fund	88%	84%	.28	96%	91%	.36
Social Security	71%	81%	< .001	78%	85%	.61
Stock v. Bond	71%	59%	< .001	64%	65%	.65

Table 5. Class Rank Differences in Subjective Financial Knowledge

Survey	Intake Survey			Two-Month Follow-Up Survey		
Indicators	Underclass	Upperclass	*p* value	Underclass	Upperclass	*p* value
Subjective Knowledge						
Rates	2.47	2.74	< .001	2.93	3.24	.13
Credit	2.15	2.48	< .001	2.26	2.98	< .001
Managing	2.72	3.05	< .001	3.06	3.57	.03
Investing	2.24	2.28	.51	2.20	2.46	.22
Report	1.95	2.42	< .001	2.30	2.23	< .001
Objective Knowledge						
Credit Report	86%	88%	.32	64%	70%	.51
Deductible	58%	69%	< .001	70%	78%	.35
Annuity	60%	66%	.05	77%	71%	.49
Mutual Fund	83%	85%	.47	77%	94%	< .001
Social Security	69%	82%	< .001	68%	83%	.06
Stock v. Bond	55%	62%	0.03	73%	66%	.48

Table 6. Family Education Differences in Financial Knowledge

Survey	Intake Survey			Two-Month Follow-Up Survey		
Indicators	First Generation	Continuous Generation	*p* value	First Generation	Continuous Generation	*p* value
Subjective Knowledge						
Rates	2.72	2.68	.43	3.2	3.17	.84
Credit	2.53	2.37	.01	2.98	2.84	.40
Managing	2.99	2.99	.93	3.46	3.51	.71
Investing	2.29	2.27	.78	2.31	2.46	.34
Report	2.49	2.27	< .001	3.25	3.09	.34
Objective Knowledge						
Credit Report	91%	86%	.02	75%	66%	.17
Deductible	65%	66%	.70	78%	76%	.79
Annuity	67%	64%	.33	75%	71%	.59
Mutual Fund	86%	84%	.45	90%	93%	.39
Social Security	77%	81%	.11	69%	87%	< .001
Stock v. Bond	58%	61%	.17	58%	72%	.04

Table 7. Summary of Statistical Differences Pre and Post Counseling

Knowledge Type	Subjective Financial Knowledge		Objective Financial Knowledge	
Survey	Intake Survey	Follow-up Survey	Intake Survey	Follow-up Survey
Gender	4	0	2	1
Race	2	3	3	0
Academic Major	4	4	2	1
Class Rank	4	3	3	1
First Generation	2	0	1	2

Differences in Social Security Knowledge across Hispanic Subgroups

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Abstract

The purpose of this paper is to incorporate the diversity of the U.S. Hispanic population into an examination of Hispanics' Social Security knowledge. Earlier research with Hispanic focus groups suggested differences in Social Security knowledge across Hispanic subgroups – Hispanics of Mexican, Puerto Rican, and Cuban ancestry as well as Hispanics who are primarily English-speaking vs. primarily Spanish-speaking. In this paper, we extend the analysis through an examination of nationally representative data. Our findings are consistent with the earlier focus group findings and offer insights for further research, policy and practice to promote greater retirement security for U.S. Hispanics.

Key words: focus groups, Hispanics, Internet panel data, retirement income, Social Security

Introduction

There is growing concern about the adequacy of retirement planning and savings in the United States. Although the literature on retirement preparedness indicates that many Americans may face economic insecurity in retirement, studies suggest that certain demographic groups face particular challenges. Hispanics are one such group (Hopkins 2014), facing challenges that include comparatively low-wage jobs, low levels of wealth, limited health insurance coverage, and longer life expectancy. As a result, Hispanics are at a greater risk than the general population of having low levels of retirement savings, and therefore, of relying on Social Security benefits as a major source of retirement income (Rabinovich, Peterson, & Smith, 2017).
The likely importance of Social Security income in retirement means that it is important for Hispanics to be well informed on program provisions. Recent research has shown, however, that Hispanics are less knowledgeable than other groups about Social Security (Rabinovich, Peterson, & Smith, 2017; Yoong, Rabinovich, & Wah, 2015). We argue that effective outreach to the Hispanic community on Social Security is crucial, and to be most effective such outreach must take into account that the Hispanic population is not homogeneous. Research has shown that there are important demographic and socio-economic differences across Hispanic ancestry groups (Lopez, Gonzalez-Barrera, & Cuddington, 2013). Language preferences and proficiencies also vary across Hispanics in the United States (Krogstad & Gonzalez-Barrera, 2015). Such differences might affect knowledge about Social Security and thus influence the development and implementation of effective outreach to Hispanic groups.

Previous qualitative research utilizing focus groups found that knowledge of Social Security's programs and benefits varies across Hispanic ancestry and language groups (Rabinovich, Peterson, & Smith, 2017). In this paper, we extend the analysis of differences in Social Security knowledge across ancestry and language groups using the Understanding America Study (UAS), a nationally representative Internet panel maintained by the Center for Economic and Social Research at the University of Southern California. Our findings using the UAS survey data are consistent with the earlier focus group findings and should be of interest to researchers, practitioners, and policymakers concerned with improving the retirement security outcomes for Hispanics in the United States.

Literature Review - Background on Hispanics and Social Security

Hispanics constitute the nation's largest minority group, at 17.6 percent of the population as of 2015 (Census Bureau, n.d.). That share is projected to increase to 26.5 percent by 2050 (Census Bureau 2014b, Table 11). Although the median age of the Hispanic population is younger than that of the general population, the Hispanic population aged 65 or older is projected to quintuple from 2012 through 2050. By 2050, the share of Americans aged 65 or older who are Hispanic will exceed 18 percent (Hummer & Hayward, 2015, 21). Consequently, it is expected that the share of Hispanics among Social Security beneficiaries will increase (Rabinovich, Peterson, & Smith, 2017).

The Hispanic community is not homogeneous in terms of ancestry. According to studies by the Pew Research Center, about 65 percent of Hispanics in the U.S. are of Mexican ancestry, almost 10 percent are Puerto Rican, and Cubans and Salvadorans each represent about 4 percent (Krogstad, 2016; Lopez, Gonzalez-Barrera, & Cuddington, 2013). In addition to the cultural differences between Latin American places of origin, these Hispanic subgroups differ in terms of median age, educational attainment, poverty rates, and homeownership rates (Lopez, Gonzalez-Barrera, & Cuddington, 2013).

Language preferences and proficiency also vary across the U.S. Hispanic population, as a significant fraction speaks primarily Spanish. According to the Pew Research Center, 36 percent of Hispanics in the United States are bilingual, 38 percent speak mainly Spanish, and one-quarter speak mainly English (Krogstad & Gonzalez-Barrera, 2015). Further, language preferences vary substantially across first-, second- and third-generation U.S. Hispanics. Among first–generation families, 61 percent consider Spanish their primary language; that figure falls to 8 percent among second-generation Hispanics and to one percent among the third generation (Taylor et al., 2012, Chapter IV).

Key indicators of socioeconomic status indicate that Hispanics are disadvantaged relative to other racial/ethnic groups in the United States. Hispanic adults have the lowest rates of high school and college graduation, are more concentrated in low-wage jobs, and have lower incomes and health insurance coverage rates (Gassoumis, Wilber, & Torres-Gil, 2008; Hummer & Hayward, 2015;). Median wealth – both an indicator and outcome of lower socioeconomic status – is also lower among Hispanic families. For example, in 2013 the median wealth of a Hispanic family ($14,000) was only one-tenth the median wealth of a non-Hispanic white family ($134,000) (Boshara, Emmons, & Noeth, 2015, 7-9).

Despite Hispanics' lower socioeconomic status, their life expectancy is greater than that of other population groups. Hispanic men aged 65 in 2014 can expect to live to age 85 versus 83 for non-Hispanic white men; Hispanic women aged 65 in 2014 can expect to live to age 87, versus 85 for non-Hispanic white women (Census Bureau, 2014a, Table 2). Higher life expectancy in the context of lower socioeconomic status has obvious and serious implications for retirement security among Hispanics (Gassoumis, Wilber, & Torres-Gil, 2008, 3).

Social Security benefits constitute a significant proportion of retirement income for the Hispanic population. Among Hispanic beneficiaries aged 65 or older in 2014, 42 percent of married couples and 59 percent of unmarried person relied on Social Security for 90 percent or more of their income. By comparison, among non-Hispanic white Social Security beneficiaries age 65 or older, 20 percent of married couples and 41 percent of unmarried persons relied on Social Security for 90 percent or more of their retirement income in 2014 (SSA, 2016a, Table 9.A3).

Social Security benefits are particularly important for Hispanics in large part because Hispanic workers are less likely than other workers to be covered by employer-sponsored retirement plans and because Hispanic households are less likely than other households to have dedicated retirement savings (Rhee, 2013). Hispanics also tend to have lower average earnings than do workers overall. As a result, the progressive formula that determines an individual's Social Security benefit level tends to help Hispanics because it replaces a larger percentage of preretirement earnings for low earners than it does for high earners. Additionally, with their longer life expectancies. Hispanics benefit from guaranteed Social Security income that is annually adjusted for inflation (SSA, 2016b).

Research on Hispanics and Social Security

Earlier qualitative research utilizing focus groups examined whether there were differences across Hispanic ancestry groups (Mexican, Puerto Rican, or Cuban) and language groups (English-speaking or Spanish-speaking) in what they know about Social Security. Nine focus groups consisting of 80 participants in total were conducted in the spring of 2015 in Miami and Los Angeles. Three sessions were held for each ancestry group. Six of the nine sessions were held in English and three (one for each ancestry subgroup) in Spanish. Although participants in the latter sessions spoke primarily Spanish, many of them reported fluency in both languages during the discussions. Participants were adults aged 25 or older. The focus group discussions revealed similar concerns about retirement and Social Security benefits across the ancestry and language groups. In addition, regardless of ancestry and primary language, the focus groups discussions revealed low levels of knowledge about the way the Social Security system works and the benefits to which participants may be entitled (Rabinovich, Peterson, & Smith, 2017).
A questionnaire was also administered to all focus participants to test their objective knowledge of Social Security. Participants were asked to answer eight true-false questions, four that asked about benefit amounts (and factors that affect these amounts) and four that ask about more general program knowledge (the existence of and eligibility for Social Security programs):

Benefits –knowledge questions

- Benefit amounts are not affected by claiming age (F)
- Benefit amounts are adjusted for inflation (T)
- Benefits must be claimed at retirement (F)
- Benefit amounts may be subject to income tax (T)

Program-knowledge questions

- Individuals who have never worked can get benefits (T)
- Benefits are paid for by a tax on employers and employees (T)
- Workers can be entitled to disability benefits (T)
- Survivor benefits may go to children (T)

A comparison of the percent of correct answers for each of the ancestry and language subgroups revealed that the English-speaking participants were more knowledgeable than Spanish-speaking participants on most aspects of Social Security, and across both language and ancestry groups, general program knowledge was stronger than specific benefits knowledge (Rabinovich, Peterson, & Smith, 2017). These findings suggest there may be value in increasing Spanish-language outreach and including more information on Social Security benefits in outreach materials. However, because focus groups do not provide a representative sample, these findings cannot be generalized to the U.S. Hispanic population.

We extend the analysis and explore the qualitative findings further using data from the Understanding America Study (UAS). The UAS is a nationally representative Internet panel of approximately 5400 individuals that is managed by the Center for Economic and Social Research at the University of Southern California. The panel comprises adults nationwide aged 18 or older, randomly selected using postal codes. Each of the different surveys in the UAS is numbered. For our research, we use UAS16, which is one of the two Social Security-related UAS surveys designed and fielded biennially. UAS16 focuses on what panel members know about Social Security programs and benefits. The 5288 participants who responded to the 2017 UAS16 survey include 410 Hispanics of whom 262 are Mexican, 38 are Puerto Rican, and 13 are Cuban. There are 333 English speakers and 70 Spanish speakers. In this round of the panel we do not have adequate numbers of Cubans for an analysis (although we do report results for them). However, in the next few years, the Internet panel is projected to grow to 10,000 participants. Thus, in the future, we will have enough Cuban respondents for analysis.

The participants of the UAS Internet panel were asked the same set of (true-false) Social Security knowledge questions as the focus group participants, allowing for a comparison of the percent of correct answers for both groups. Consistent with the findings of the earlier focus group research, we find stronger knowledge of Social Security among primarily English-speaking than primarily Spanish-speaking participants, and across language and ancestry groups we find stronger knowledge of general program attributes than specific benefits characteristics and requirements. While in the focus groups there were differences but no clear pattern across ancestry groups, we find that the UAS Internet panel results suggest that Puerto Ricans are generally more knowledgeable about Social Security benefits than are Mexicans. There is, however, little difference between Puerto Ricans and Mexicans in their general knowledge of Social Security programs.

Conclusion

An important finding of this research is that across ancestry groups and language groups there is greater knowledge of Social Security programs than of Social Security benefits. This suggests that future Social Security outreach efforts should provide more detail on benefits rather than overemphasizing program knowledge. This also suggests that particular attention to details regarding Social Security benefits may be important for other forms of retirement planning and counseling outreach to Hispanics. Our current findings also reinforce the qualitative findings suggesting that there might be value in increasing Spanish-language outreach, given lower levels of Social Security knowledge for Spanish-speakers compared to English-speakers. For example, while the Social Security Administration already provides its publications in Spanish, it might consider partnering with community language programs and other retirement planning and counseling stake-holders to better inform Spanish-speaking Hispanics about Social Security benefits. Finally, our Internet panel findings suggest there are potential differences across ancestry groups in their knowledge of Social Security benefits that should be explored further. With the predicted growth of the U.S. Hispanic population, further research should explore how best to make important, relevant, and tailored information easily accessible to English- and Spanish-speaking Hispanics—and to those from different cultural backgrounds—to improve their retirement outcomes.

References

Boshara, R., Emmons, W.R., & Noeth, B.J. (2015). The demographics of wealth: How age, education and race separate thrivers from strugglers in today's economy. Essay No. 1: Race, ethnicity and wealth. Federal Reserve Bank of St. Louis, Center for Household Financial Stability. Retrieved from https://www.stlouisfed.org/~/media/Files/PDFs/HFS/essays/HFS-Essay-1-2015-Race-Ethnicity-and-Wealth.pdf

Census Bureau. (2014a). Methodology, assumptions, and inputs for the 2014 national projections. Retrieved from https://www.census.gov/programssurveys/popproj/technicaldocumentation/methodology/methodstatement14.pdf

Census Bureau. (2014b). 2014 National population projections tables. Retrieved from https://www.census.gov/data/tables/2014/demo/popproj/2014-summary-tables.html

Census Bureau. (n.d.). Welcome to quick facts. Retrieved from http://www.census.gov/quickfacts/table/PST045215/00

Gassoumis, Z.D., Wilber, K.H., & Torres-Gil, F. (2008). Who are the Latino boomers? Examining the demographic and economic characteristics of a hidden population. Latinos & Social Security Research Report No. 3. UCLA Center for Policy Research on Aging. Retrieved from http://www.chicano.ucla.edu/files/LSSRR3July08rev.pdf

Hopkins, J. (2014). Unique retirement planning challenges facing Hispanic Americans. *Forbes.* Feb. 18. Retrieved from https://www.forbes.com/sites/jamiehopkins/2014/02/18/unique-retirement-planning-challenges-facing-hispanic-americans/#533b7da17a9d

Hummer, R.A. & Hayward, M.D. (2015). Hispanic older adult health & longevity in the United States: Current patterns & concerns for the future. *Daedalus* 144(2): 20–30.

Krogstad, J.M. (2016). 10 Facts for national Hispanic heritage month. Pew Research Center Fact-Tank. Retrieved from http://www.pewresearch.org/fact-tank/2016/09/15/facts-for-national-hispanic-heritage-month/

Krogstad, J.M. & Gonzalez-Barrera, A. (2015). A majority of English-speaking Hispanics in the U.S. are bilingual. Pew Research Center Fact-Tank. Retrieved from http://www.pewresearch.org/fact-tank/2015/03/24/a-majority-of-english-speaking-hispanics-in-the-u-s-are-bilingual/

Lopez, M.H., Gonzalez-Barrera, A., & Cuddington, D. (2013). Diverse origins: The nation's 14 largest Hispanic-origin groups. Pew Research Center Hispanic Trends. Retrieved from http://www.pewhispanic.org/2013/06/19/diverse-origins-the-nations-14-largest-hispanic-origin-groups/

Rabinovich, L., Peterson, J., & Smith, B.A. (2017). Hispanics' understanding of Social Security and the implications for retirement security: A qualitative study. *Social Security Bulletin* 77(3): 1-14.

Rhee, N. (2013). Race and retirement insecurity in the United States*.* National Institute on Retirement Security. Retrieved from http://www.nirsonline.org/index.php?option=content&task=view&id=810

[SSA] Social Security Administration. (2016a). Income of the population 55 or older, 2014*.* Publication No. 11871. Retrieved from https://www.socialsecurity.gov/policy/docs/statcomps/income_pop55/2014/index.html

[SSA] Social Security Administration. (2016b). Social Security is important to Hispanics. Fact Sheet. Retrieved from https://www.socialsecurity.gov/news/press/factsheets/hispanics-alt.pdf

Taylor, P., Lopez, M.H., Martínez, J., & Velasco, G. (2012). When labels don't fit: Hispanics and their views of identity. Pew Research Center Hispanic Trends. Retrieved from http://www.pewhispanic.org/2012/04/04/when-labels-dont-fit-hispanics-and-their-views-of-identity/

Yoong, J., Rabinovich, L., & Wah, S.H. (2015). What do people know about Social Security? CESR-Schaffer Working Paper Series, Paper No. 2015-02, University of Southern California. Retrieved from https://cesr.usc.edu/documents/WP_2015_022.pdf

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Disability Type, Financial Capability, and Risky Asset Holding

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Abstract

The purpose of this study is to examine whether disability type and financial capability are associated with risky asset holding of adults with disabilities. Using data from the 2015 National Financial Capability Study, we find that adults with different types of disabilities have different chances of holding risky assets. After controlling for financial capability and other variables in the logistical model, people with a work disability are still less likely to hold risky financial assets than the deaf (reference category). In addition, two financial capability variables, objective financial knowledge and desirable financial behavior, are positively associated with risky asset holding.

Key words*:* disability, financial capability, National Financial Capability Study, risky asset holding

Introduction

It is not uncommon for financial practitioners to work with clients who have disabilities or family members with disabilities. A report by researchers at the National Disability Institute noted that one in nine working-age adults ages 18 to 65 has a disability and they demonstrate lower financial status and less financial capability than the general U.S. adult population (Goodman, O'Day, & Morris, 2017). However, some of them, especially those with higher incomes, may need professional services for financial planning. Among the population with disabilities, for those with a family income $75,000 or higher, 44.5% or more hold non-retirement risky financial assets (Figure 1). A relatively new government policy shift may further increase this demand. The Achieving a Better Life Experience (ABLE) Act, signed into law in December 2014, amended the tax code to encourage contributions to an ABLE account that allows investments to grow tax-free. Congress recognized that families raising a child with a significant disability and working-age adults with disabilities have additional costs associated with the disability (Goodman et al., 2017; Napach, 2016; Waddell, 2017).

Research on the financial capability and well-being of the disabled population is emerging. Scholars at the National Disability Institute conducted a comprehensive study by comparing financial capability and well-being indicators between working-age people with disabilities and the general population (Goodman et al., 2017). A few studies also examined the financial capability of adults with specific types of disabilities (Lazar et al., 2016; Kavaliunas et al., 2015). In this study, we examined whether disability type and financial capability are associated with risky asset holding of adults with disabilities. Financial ability is defined in this study as applying financial knowledge and engaging in desirable financial behavior to achieve financial well-being (Xiao & O'Neill, 2016).

Risky asset holding is a basis for measuring financial sophistication (Calvet et al. 2009; Huston, Finke, & Smith, 2012) and also considered an indicator of financial well-being where. people holding risky assets are more likely to accumulate more wealth compared to those who do not (Campbell, 2016). Compared to previous research, we make unique contributions to the literature by including disability type in the analyses and by examining the association between financial capability and risky asset holding of the disabled. The results will be informational for policy makers and professionals who work with the disabled population.

Literature Review and Hypotheses

Financial Capability and Well-being of Adults with Disabilities
More than 17 million disabled Americans receive financial benefits from the U.S. Social Security Administration (SSA) through the Supplemental Security Income (SSI) or the Social Security Disability Insurance (SSDI) programs, or both. Of this cohort, 3.5 million disabled adults are appointed a representative payee to manage their benefits because they have been determined not to be financially capable (Birkenmaier et al., 2017; SSA, 2015). Literature about associations between physical and mental disabilities and financial management practices includes studies that assess financial capability, earnings and asset holdings, financial assistance programs, and poverty levels.

Several studies have explored the financial capability of adults with disabilities. Allmark and Machaczek (2015) argued, in a position paper, that financial capability should not be viewed as a personal quality in isolation from a person's socio-economic environment and that there are two distinct types of financial capability: in poverty and not in poverty. In addition, "in some cases, personal disability puts a core functioning out of someone's reach… no matter how enabling the social arrangements" (p. 4). Palmer (2011) examined links of three definitions of poverty to disability (basic needs, capability, and economic resources) and concluded that, however it is defined, poverty is closely related to disability.

Researchers at the National Disability Institute examined the financial capability and well-being of adults with disabilities with data from the 2015 National Financial Capability Study and noted that people with disabilities are a very diverse group and that disabilities can be related to vision, hearing, movement, communication, cognition, and/or psychosocial issues. Further, people with disabilities face many barriers to financial stability including low/unstable incomes, inadequate health insurance, and susceptibility to health problems related to their disability, resulting in both lost income and medical expenses. Thus, a large number of people with disabilities are financially fragile (Goodman et al., 2017).

Analyses of NFCS data found that persons with disabilities, compared to others, are: more than twice as likely to find it "very difficult" to cover expenses and pay bills (23% vs. 9%); twice as likely to have past due medical bills (38% vs. 18%) and to forgo medical care (46% vs 25%);less likely to be employed (39% vs. 69%) and more likely to be employed in service occupations; less likely to have three months of emergency funds (30% vs 46%); less likely to have a retirement account (40% vs. 62%) and non-retirement accounts (20% vs. 31%); and less likely to take financial risks to benefit from potential investment gains (36% vs. 24%) (Goodman et al., 2017).

Lazar et al. (2015, 2016) tested a tool to rate the financial capability of 118 persons who received SSDI payments, had recently been treated in acute care facilities for psychiatric disorders, and who did not have representative payees or conservators. Almost half (48%) of the participants were found to be financially incapable for a variety of reasons (e.g., harmful spending on illicit drugs). In addition, as expected, financially incapable persons scored higher on a money mismanagement measure compared to capable ones. It is important to note, however, that SSDI beneficiaries who had been hospitalized for psychiatric disabilities makes up a very small portion of SSDI beneficiaries and are not representative of people with disabilities in general. Kavaliunas et al. (2015) studied relationships between earnings and Social Security compensation and disability from Multiple Sclerosis (MS). Not surprisingly, disease progression affected the finances of MS patients considerably. The average level of earnings was ten times lower when comparing MS patients with severe and mild disability.

Two key factors associated with financial capability and portfolio choices are income potential (i.e., human capital) and cognitive ability. People with disabilities have issues with both. The percentage of working-age people with disabilities in the labor force is about one-third that of persons with no disability (The Arc, 2016). Milfort, Bond, McGurk, and Drake (2014) examined barriers to employment among 430 SSDI beneficiaries who received comprehensive vocational and mental health services but were not successful in returning to work. The three most frequently identified barriers to employment were poorly controlled symptoms of mental illness (55%), non-engagement in supported employment (44%), and poorly controlled medical problems (33%).

Note that, again, a mental health cohort is not representative of the broader population in which barriers to work were more a function of access to the labor market and availability of supports. In general, the ability to fully participate in the labor market is not based on the individual's medical condition but rather the relationship of that condition to the environment (or policy environment). Also, most people with disabilities do not have cognitive limitations.

Another factor that affects investment choices of disabled persons are mean tests for SSDI and SSI benefits and other government programs that limit the income and/or resources of beneficiaries. Stock investments count as resources for SSI as do savings accounts and pension plans (Zacks, n.d.). ABLE (Achieving a Better Life Experience) investment accounts were implemented as vehicles which allow children and adults with disabilities to save money without jeopardizing federal benefits (Waddell, 2017). ABLE accounts are similar to state 529 college savings plans but more limited in their numbers and more flexible in terms of benefits (Napach, 2016).

Christelis, Jappelli, and Padula (2010) studied the relationship between cognitive abilities and portfolio choices among a sample of European adults. They found that propensity to invest in stocks is strongly associated with cognitive abilities for both direct stock purchases and indirect participation through mutual funds and retirement savings accounts. However, to our knowledge, no previous research examined disability type and risky asset holding of the disabled. Therefore, we propose the following hypothesis:

H1: There is no difference between adults with physical disabilities and mental disabilities in terms of risky asset holding.

Financial Capability and Risky Asset Holding

Risky financial assets examined in this study include stocks, bonds, mutual funds and other investment instruments that are not in employer-sponsored or other retirement accounts. In the standard model of investing, holding risky assets is a desirable financial behavior (Cardak & Wilkins, 2009). Holding risky assets implies that the holders have a higher level of risk tolerance and are likely to achieve higher level wealth due to superior investment performance over extended periods of time (Campbell, 2016). Financial researchers examined factors associated with risky asset holding and identified background risk factors that are mainly socioeconomic characteristics of households (Cardak & Wilkins, 2009). The health risk factor plays a similar role as background risk factors (Campbell, 2006), which has direct implications for the population with disabilities.

Among factors affecting risky asset holding, financial capability is an important one. Financial capability can be defined in a variety of ways (Lin et al., 2016; Huston, 2010; Johnson & Sherraden, 2007; Lusardi & Mitchell, 2014). In this study, we refer to financial capability as an individual's ability to apply appropriate financial knowledge and engage in desirable financial behavior for achieving financial wellbeing (Xiao & O'Neill, 2016). Previous research showed that financial knowledge is positively associated with stock or risky asset holding (Chu, Xiao, Wang, & Zhang, 2017; Liao, Xiao, Zhang, & Zhou, 2017; Van Rooij, Lusardi, & Alessie, 2011).

Based on the above discussions, we propose the following hypothesis:

H2: Financial capability is positively associated with risky asset holding among adults with disabilities.

Method

Data

Data used in this study were from the 2015 U. S. National Financial Capability Study, commissioned by the FINRA Investor Education Foundation and conducted by Applied Research and Consulting LLC, which included 27,564 American adults (roughly 500 per state and the District of Columbia). Descriptive statistics and other background information about this data set can be found in a report by the data owner (Lin et al., 2016). The NFCS is a triennial survey, started in 2009, that has been widely used and validated as a representative sample of the American population by researchers in economics, business, consumer science, and other social science fields.

In the 2015 survey, several new questions were asked about specific statuses of disabilities. In this study, adults with any disability were initially selected for the analyses. After consulting with staff of the National Disability Institute who conducted similar analyses (Goodman et al., 2017), they reported that those who reported all "yes" answers for the six new National Financial Capability Study disability status questions may be not serious answers, Thus, we removed these observations that resulted in a sample size of 6,151, which accounted for 22% of the sample, which is higher than the percentage of the disabled population (12.6%) reported by the U.S. Census (U.S. Census, n.d.). The differences may be a result of the type (individual survey), mode (online), and context (health-related) of this survey compared to the U.S. Census survey (Goodman et al., 2017).

Variables

Table 1 presents detailed information about variable specifications used in this study. Risky asset holding was measured by a binary variable indicating if holding any non-retirement investments such as stocks, bonds, mutual funds and other equity, in which 1 refers to yes and 0 no. Disability statuses were measured by 6 binary variables, if being disabled in hearing, seeing, concentrating, working or climbing stairs, dressing or bathing, doing errands, or work, where 1 refers to yes and 0, no.

Following previous research (Xiao & O'Neill, 2016), four financial capability variables included objective financial literacy, subjective financial literacy, desirable financial behavior, and perceived financial capability. Objective financial literacy is the quiz score of six financial knowledge questions ranging from 0 to 6. Subjective financial literacy is a self-assessment of financial knowledge with a range of 1-7 (1=very low, 7=very high). Desirable financial behavior is a sum of 5 desirable financial behavior binary variables such as underspending, having an emergency fund, having a budget, setting up a long term plan, and calculating retirement needs, which ranged from 0 to 5. Perceived financial capability is a self-assessment of money management ability with a range of 1-7 (1=very low, 7=very high). Following previous research (Cardak & Wilkins, 2009), several demographic and financial variables associated with risky asset holding were also included in the analyses as control variables (see more details in Table 1).

Data Analyses
Descriptive statistical analyses were conducted with the whole sample. Descriptive statistical analyses of risky asset holding by disability type and financial capability were also conducted. To test the hypotheses, logistic regressions were used with the whole sample and with income subsamples.

Results

Descriptive Statistics of the Sample
Table 2 presents descriptive statistics of the total sample and subsamples by two income categories (under $75,000 and $75,000 and higher) and Table 3 presents descriptive statistics of risky asset holding by disability type and financial capability. For the whole sample of adults with disabilities, respondents who reported having serious difficulties walking and climbing stairs had the largest percentage, 49%, followed by respondents who reported a mental disability (i.e., having serious difficulty concentrating, remembering, and making decisions) (39%) and those who reported having serious difficulty running errands (31%). Percentages of the sample for other disabilities were 23% who reported having serious difficulty in hearing, 14% having serious difficulty in seeing, 14% having serious difficulty in dressing or bathing, and 20% who reported a work disability.

About a quarter of the sample, 22% reported holding non-retirement risky assets (among them, 12.2% and 11.6% with and without a 401k type plan, respectively)Two disability types that had much higher than average holding rates were the deaf (38%) and blind (28%). Four disability types had similar holding rates compared to the average rate: dressing difficulty (24%), difficulty running errands (19%), walking difficulty (21%), and mental difficulty (18%). The work disability group had the lowest risky asset holding rate, only 6%.

For the whole sample, the score of objective financial knowledge was 2.91 out of 6 (48.5%). Among disability types (Table 3), only two types were higher than the average score: the deaf and walking difficulty group, while the other five types scored lower than the average. The whole sample's subjective financial knowledge score was 5.03 out of 7 or 71.9%. Four disability types had scores higher than the average: the deaf, blind, walking difficulty, and dressing difficulty group. Regarding desirable financial behavior, the whole sample's score was 2.45 out of 4 (61.3%). Three types, the deaf, blind, and dressing difficulty group, had the higher than average score. Finally, for perceived financial capability, the whole sample's score was 5.54 out of 7 (79.1%). Only two disability types had a higher than average score: the deaf and walking difficulty group. To summarize, it appears that two disability types, the deaf and walking difficulty group, had a higher level of financial capability compared to other disability types.

Table 1 also presents other sample characteristics. The average age was 49.7 (that may be at the life cycle stage with higher risk tolerance and increased likelihood to hold risky assets than other age groups) and males accounted for 43% of the sample, 45% were married, and 31% had financially dependent children. Percentages of three education groups were similar: 33% had high school or lower education, 32% had some college, and 35% had an associate degree or more education. Almost half (48%) were credit constrained, where they had difficulty raising $2,000 in an emergency, 31% had no credit card, and 35% owed credit card debt. The respondents seemed time and risk neutral, with an average planning horizon score of 2.47 out of 5 (this score is between two categories, the next year and the next few years), and risk attitude score of 4.47 out of 10. About half owned a home (53%) and a quarter had employer-sponsored defined contribution retirement plans (22%) or non-employer provided retirement accounts (23%). The income distribution was that 40% had incomes under $25,000, 28% had incomes of $25,000-$50,000, and 32% had incomes of $50,000 or higher.

Logistic Regression Results with the Whole Sample
Table 4 presents logistic regression results with the whole sample. Three models were used in the analyses. In the first model, only disability type variables were entered. In the second model, financial capability variables were

entered. In the third model, other control variables were entered. In these models, the deaf group was used as a reference category for disability type.

The results of model 1 showed that the blind and dressing difficulty groups were more likely, while the mental, walking, running errand, and work disability types were less likely, than the deaf to hold risky assets.

In model 2, when financial capability variables were entered, the difference between the deaf and a set of types, mental, walking, and running errand disability groups disappeared but three other differences between disability types still existed. In addition, three of four financial capability variables showed positive associations with risky asset holding. In model 3, when other variables were entered, only two differences between the deaf and dressing difficulty group, and the deaf and work disability group, in which the dressing difficulty group was more likely, while the work disability group was less likely than the deaf group to hold risky asset. There were no differences between other disability types and the reference category, the deaf group.

In model 3, only two financial capability variables, objective financial knowledge and desirable financial behavior, showed positive associations with risky asset holding. Several other variables showed associations with risky asset holding. Risk attitude was positively associated with risky asset holding. Age showed a U-pattern association, middle age was the least likely to hold risky asset, which was different from the general population. Three variables showing credit constraints (no $2,000, no credit card, and having credit card debt) were negatively associated with risky asset holding. Holding assets such as a home, employer sponsored, or non-employer sponsored retirement accounts, were positively associated with risky asset holding. For income groups, only those with income of $50,000 or higher were more likely than the reference category, the group with income under $25,000, to hold risky asset.

Logistic Regression Results with Income Subsamples
Figure 1 shows that respondents with income of $75,000 were 44.5% or more likely to hold risky assets than their counterparts with lower income. Logistic analyses were conducted with two income subsamples, one was for those with income under $75,000 and the other was for those with income of $75,000 or higher. Table 5 presents the results. In the lower income group, only the work disability group was less likely to own risky assets, while in the higher income group, this difference was not shown but the mental disability was more likely than the deaf, the reference group, to hold risky assets. A possible explanation for this finding is that these disabilities may have occurred later in life after respondents had already accumulated some investment assets. The potential effects of financial capability variables were also different for the two groups. In the lower income group, both objective financial knowledge and desirable financial behavior showed positive associations with risky asset holding, while in the higher income group, the association of objective financial knowledge disappeared.

Several other variables showed some associations in the two subsamples such as risk attitude, age, owning a home, and having non-employer sponsored retirement accounts. The negative associations of having difficulty to raise $2,000 and no credit card and the positive association of having employer sponsored retirement accounts were shown only in the lower income group and the negative association of having credit card debt was shown in only the higher income group.

Discussion, Limitations, and Implications

Discussion
This study used a subset of a large scale national sample to examine differences in risky asset holding of the disabled population according to their disability type and financial capability. People with different disability types show differences in terms of risky asset holding status. Multivariate analysis results showed that people with a work disability are less likely, while people with serious difficulty running errands are more likely, than the reference category, the deaf, to hold risky assets after controlling for financial capability and other factors. The finding regarding the mentally disabled appears to support Hypothesis 1 (There is no difference between adults with physical and mental disabilities in terms of risky asset holdings).

Two of four financial capability variables show positive associations with risky asset holding after controlling for other factors: objective financial knowledge and desirable financial behavior. These findings are consistent with Hypothesis 2 (Financial capability is positively associated with risky asset holding among adults with disabilities) and previous research that found that financial knowledge contributes to risky asset holding (Chu, Xiao, Wang, & Zhang, 2017; Liao, Xiao, Zhang, & Zhou, forthcoming; Van Rooij, Lusardi, & Alessie, 2011).

Results from two income subsamples show differences of factors associated with risky asset holding. In the lower income sample, only those who reported a work disability are less likely to hold risky assets, while in the higher income sample, only the mentally disabled are more likely than the deaf (the reference group) to hold risky assets. Another difference is that objective financial knowledge showed a positive association with risky asset holding only in the lower income group. There are several other differences in control variables in terms of risky asset holding, which implies that practitioners working with clients from different income levels may need to consider their ability to invest in risky asset classes.

Limitations

The variable of risky asset holding is only a binary variable that has limited information for furthering understanding of the investment behavior of adults with disabilities. A more desirable measure should include dollar values of all types of risky assets that can be used to form portfolios to better show the financial positions of these people. Another limitation is that self-reported financial and medical information may have measurement errors. More desirable measures are to link relevant administrative data with survey data to more accurately describe these people's behavior and wellbeing. These issues should be explored in future research.

Implications

People with disabilities are the largest minority in the U.S. at 19% of the population (Morris, 2018) and, as such, are an important clientele constituency for financial practitioners. They face barriers to financial stability such as a low or unstable income, thinner margin of health, and the extra costs associated with living with a disability such as medical care, medication, and medical equipment (Goodman et al., 2017). Not all disabilities are the same, however, with some having a greater impact on earning ability and the availability of investment capital. In addition, some disabilities begin early in life while others begin later after individuals have established themselves financially.

This study explored the association between different types of disabilities (i.e., mental and physical) and risky asset holding and whether various measures of financial capability are positively associated with risky asset holding among adults with disabilities. Below are three implications for financial practice:

Earning Ability is a Key Variable. Fewer than one in three working age adults with a disability are employed, compared to 75% of those without a disability (Morris, 2018). This study found that people with a work disability were less likely to hold risky assets, which is a practice linked to financial well-being and wealth-building. Clearly, income is a key pre-requisite for asset building. Financial practitioners with disabled clients (or disabled adult family members of clients) can assist them with referrals to career counseling and job training programs and employers that hire people with disabilities. Options for telework that involves fewer barriers (e.g., commuting, travel, and building access) could also be explored. In addition, referrals for legal assistance may be warranted. because employers who don't hire people with disabilities are violating the Americans with Disabilities Act (ADA). Unless disabled clients improve their ability to work and to earn a higher income, they are unlikely to have available capital to invest in any type of asset. With appropriate supports and public policies, few disabilities should preclude the ability to work.

Some Disabilities Present More Challenges Than Others. People with disabilities are a diverse group with a wide range of types and severity of disabilities (Morris, 2018). This study found differences in risky asset holding between persons with physical and mental disabilities. Specifically, respondents with mental disabilities (e.g., concentrating, remembering, and making decisions) and difficulty running errands were more likely to hold risky assets than the deaf and those unable to work. Mental disabilities like those listed above may not preclude work entirely like a severe physical injury would and may be easier to work around. They may also occur later in life after someone has already become established financially. Clearly, disabled clients are not a homogeneous group of clients and require personally tailored financial products and services from financial advisors to create a better future for themselves and their families. Some may be able to manage investment accounts while others require a representative payee to manage their finances. Financial practitioners can assist individuals and families with a wide range of disability severity levels.

Leverage Opportunities Under the ABLE Act. Wealth-building by disabled persons who receive government benefits has traditionally been limited by asset tests. In 2014, Congress passed the ABLE Act, which created an option for people with disabilities to save for the future while preserving their eligibility for public benefits. Eligibility requirements to open an ABLE account are age of onset of disability before age 26 and proof of significant functional limitations (Morris, 2018). Before disabled persons can even consider risky assets, they need encouragement to save and a place to hold their savings. Financial practitioners can help them set up ABLE accounts as a first step. This is especially true for disabled persons with lower incomes who were less likely to hold risky assets. In addition, findings from this study clearly show that some people with disabilities do invest. These results can be used to advocate for additional public policies that support asset building by vulnerable populations.

References

Allmark, P., & Machaczek, K. (2015). Financial capability, health and disability. *BMC Public Health, 15*(1), 1-5.

Birkenmaier, J., Aranda, M., Appelbaum, P. S., & Norman, M. A. (2017). For their financial benefit: determination of financial capability for adult beneficiaries of social security disability. *Social Work, 62*(3), 271-273.

Calvet, L. E., Campbell, J. Y., & Sodini, P. (2009). Measuring the financial sophistication of households. *American Economic Review*, *99*(2), 393-98.

Campbell, J.Y., (2006). Household finance. *Journal of Finance, 61*, 1553–1604.

Campbell, J. (2016). Restoring rational choice: The challenge of consumer financial regulation. *American Economic Review: Papers & Proceedings, 106(5): 1–30.*

Cardak, B. A., & Wilkins, R. (2009). The determinants of household risky asset holdings: Australian evidence on background risk and other factors. *Journal of Banking & Finance, 33*(5), 850-860.

Christelis, D., Jappelli, T., & Padula, M. (2010). Cognitive abilities and portfolio choice. *European Economic Review*, 54(1), 18-38.

Chu, Z., Wang, Z., Xiao, J. J., & Zhang, W. (2017). Financial literacy, portfolio choice, and financial well-being. *Social Indicators Research, 132*(2), 799-820.

Goodman, N., O'Day, B., & Morris, M. (2017). *Financial capability of adults with disabilities.* Washington, DC: National Disability Institute. Retrieved https://www.realeconomicimpact.org/assets/site_18/files/other_documents/finra%20report/ndi-finrareport-accessible.pdf

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

Huston, S. J., Finke, M. S., & Smith, H. (2012). A financial sophistication proxy for the Survey of Consumer Finances. *Applied Economics Letters*, *19*(13), 1275-1278.

Johnson, E., & Sherraden, M. S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology & Social Welfare*, *34*(3), 119–146.

Kavaliunas, A., Wiberg, M., Tinghög, P., Glaser, A., Gyllensten, H., & Alexanderson, K., et al. (2015). Earnings and financial compensation from social security systems correlate strongly with disability for multiple sclerosis patients. *Plos One, 10*(12), e0145435.

Lazar, C. M., Black, A. C., Mcmahon, T. J., O'Shea, K., & Rosen, M. I. (2015). Determining financial capability of SSI/SSDI beneficiaries with psychiatric disabilities: A case series. *Psychiatric Services, 66*(3), 279-284.

Lazar, C. M., Black, A. C., Mcmahon, T. J., Rosenheck, R. A., Ries, R., & Ames, D., et al. (2016). All-data approach to assessing financial capability in people with psychiatric disabilities. *Psychological Assess, 28*(4), 362-371.

Liao, L., Xiao, J. J., Zhang, W., & Zhou, C. (2017). Financial literacy and risky asset holdings: Evidence from China. *Accounting and Finance, 57,* 1383-1415.

Lin, J. T. Bumcrot, C., Ulicny, T., Lusardi, A., Mottola, G., Kieffer, C., & Walsh, G. (2016). *Financial capability in the United States 2016.* Washington, DC: FINRA Investor Education Foundation.

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

Milfort, R., Bond, G.R., McGurk, S.R., & Drake, R.E. (2015). Barriers to employment among Social Security disability insurance beneficiaries in the mental health treatment study. *Psychiatric Services,* 66(12), 1350-1352. Retrieved from https://ps.psychiatryonline.org/doi/abs/10.1176/appi.ps.201400502

Morris, B. (2018). *Advancing economic self-sufficiency: Challenges and opportunities for people with disabilities.* Washington, DC: National Disability Institute. Retrieved from http://choosetosave.org/asec/Michael%20Morris.pdf

Napach, B. (2016). ABLE Accounts: What advisors need to know. *Think Advisor*. Retrieved from https://www.thinkadvisor.com/2016/08/05/able-accounts-what-advisors-need-to-know

Palmer, B. (2011). Disability and poverty: A conceptual review. *Journal of Disability Policy Studies*, 21(4), 210-218. Retrieved from http://journals.sagepub.com/doi/pdf/10.1177/1044207310389333

Social Security Administration. (2015). Capability determination: Overview. Retrieved from https://secure.ssa.gov/poms.nsf/lnx/0200502010

The Arc (2016). Employment issues for people with disabilities. *Public Policy and Legal Advocacy*. Retrieved from https://www.thearc.org/what-we-do/public-policy/policy-issues/employment

U.S. Census (n.d.). Disability characteristics: 2015 American Community Survey 1-year estimates. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_1YR_S1810&prodType=table

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics, 101*(2), 449–472.

Waddell, M. (2017). ABLE alliance launches investment accounts for disabled, blind. *Think Advisor*. Retrieved from https://www.thinkadvisor.com/2017/02/14/able-alliance-launches-investment-accounts-for-dis/?slreturn=20180222194836

Xiao, J. J., & O'Neill, B. (2016). Consumer financial education and financial capability. *International Journal of Consumer Studies, 40*(6), 712-721.

Zacks Investment Research (n.d.). *Can a person on Social Security invest in stocks*? Retrieved from https://finance.zacks.com/can-person-social-security-invest-stocks-2686.html

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Table 1: Variable Specifications

Variable name	Variable label	Attribute
	Dependent Variable	
B14	Risky asset holding	The original question "Not including retirement accounts, do you have any investments in stocks, bonds, mutual funds, or other securities?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
	Disability Status	
N31	Disability_deaf	The original question "Are you deaf or do you have serious difficulty hearing?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
N32	Disability_blind	The original question "Are you blind or do you have serious difficulty seeing, even when wearing glasses?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
N33	Disability_mental	The original question "Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
N34	Disability_walking	The original question "Do you have serious difficulty walking or climbing stairs?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
N35	Disability_dressing	The original question "Do you have difficulty dressing or bathing?" on a scale of 1-strongly disagree to 7-strongly agree. If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
N36	Disability_errand	The original question "Because of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visiting a doctor's office or shopping?" If the respondent's answer is yes, the variable is recoded to 1, otherwise 0.
A10	Disability_work	The original question "Which of the following best describes your current employment or work status?" If the respondent's answer is "Permanently sick, disabled, or unable to work … 6," the variable is recoded to 1, otherwise 0.
	Financial Capability	
M4	Objective knowledge	0-6, the sum of correct numbers for financial literacy questions. The original financial literacy variables (m6-m10) were recoded to binary variables in which 1=correct answer, 0=otherwise and then the new variables were summed to form the score. These questions asked financial knowledge about interest (m6), inflation (m7), bond (m8), time value of money (m31), mortgage (m9), and stock (m10). More details about these questions can be found at Lin et al. (2016).
M1_1	Subjective knowledge	The question is "On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your overall financial knowledge?" 1-very low, 7-very high.
	Financial behavior	A sum of 5 desirable financial behavior binary variables, which is ranged 0-5. These variables are appropriately recoded from corresponding variables in the original data set: j3 (underspend), j5 (emergency fund), j31 (budget), j33_3 (long term planning), and j8j9 (calculate retirement need).
J1	Financial capability	The question is "I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses," 1-strongly disagree, 7-strongly agree.
	Other Variables	
J2	Risk attitude	The original question "When thinking of your financial investments, how willing are you to take risks? Please use a 10-point scale, where 1 means 'Not At All Willing' and 10 means 'Very Willing.'"

J30	Time preference	The original question "In planning or budgeting your saving and spending, which of the following time periods is most important to you?" 1- the next few months, 2-the next year, 3-the next few years, 4-the next 5-10 years, 5 – longer than 10 years.
A3a	Age	Actual year of age
A3	Male	Recoded, 1=male, 0=female
A6	Married	Recoded, 1=married, 0=not married
A11	Have children	If have financially dependent children. Recoded, 1=yes, 0=no
A5	High school or lower	If high school graduated or lower, 1=yes, 0=no.
A5	Some college	If some college, 1=yes, 0=no.
A5	Associate or higher	If associate degree or higher, 1=yes, 0=no.
J20	No $2000	If probably or certain having difficulty to raise $2000, 1=yes, 0=no.
F1	No credit card	If "no credit cards - 7", 1=yes, 0=no
F2_2	Have credit card debt	If "In some months, I carried over a balance and was charged interest", 1=yes, 0=no
Ea_1	Own home	Recoded, 1=yes, 0=no
A8	Income, under $25k	If income under $25k, 1=yes, 0=no
A8	Income, $25k-$50k	If income $25k but under $50k, 1=yes, 0=no
A8	Income, $50k or higher	If income $50k or higher, 1=yes, 0=no
C3	Have 401k etc.	If having any retirement plan that can choose to invest, 1=yes, 0=no
C4	Have IRA etc.	If having any retirement accounts not through employers, 1=yes, 0=no
A9	Working	If working as self-employed, full time, or part time, 1=yes, 0=no

Note: Variable names are from the codebook of the 2015 National Financial Capability Study.

Table 2. Descriptive Statistics of the Sample (N=6,151)

	Total		Income Under 75k		Income 75k or higher	
	Mean	SD	Mean	SD	Mean	SD
Risky asset holding	.22	.42	.16	.37	.53	.50
Disability_deaf	.23	.42	.20	.40	.40	.49
Disability_blind	.14	.35	.13	.34	.18	.39
Disability_mental	.39	.49	.41	.49	.30	.46
Disability_walking	.49	.50	.50	.50	.44	.50
Disability_dressing	.14	.35	.14	.35	.13	.34
Disability_errand	.31	.46	.33	.47	.22	.42
Disability_work	.20	.40	.23	.42	.05	.23
Objective knowledge (0-6)	2.91	1.61	2.77	1.59	3.59	1.58
Subjective knowledge (1-7)	5.03	1.40	4.91	1.42	5.60	1.10
Financial behavior (0-5)	2.45	1.41	2.28	1.34	3.29	1.42
Fin. capability (1-7)	5.54	1.61	5.45	1.64	5.97	1.38
Time preference (1-5)	2.47	1.35	2.36	1.33	2.99	1.34
Risk attitude (1-10)	4.47	2.83	4.18	2.78	5.92	2.60
Age (18-94)	49.70	17.17	49.23	17.25	52.06	16.57
Male	.43	.50	.41	.49	.56	.50
Married	.45	.50	.38	.49	.78	.41
Have children	.31	.46	.28	.45	.41	.49
High school or lower	.33	.47	.36	.48	.16	.37
Some college	.32	.47	.34	.47	.25	.43
Associate degree or higher	.35	.48	.30	.46	.59	.49
No $2000	.48	.50	.55	.50	.17	.38
No credit card	.31	.46	.36	.48	.07	.25
Have credit card debt	.35	.48	.34	.48	.40	.49
Own home	.53	.50	.47	.50	.83	.37
Income, under $25k	.40	.49				
Income, $25k-$50k	.28	.45				
Income, $50k or higher	.32	.47				
Have 401k etc.	.22	.41	.15	.36	.53	.50
Have IRA etc.	.23	.42	.17	.37	.55	.50
Working	.33	.47	.29	.45	.53	.50

Table 3. Risky Asset Holding and Financial Capability by Disability Status

	Disability Status							Total
	Deaf	Blind	Mental	Walking	Dressing	Errand	Work	
Risky asset holding	0.38	0.28	0.18	0.21	0.24	0.19	0.06	0.22
Objective knowledge	3.21	2.74	2.63	2.98	2.83	2.69	2.60	2.91
Subjective knowledge	5.38	5.19	4.73	5.11	5.13	4.92	4.78	5.03
Financial behavior	2.90	2.64	2.24	2.42	2.47	2.31	1.97	2.45
Financial capability	5.79	5.44	5.07	5.68	5.48	5.33	5.44	5.54

Table 4. Logistic Regression Results on Risky Asset Holding (Odds Ratios)

	Model 1		Model 2		Model 3	
Disability_blind	1.239	*	1.298	*	1.085	
Disability_mental	.653	***	.949		1.161	
Disability_walking	.850	*	.876		1.025	
Disability_dressing	1.466	***	1.276	*	1.087	
Disability_errand	.817	*	.957		1.253	*
Disability_work	.221	***	.300	***	.584	**
Objective know.			1.262	***	1.103	**
Subjective know.			1.269	***	1.012	
Financial behavior			1.689	***	1.198	***
Fin. capability			1.042		1.028	
Risk attitude					1.162	***
Time preference					1.065	
Age					.924	***
Age squared					1.001	***
Male					1.021	
Married					.837	
Have children					.969	
Some college					1.039	
Associate or higher					1.183	
No $2000					.626	***
No credit card					.444	***
Have credit card debt					.802	*
Own home					1.880	***
Income, $25k-$50k					1.179	
Income, $50k or higher					1.975	***
Have 401k etc.					1.371	**
Have IRA etc.					4.106	***
Working					1.102	
-2 log likelihood	5348.266		3624.549		3624.549	
Cox & Snell R^2	.051		.325		.325	
Neglkerke R^2	.075		.485		.485	

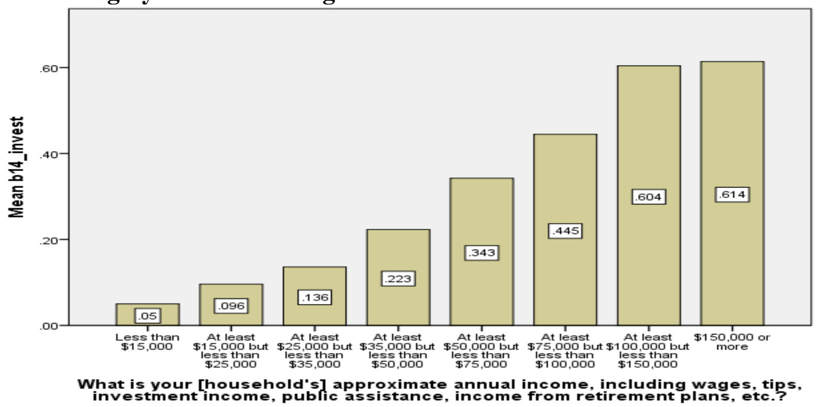
Note: reference categories: disability_deaf, high school or lower, income under $25k.
* p < .05. ** p < .01. *** p < .001.

Table 5. Logistic Regression Results on Risky Asset Holding (Odds Ratios) by Income Group

	Income	under $75k	Income	$75k or higher
Disability_blind	1.124		.857	
Disability_mental	1.063		1.517	*
Disability_walking	1.075		.891	
Disability_dressing	1.151		.867	
Disability_errand	1.189		1.518	
Disability_work	.512	***	.792	
Objective knowledge	1.105	**	1.108	
Subjective knowledge	1.015		.980	
Financial behavior	1.168	***	1.295	***
Financial capability	1.035		1.004	
Risk attitude	1.153	***	1.215	***
Time preference	1.076		1.042	
Age	.931	***	.893	**
Age squared	1.001	***	1.001	***
Male	1.108		.755	
Married	.930		.864	
Have children	.924		1.260	
Some college	1.049		1.071	
Associate or higher	1.242		1.157	
No $2000	.588	***	.619	
No credit card	.428	***	.546	
Have credit card debt	.906		.611	**
Own home	1.960	***	2.041	**
Have 401k etc.	1.428	**	1.406	
Have IRA etc.	4.236	***	3.846	***
Working	1.097		1.261	
-2 log likelihood	2738.387		957.518	
Cox & Snell R^2	.276		.334	
Neglkerke R^2	.444		.448	

Note: reference categories: disability_deaf, high school or lower, income under $25k.
* p < .05. ** p < .01. *** p < .001.

Figure 1. Risky Asset Holding by Income Among Adults with Disabilities



Source: Author calculation with data from the 2015 National Financial Capability Study.

Financial Strain, Social Support, and Well-being of Young Adults

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Abstract

The purpose of this study was to examine financial strain, financial independence, social support and the effects on overall well-being of young adults. Based on the Social Capital Theory and the use of the NLSY97 data set, the different social support systems were examined to determine if different social supports increased well-being among young adults. Three models were run, which included the full sample, married, and non-married individuals.

Key words: financial strain, financial independence, social support, well-being, young adults

Introduction

As the economic climate changes, one factor remains the same: finances cause stress. According to the American Psychological Association's (APA) Stress in America Survey (2015), finances continue to be the biggest stressor for Americans. With financial independence typically beginning after the last year of high school, learning to manage finances can be a big learning curve (Shim, Xiao, Barber, & Lyons, 2009). When the lack of knowledge of managing finances is combined with the everyday temptations of online shopping, and everything available at one's fingertips, being financially responsible falls to the way side (Shim et al., 2009). An estimated sixty-percent of students worried about having enough money to pay for school or being able to pay monthly expenses (Grabmeier, 2015).

Additionally, with climbing tuition rates, college debt, and the job market becoming more competitive, young adults are experiencing an increase in stress and financial strain (Stein et al., 2013). Getting out of school and being posed with the challenge of paying back student loan debt right away can lead to young adults looking to their social support for financial help and using that support as a coping mechanism. USA Today reported that nearly half of the post-college population (millennials born in 1981-1996) moved back home with their parents (Shell, 2017) Additionally, social support proved to be a big factor in how stress is handled. APA (2015) found that one in five Americans did not have anyone in their social support circle that they could rely on during times of stress. As the transition to adulthood drags on, parents across society are supporting their children for longer periods of time. According to Goudreau (2011) in an article written in Forbes, an estimated sixty-percent of parents provide financial support to their adult children who are no longer in school. Social support is a factor that influences many aspects of a consumer's life. Previous research has defined social support as the exchange of resources to enhance the overall well-being of the individual seeking the social support (Shumaker & Brownell, 1984). This definition necessitates asking if who consumers seek out for financial social support increases or decreases overall well-being. For example, if a stressful financial situation is discussed, is the outcome different to one's overall well-being based on if the discussion is held with a financial planner versus a parent. Researchers continue to seek information about how finances affect consumers' everyday lives, especially in regards to social support. It has been hypothesized by other researchers that financial support within social support increases overall well-being. (Aslund, Larm, Starrin, & Nilsson, 2014; Cohen & Wills, 1985). With social support as a buffering system, the negative financial impacts and events that occur throughout one's life become more manageable (Aslund et al., 2014). A 2013 study by Monica Johnson found that depressive symptoms in young adults were improved by financial assistance from parents, increasing the young adults' overall well-being.

The purpose of this study is to explore financial strain, social support, and well-being in young adults. For this study, social support is defined as a parent, sibling, relative, friend, spouse or partner, or financial counselor. With the accessibility of the internet and online shopping it is important to look at the differences in young adults in how they handle financial strain and if any social support helps more than others and overall how these factors affect young adult's wellbeing. With an understanding about young adults and their constantly evolving social support system financial counselors and planners will have better insight into what is important to young adults and be able to better guide them on their money journey. The intent of this study is for financial counselors and planners to gain a better understanding between the correlation of financial strain, financial independence, or social support and each one's potential ability to increase life satisfaction.

Literature Review

Studies have focused on the relationship between social support, well-being, and financial strain. The Center for Disease Control and Prevention (2016) discusses well-being as a perception of meaningfulness that individuals experience when they perceive their lives to be going well. Well-being is a feeling of contentment or happiness, which can be different for people of different ages, genders, or income levels. It can also be different for individuals with or without a partner (The Center for Disease Control and Prevention, 2016). Social support has been studied in large part in regard to psychological well-being (Kawachi & Berkman, 2001). Social support continues to be significant in helping individuals through hard times, and it can be a powerful tool that influences one's emotions, cognitions, and behaviors (Kawachi & Berkman, 2001). Further, social support promotes well-being through two means: stress buffering and main effects (Cohen, 2004). Stress buffering reduces stress and provides coping strategies, while main effects is the social connectedness that benefits the individual under stress (Cohen, 2004). When financial strain hit, an individual may look to their social support for help with coping. However, not all social supports are beneficial or able to assist financially or emotionally (Henly, Danziger, & Offer, 2005).

Financial Strain and Well-being

Financial strain is defined as one's inability to pay for basic living expenses (Internal Revenue Service, 2018), and it can affect individuals at different stages in the life cycle. Both monetary and assessment of economic well-being is associated with distress in one's life (Bradshaw & Ellison, 2010). When financial strain is experienced, an individual's overall well-being decreases (Park, Heo, Ruiz-Menjivar, & Grable, 2017). Asebedo & Wilmarth (2017) found financial strain to be related to increases in depression. Further, when lower levels of financial stress about an ongoing financial matter occurred the negative relationship between financial strain and mental health was reduced (Asebedo & Wilmarth, 2017). With rising debt (Fry, 2014), young adults are depending on family support more and more, which hinders their experience of living independently (Heath & Calvert, 2013). When financial strain enters a young adult's life, it can cause stress which lowers one's overall well-being (Park et al., 2017). When you add in the factors of marriage or cohabitation, the pressure to meet economic standards increases. Typically, married couples manage their resources jointly, and cohabiters keep their financial resources separate (Hardie & Lucas, 2010).

In a study done by Hardie and Lucas (2010), cohabiting partners reported receiving between $1 to $500 from their family or utilizing governmental support. Cohabiting partners also reported more economic hardship compared to married couples (Hardie & Lucas, 2010). Further, factors such as family support and whether or not hardship was experienced played a role in relationship quality, impacting an individual's overall well-being (Hardie & Lucas, 2010). Similar findings were reported by Park et al. (2017), with social networks lowering a respondent's perceived stress, even during times of financial strain.

Social Support and Well-being

Social support can be broken into three categories: emotional, instrumental, and informational. Informational social support has been found to have the strongest impact on psychological well-being (Seeman, 2008). Social support can take multiple forms, but oftentimes it comes from family, friends, neighbors, community members, or professionals. These individuals are there to help mitigate stress or provide financial help (Seeman, 2008). The optimal type of social support changes as individuals age. For example, during adolescence parental support may be more beneficial, while in young adulthood friends or professionals may be more beneficial (Ozbay et al., 2007). Social support can reduce stress, prevent risky behaviors, and prevent negative appraisals during stressful situations (Ozbay et al., 2007; Viswesvaran, Sanchez & Fisher, 1999).

The importance of social support for middle-aged adults is prevalent and has been noted to improve the immune system and promote good health, whether there is a stressful situation or not (Clark, 2005). Clark (2005) reported that individuals with high amounts of social support - in the form of either family members or friends - decrease their chances of feeling depressed or developing an anxiety disorder. Moreover, Pugno and Verme (2012) found individuals that had a healthy attitude towards family experienced higher levels of well-being. Additionally, studies examined the differences between married and single individuals. In a study by DePaulo (2011), it was found that single adults with poor support were just as happy as those that were married with good support.

Financial independence

Financial independence is a key factor in the transition and can be defined in many ways. Young adults define financial independence by moving out of the parent's home, the start of a career, completing formal schooling, marriage, or parenthood (Lee & Mortimer, 2009; Xiao, Chatterjee, & Kim, 2014). Achieving financial independence is a way that some young adults determine their self-prominence in themselves (Lee & Mortimer, 2009). Factors found to be positive contributors in achieving financial independence for young adults are discussions about money and work with parents and economic self-efficacy – having the confidence to achieve financial independence (Lee & Mortimer, 2009; Xiao, Chatterjee, & Kim, 2014). With financial independence being a milestone of adulthood, it is important variable within this study to be looked at when examining social support and financial strain.

Theory

The Social Capital Theory provided the framework for this study. Social capital is defined as the tangible assets that individuals hold with others in their social unit (Brian, 2007). Furthermore, social capital is a network of resources that can be used to generate reward. However, not all social networks are equal (Lin, 2005). Putnam (2000) proposed using groups to distinguish the differences between positive and negative social capital. The two groups proposed were bonding and bridging. Bonding occurs when trust is achieved, which eliminates the negative aspects (Pugno & Verme, 2012). Bonds are individuals that share a common identity, such as family or close friends (Brian, 2007). Bridging occurs when linkages between groups appear. Bridging has been reported to have a negative effect on individuals' economic growth (Knudsen, Florida, & Rousseau, 2014). Bridges are between individuals that are more distant, such as a friend or colleague. Linkages are individuals that are lower on the social ladder (Brian, 2007).
Each part of social capital plays a specific role, and depending on the individual's goals, different groups may be leveraged (Lin, 2005). With this leverage, either negative or positive reactions can happen. The Social Capital Theory is utilized as the framework for this study to explain that not all-social capital has a positive interaction with financial strain and life satisfaction. The differences between bridging and bonding explain why some groups may have more positive influence over another. This could be true when it comes to who individuals choose to confide in during financial strain. The following hypotheses are developed:

H1: Financial strain is negatively related to life satisfaction.
H2: Maintaining independence is positively related to life satisfaction.
H3: Social support is related to life satisfaction.

Method

Data and Sample
Data from the 2008 National Longitudinal Survey of Youth (NLSY97) was utilized in this study. The first round of the survey was in 1997, during which both the youth and one parent was interviewed. The sample of the first round of NLSY97 included 9,000 respondents from 12 to 16 years of age, born between 1980 and 1984. Afterward, the youth continued to be interviewed on an annual basis from 1997 onwards. The survey collects information regarding employment, education, households, parents, marriage and cohabitation, income, health, attitudes, and crime. The survey specifically asks about life satisfaction and different kinds of social support. The specificity of these questions allowed this study to explore the research questions on the relationship between financial strain, social support, and life satisfaction among the young adults. The dataset consisted of 8,984 respondents, but a sample of 7,260 respondents was used for this study after removing the respondents with missing information on key variables.

Dependent Variable
Life satisfaction served as the dependent variable in this analysis. The variable was measured by a single question: "With all things considered, how satisfied are you with your life as a whole these days?" Responses ranged from 1 (*extremely dissatisfied*) to 10 (*extremely satisfied*).

Independent Variables
Financial strain. Financial strain was operationalized through two variables: (a) negative financial events and (b) financial condition. Previous studies used similar variables to measure financial strain (Park et al., 2017). Negative financial events were measured utilizing four questions on respondents' experiences. Four binary responses were summed up to create the number of negative financial events as a continuous variable ranging from 0 to 4.

- During the last 12 months, have [you/you or your spouse/you or your partner] used a cash advance service using any of your credit cards?
- During the past 12 months, [have you/you or your spouse/you or your partner] obtained a payday loan?
- During the past 12 months, [have you/you or your spouse/you or your partner] been late in paying your rent or your mortgage by more than 60 days?

- During the past 12 months, were [you/you or your spouse/you or your partner] pressured to pay bills by stores, creditors, or bill collectors?

Furthermore, Financial condition was measured by asking respondents, "Which of the following best describes [your/you and your spouse's/you and your partner's] financial condition?" The following options were given to respondents: 1 = very comfortable and secure, 2 = able to make ends meet without much difficulty, 3 = occasionally have some difficulty making ends meet, 4 = tough to make ends meet but keeping your head above water, 5 = in over your head.

Financial independence. Financial independence was measured utilizing three variables. The first was whether an individual received financial assistance from a family member or friend, "Did [you/you or your spouse/you or your partner] receive any money as gifts from friends or family during 2007?" The second measure of financial independence was based on the household roster. If a biological, step, adoptive, or foster parent was included in the household roster, the respondent was coded as living with parents. For married respondents, those living with in-laws were also coded as living with parents. The last question was, "During 2007, did you receive any income from a job such as wages, salary, commissions, or tips?"

Social support. Social support was operationalized using two measures to determine whether the respondents have had a financial discussion, and if yes, with whom they had the discussion. The first question utilized was, "In the past twelve months have you talked with anyone about how to handle your finances – for example, how you manage your money or whether or not to get a credit card?" The second question was, "In the past twelve months, who have you talked with about money issues most often?" The possible responses were 1=your biological or adoptive mother, 2=your biological or adoptive father, 3=your step parent, 4=your brother or sister, 5=another relative, 6=your spouse, partner, boyfriend, or girlfriend, 7=another friend or personal acquaintance, 8=someone with professional expertise in the field, 9=someone in a different field with whom you have a professional relationship, 10=someone else, and 11=no one. This study grouped the respondents into those who received social support from no one, parents or family, spouse or partner, friends, and professionals.

Other control variables. In addition to the social support and financial variables, demographic variables were used in the study as control variables. The selected demographic variables included age, gender, education, marital status, health, and race. Age was a continuous variable, ranging from 23 to 29. Gender was coded as male and female. Education was coded as a categorical variable with four groups, including high school or less, college student, some college, or college graduate. Marital status consisted of the following categories: never married, married, cohabiting, and divorced, separated or widowed. Health was coded as excellent, very good, good, fair, and poor.

Results

Since NLSY97 oversampled Blacks and Hispanics, this study used the sampling weight of the 2008 NLSY97 for the descriptive statistics. However, sampling weight was not used for the multivariate analysis.

Descriptive results

Sample characteristics are shown in Table 1. The sample was evenly split between men and women with ages ranging from 23 to 29. More than a third of the sample had the education level of high school or less and slightly less than a third of the sample was college graduates. About 45% of the sample is never married and currently not cohabiting individuals and about 31% of the sample is married. Further, the majority of the respondents were in good or better health and about two thirds of the respondents were white.

Most of the sample reported that they did not experience any of the four negative financial events during the last twelve months and about 41% described their financial condition as they make ends meet without difficulty. An overwhelming 76% of the respondents stated they did not discuss finances with anyone in the past twelve months. Regarding maintaining financial independence, a majority of the respondents did not receive financial support from family or friends and did not live with their parents. Also, most of the respondents (88%) reported that they earned income.

Multivariate results

Given that the dependent variable was continuous, regression analyses were conducted. Three models were run. The first model included all samples, then was split into married versus not married. Considering that marriage is one of the critical milestones in the transition toward adulthood for young adults, this study split the sample into married versus not married, expecting to observe different roles of social support from their original family (parents, siblings), spouse or partner, friends, and professionals.

Model 1: Total sample. The results from Model 1 are shown in Table 2. The first model captured all of the samples. The number of negative financial events and financial conditions were significant predictors in the model. As individuals experienced more negative financial events and perceived their financial conditions worse, their reported life satisfaction was lower (H1 supported). None of the financial independence variables were found significant in Model 1 (H2 not supported). The one category found to be significant for social support was discussing money issues with a parent or family member. Receiving social support from a parent or family member resulted in lower life satisfaction for young adults. All other social support categories were not found to be significant (H3 supported).

Married and cohabiting couples showed higher life satisfaction than never-married singles. Compared to those who reported their health as good, those who considered their health better than good were found to have higher life satisfaction but those who considered their health worse than good were found to have lower life satisfaction. Age was found to be negatively related with life satisfaction, and men, when compared to women, were found to have lower life satisfaction. Hispanics were found to have higher life satisfaction when compared to Whites. Level of education was found not related to the level of life satisfaction in Model 1.

Model 2: Married sample. The results from Model 2 with the married sample only are presented in Table 2. The number of negative financial events and negative financial conditions were both found to be significant, with a decrease in life satisfaction (H1 supported). Receiving financial assistance and earning income were not significant in the model. However, living with a parent was found to be significant, as life satisfaction decreased when a married young adult lived with parents (H2 partially supported). With regard to social support, while having talked with parents and family about one's finances was negatively associated with life satisfaction, seeking support from a professional, with a marginal level of significance (p=.074) was found to be positively associated with married young adults' life satisfaction (H3 supported).

Gender, health status, race/ethnicity, and education level were found to be significant in Model 2. When compared to females, males experienced lower life satisfaction and all health variables were found to be significant. Compared to good health, excellent and very good health were found to be positively associated with life satisfaction, but fair and poor health were negatively associated with life satisfaction. Blacks, when compared to whites, experienced lower life satisfaction. Being in college was also negatively associated to life satisfaction for married young adults.

Model 3: Not married sample. Model 3 is shown in Table 2. Both financial strain measurements were significant in Model 3. Experiencing negative financial events and perceiving financial conditions worse had negative effects on one's overall life satisfaction (H1 supported). With regard to maintaining financial independence, living with a parent or earning income were not found to be significant but individuals that had financial assistance experienced lower life satisfaction (H2 partially supported). Furthermore, **i**ndividuals that discussed finances with their parents experienced a lower life satisfaction compared to those that discussed finances with no one but other sources of social support were not significant (H3 supported).

When compared to women, men experienced lower life satisfaction. Age and health were found to be contributing factors in the model, with older respondents reporting less satisfaction with their life and healthier respondents reporting more satisfaction with their life. Hispanics experienced higher life satisfaction within the model when compared to Whites. Finally, education was not found to be significant.

Discussion

The purpose of the study was to explore the relationships between financial strain, social support, and life satisfaction of young adults. Based on the results, some factors were found to be significant in all models. Most importantly, financial strain, which was measured with the number of negative financial events and perception on own financial conditions, was found to be negatively related with young adults' life satisfaction. While all three of financial independence variables were not significant with total sample, part of them were found to be significant in sub-samples. Living with parents was associated with lower life satisfaction among married young adults and receiving financial support was associated with lower life satisfaction among non-married young adults. Across all three models, having parents or family to talk about money issues most often showed a negative relationship with young adults' life satisfaction compared to having no social support. Based on these results, an assumption can be made that young adults pride themselves on being independent, and that asking for helping or receiving assistance interrupts the independence that a young adult strives for. Other than social support and financial variables, gender, health, and marital status were big factors for young adults' overall life satisfaction.

Implications and future studies

Professionals seeking to help young adults, such as financial planners, coaches, counselors or therapists, should be aware of how important independence is to young adults. The approach taken to provide guidance to young adults should be different in nature than it would be for older populations. By further understanding why these traits are valuable, professionals will be able to reach young adults and assist in a way that will not intrude on their growth or threaten their independence. Furthermore, with the significance found in each model in regard to health, further policy needs to be examined to ensure that individuals are striving to be healthy. Given these findings it is important for health insurance companies to continue to provide incentives for healthy habits. Additionally, each model demonstrated that good health played a significant role in overall life satisfaction.

References

American Psychological Association (APA). (2015). Money stress weighs on Americans' health. Retrieved from http://www.apa.org/monitor/2015/04/money-stress.aspx

Asebedo, S. D., & Wilmarth, M. J. (2017). Does how we feel about financial strain matter for mental health? *Journal of Financial Therapy, 8*(1), 61-80. doi: https://doi.org/10.4148/1944-9771.1130

Aslund, C., Larm, P., Starrin, B., & Nilsson, K. W. (2014). The buffering effect of tangible social support on financial stress: Influence on psychological well-being and psychosomatic symptoms in a large sample of the adult general population. *International Journal for Equity in Health, 13*(1), 85. Retrieved from https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-014-0085-3

Bradshaw, M. & Ellison, C. G. (2010). Financial hardship and psychological distress: Exploring the buffering effects of religion. *Social Science & Medicine*, *71*(1), 196–204.

Brian, K. (2007). Human Capital: How what you know shapes your life. Organization for Economic Co-operation and Development (OECD). Retrieved from https://www.oecd.org/insights/37966934.pdf

Center for Disease Control and Prevention. (2016). Health-related quality of life (HRQOL). Retrieved from https://www.cdc.gov/hrqol/wellbeing.htm

Clark, C. M. (2005). Relations between social support and physical health. *Rochester Institute of Technology.* Retrieved from http://www.personalityresearch.org/papers/clark.html

Cohen, S. (2004). Social relationships and health. *American Psychologist, 59*(8), 676-684.

Cohen, S. & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*(2), 310-357.

DePaulo, B. (2011). Is marriage a special kind of social support? Retrieved from https://www.psychologytoday.com/us/blog/living-single/201105/is-marriage-special-kind-social-support

Fry, R. (2014). Section 1: Student debt and overall economic well-being. Retrieved from http://www.pewsocialtrends.org/2014/05/14/section-1-student-debt-and-overall-economic-well-being/

Goudreau, J. (2011). Nearly 60% of parents provide financial support to adult children. Forbes. Retrieved from https://www.forbes.com/sites/jennagoudreau/2011/05/20/parents-provide-financial-support-money-adult-children/#6fc7a7591987

Grabmeier, J. (2015). 70 percent of college students stressed about finances. The Ohio State University News. Retrieved from https://news.osu.edu/news/2015/07/01/financial-wellness/

Hardie, J. H. & Lucas, A. (2010). Economic factors and relationship quality among young couples: Comparing cohabitation and marriage. *Journal of Marriage and the Family*, *72*(5), 1141–1154. doi: http://doi.org/10.1111/j.1741-3737.2010.00755.x

Heath, S. & Calvert, E. (2013). Gifts, loans and intergenerational support for young adults. *Sociology, 47*(6), 1120-1135. doi: 10.1177/0038038512455736

Henly, J. R., Danziger, S. K., & Offer, S. (2005). The contribution of social support to the material well-being of low-income families. *Journal of Marriage and Family, 67*(1), 122-140. doi: https://doi.org/10.1111/j.0022-2445.2005.00010.x

Internal Revenue Service (IRS). (2018). Hardships, early withdrawals and loans. Retrieved from https://www.irs.gov/retirement-plans/hardships-early-withdrawals-and-loans

Johnson, M. K. (2013). Parental financial assistance and young adults' relationships with parents and well-being. *Journal of Marriage and Family, 75*(3), 713-733. doi:10.1111/jomf.12029

Kawachi, I. & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health, 78*(3), 458-467.

Knudsen, B., Florida, R., & Rousseau, D. (2014). Bridging and bonding: A multi-dimensional approach to regional social capital. Retrieved from https://www.researchgate.net/publication/265115772_Bridging_and_Bonding_A_Multi-dimensional_Approach_to_Regional_Social_Capital

Lee, J. C., & Mortimer, J. T. (2009). Family socialization, economic self-efficacy, and the attainment of financial independence in early adulthood. *Longitudinal and Life Course Studies*, *1*(1), 45–62.

Lin, N. (2005). A network theory of social capital. Retrieved from http://www.pro-classic.com/ethnicgv/SN/SC/paper-final-041605.pdf

Ozbay, F., Johnson, D. C., Dimoulas, E., Morgan III, C. A., Charney, D., & Southwick, S. (2007). Social support and resilience to stress: from neurobiology to clinical practice. *Psychiatry (Edgmont)*, *4*(5), 35.

Park, N., Heo, W., Ruiz-Menjivar, J., & Grable, J. E. (2017). Financial hardship, social support, and perceived stress. *Journal of Financial Counseling and Planning, 28*(2), 322-332.

Pugno, M., & Verme, P. (2012). Life satisfaction, social capital and the bonding-bridging nexus. World Bank Working Paper No. 5945. Washington, D.C.: World Bank.

Putnam, R. D. (2000). Social capital: Measurement and consequences. Harvard University. Retrieved from http://archive.realtor.org/sites/default/files/BowlingAlone.pdf

Seeman, T. (2008). Support and social conflict: Section one – social support. Retrieved from http://www.macses.ucsf.edu/research/psychosocial/socsupp.php

Shell, A. (2017, May 10). Parents: No empty nest for you. Student debt prompts many millennials to move back home, survey finds. *USA Today.* Retrieved from https://www.usatoday.com/story/money/markets/2017/05/10/td-ameritrade-millennial-college-survey/101503580/

Shim, S., Xiao, J. J., Barber, B. L., & Lyons, A. C. (2009) Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology, 30*(6), 708-723. doi: 10.1016/j.appdev.2009.02.003

Shumaker, S. A. & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. *Journal of Social Issues, 40*(4), 11-36.

Stein, C., Hoffmann, H., Bonar, E., Leith, E., Abraham, E., Hamill, A. C., Kraus, S. W., Gumber, S., & Fogo, W. R. (2013). The United States economic crisis: Young adults' reports of economic pressures, financial and religious coping and psychological well-being. *Journal of Family and Economic Issues, 34*(2), 200-210. doi: 10.1007/s10834-012-9328-x

Viswesvaran, C., Sanchez, J. I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior, 54*, 314-334.

Xiao, J. J., Chatterjee, S., & Kim, J. (2014). Factors associated with financial independence of young adults. *International Journal of Consumer Studies, 38*(4), 394-403. doi: 10.1111/ijcs.12106

Table 1. Descriptive statistics of the sample (*n* = 7260)

Variables	% of sample	Average of life satisfaction (1-10)
Financial strain		
Number of negative financial events		
0	81.16	7.81
1	15.55	7.07
2	2.95	6.63
3	0.32	7.24
4	0.02	5.00
Financial condition		
Very comfortable	14.47	8.50
Make ends meet without difficulty	40.77	8.05
Some difficulty	27.10	7.46
Tough to make ends meet	14.26	6.63
In over your head	3.40	5.49
Social support		
No	73.09	7.67
Parents or Family	11.36	7.29
Spouse or Partner	10.60	8.00
Friends	2.15	7.44
Professionals	2.80	7.92
Financial independence		
Receive financial support		
No	76.39	7.68
Yes	23.61	7.61
Live with parents		
No	75.62	7.76
Yes	24.38	7.35
Earn income		
No	12.05	7.40
Yes	87.95	7.70
Demographic variables		
Age		
23	2.29	7.53
24	19.43	7.68
25	19.23	7.63
26	20.51	7.68
27	20.29	7.66
28	17.70	7.68
29	0.54	7.51
Gender		
Male	48.78	7.71
Female	51.22	7.61
Education		

High or Less	35.49	7.42
Some College	9.57	7.62
College Student	22.94	7.60
College graduate	32.00	7.99
Marital status		
Never married, not cohabiting	44.50	7.29
Married	30.67	8.23
Cohabiting	21.07	7.73
Widowed/Separated/Divorced, not cohabiting	3.76	7.00
Health		
Excellent	25.27	8.28
Very good	37.94	7.90
Good	28.66	7.31
Fair	7.33	6.51
Poor	0.79	5.17
Race		
White	66.97	7.71
Black	15.23	7.79
Hispanic	12.86	7.71
Other	4.94	7.48

Table 2. Regression results for life satisfaction (n = 7260)

	Model 1			Model 2			Model 3		
	Total Sample			Married Sample			Not Married Sample		
	β	*S.E.*	*p*-value	β	*S.E.*	*p* value	β	*S.E.*	*p* value
Intercept	9.30	0.37	<.001	9.62	0.64	<.001	9.51	0.45	<.001
Financial strain									
# of negative financial event	-0.18	0.04	<.001	-0.13	0.07	.045	-0.19	0.05	<.001
Financial condition	-0.53	0.02	<.001	-0.46	0.04	<.001	-0.55	0.02	<.001
Independence									
Receive financial support	-0.08	0.05	.115	-0.02	0.08	.792	-0.12	0.06	.047
Live with parents	0.05	0.05	.293	-0.21	0.11	.049	-0.04	0.05	.469
Earn income	0.01	0.06	.826	-0.14	0.10	.168	0.08	0.07	.280
Social support									
Parents or family	-0.14	0.07	.030	-0.47	0.17	.005	-0.16	0.07	.029
Spouse or partner	-0.05	0.07	.480	-0.06	0.09	.516	0.17	0.11	.125
Friends	-0.20	0.13	.141	-0.20	0.38	.594	-0.24	0.15	.105
Professionals	0.09	0.12	.455	0.40	0.22	.074	0.00	0.14	.975
Control Variables									
Age	-0.03	0.01	.041	-0.01	0.02	.772	-0.03	0.02	.080
Male	-0.15	0.04	<.001	-0.14	0.07	.045	-0.16	0.05	<.001
Health: excellent	0.63	0.05	<.001	0.65	0.09	<.001	0.60	0.07	<.001
Health: very good	0.27	0.05	<.001	0.36	0.08	<.001	0.22	0.06	<.001
Health: fair	-0.54	0.08	<.001	-0.54	0.14	<.001	-0.55	0.09	<.001
Health: poor	-1.38	0.22	<.001	-1.81	0.36	<.001	-1.27	0.26	<.001
Race: black	-0.05	0.05	.354	-0.24	0.10	.014	-0.03	0.06	.623
Race: Hispanic	0.16	0.05	.002	0.08	0.08	.333	0.22	0.07	.001
Race: other	-0.12	0.11	.252	-0.12	0.22	.587	-0.14	0.12	.274
Education: some college	-0.01	0.05	.832	-0.09	0.09	.312	-0.02	0.06	.719
Education: college student	-0.03	0.07	.654	-0.42	0.13	.001	0.04	0.08	.597
Education: college graduate	0.05	0.05	.322	-0.13	0.09	.144	0.06	0.07	.352
Marital status: married	0.77	0.05	<.001	x	x	x	x	x	x
Marital status: cohabiting	0.45	0.05	<.001	x	x	x	x	x	x
Marital status: other	-0.10	0.11	.330	x	x	x	x	x	x
Adjusted R^2		0.21			0.18			0.17	

Group Financial Coaching: A New Approach for Building Financial Capability?

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Abstract

This paper summarizes a field-based experiment comparing the effectiveness of individual and small-group financial coaching. Both types of coaching programs had the same goal: to develop clients' financial capabilities through a series of planned meetings focusing on client driven goals. Results indicate clients who were coached in groups demonstrated similar gains in confidence, reductions in stress, positive changes in behavior, and increases in financial knowledge as clients who were coached individually. The analysis provides support for the effectiveness of group coaching and suggests there is potential for reaching more clients and spreading financial capabilities to more of the population without sacrificing results.

Key words: behavior change, financial capability, group coaching, household finance

Background

Developing Financial Capabilities through Coaching

While traditional coaching efforts have been studied for ages, the financial coaching field is a relatively new endeavor for many foundations, financial institutions, and non-profit partnerships across the globe (Collins, Baker, & Gorey, 2007). Much of the literature on financial coaching draws from coaching psychology theories and positive psychology (e.g., Collins & O'Rourke, 2012). Mangan (2010) defines financial coaching as anchored in behavioral change, client directed and aimed at empowering clients by making them the decision maker. Financial coaches provide a long term, client centered approach focusing on action planning and reinforcing self-control rather than alternatives such as financial education or counseling which provides prescriptive information and advice (n.a., 2015a). Most financial coaching programs focus efforts on developing clients' financial capabilities seeking increases in financial confidence, knowledge, and behaviors while reducing the stress that surrounds one's finances. As financial coaching programs grow and become successful, it is also beneficial to understand the efficacy of the coaching methods used to develop clients' capabilities. This study aims to analyze the differences and effectiveness of group versus individual coaching in a setting dedicated to developing clients' financial capabilities.

Prior studies in this field have focused on the client and the positive changes that clients make in their financial behaviors. Most of this work applies various change theories as the research foundation. For example, the Transtheoretical Model of Change (Prochaska & DiClemente, 1983) suggests that individuals move through six stages of change in a non-linear manner and financial capabilities are best developed when clients are in the latter stages due to their capacity for behavior change. This model has been applied in numerous studies focusing on financial behavior change (e.g., Collins et al., 2007; Lyons, Howard, & Scherpf, 2010; Shockey & Seiling, 2004; Xiao et al., 2004). In particular, Shockey and Seiling studied low-wealth adults enrolled in financial literacy programs before and after their four classes. They found that participants moved from the preparation stage to the action stage for setting financial goals, tracking spending, and using a spending plan. Further, Lyons et al. completed a study of over 32,000 debtors completing an online bankruptcy course consisting of ten varying personal finance modules over a six month period. Based upon both quantitative and qualitative data collected pre and post training, the researchers found that post counseling debtors were more aware of their current financial situation and were motivated to take action to improve their financial situation.

Another theory that is foundational in explaining and changing financial behavior is self-determination theory (Deci & Ryan, 1985). Self-determination identifies three important needs to explain intrinsic motivation, self-regulation, and general psychological well-being. These needs are competence, autonomy, and relatedness (Deci & Ryan). Translating this to changing financial behaviors, Stone, Bryant and Wier (2010) suggest that competence needs translate to self-efficacy or financial competence, autonomy is akin to self-regulation in financial autonomy, and relatedness needs can be split two ways into trust and support. Trust refers to the belief that there are people close by who can help when financial issues arise and support refers to the idea that financial resources can be used to support communities and relationships (Stone et al.).

Purpose

Group-based financial coaching models hold promise as a means of increasing the scale and impact of financial coaching and enhancing behavior change (Baker & O'Rourke, 2013). The studies mentioned thus far focus first on the client, and second use some sort of one-on-one model for behavior change. We extend the work of Baker and O'Rourke and conduct a study that includes both individual coaching and group coaching. Our research is unique in that we collect and compare data from both traditional one-on-one financial coaching and group financial coaching. Both types of coaching conditions had the same goal: to develop clients' financial capabilities through a series of planned meetings focusing on client driven financial goals. We study reports and data from each client (both group and individual). Overall, there is a lack of empirical studies in this field and our study will help move the field of group coaching forward. The potential for group coaching has yet to be explored in depth in our field. This literature review and subsequent empirical study will add to the field by incorporating both a financial capability success model as well as results from group versus individual coaching model with empirical results.

Conceptual Background/Theory

Financial Coaching

Financial coaching, defined as a collaborative solution-focused, result-orientated, systematic, and strengths-based process to facilitate the enhancement of personal financial management, appears well-positioned to complement, supplement and, in some cases, replace existing strategies such as financial education and counseling. Drawing on the literature in psychology on goal intentions and self-efficacy, Collins and O'Rourke (2012) suggest that financial coaching is most critically grounded in systematically forming intentions, setting goals, and then monitoring performance over time. A close common theoretical core applicable to financial coaching draws from cognitive behavioral coaching and solution-focused coaching. Both approaches have been well documented in organizational settings, but are not yet documented in financial settings. Both approaches focus on goals and perceived self-efficacy to achieve goals (Bandura, 1969). Further, the literature on coaching generally supports the application of the approach to personal financial management.

Collins and O'Rourke (2012) distinguish financial coaching from both financial education and financial counseling in that there is always client accountability and coaches follow up with financial coaching, but follow up is rare with both financial education and financial counseling. Another distinction with financial coaching is that it is seldom used with clients in crisis. Financial coaching is most frequently used with clients who are in relatively stable situations and over longer periods of time (Collins & O'Rourke, 2012).

There are multiple documented successes involving financial coaching. Financial coaching is found to have several positive associations with client outcomes that included goal formation, confidence, budgeting and saving. Results from a survey administered to 178 respondents indicated that participants in a community college's achievement coaching program were very likely to follow and adhere to a budget (Collins & O'Rourke, 2013). Data collected from a community-based program in New York City that included a control group of non-coached clients indicated that coached participants were 17.8% more likely to have a financial goal (Collins & O'Rourke, 2012). A study conducted by the Centers for Working Families found a significant difference in savings behavior for coached clients versus non-coached clients (Collins & O'Rourke, 2012).

Goals and the ability to pursue goal-directed behavior are fundamental to the coaching approach; these data support a goal focus in financial coaching, as well as fostering the self-efficacy required to achieve goals (Collins & O'Rourke, 2012). Overall, evaluations and assessments of financial coaching suggest that participating in coaching is associated with increases in forming and achieving goals, along with goal confidence, increases in budgeting and savings for clients with goals in that area, and improvement of credit scores (n.a., 2015a).

Group Financial Coaching

Coaching in a group setting has many potential benefits for participants. Groups provide a unique platform that can be beneficial to changing behaviors. Mutual identification with specific problems brings people together and offers opportunities to jointly discuss more effective ways of dealing with issues (Kets de Vries, 2015). With group coaching, individuals benefit from the peer group in that they become mutually invested in encouraging the new behaviors that each one has identified and committed to working on. This kind of "group contagion" is a powerful way to make changes happen, and makes group coaching interventions a highly effective method for achieving shared objectives (Ket de Vries, 2015).

Grounding behavioral coaching in a group setting to a specific theory or discipline such as psychology is challenging. Group coaching has clear connections to positive psychology and is an example of an application of concepts from this emerging area of study (Biswas-Diener & Dean, 2007; Kauffman, Boniwell, & Silberman, 2010). Biswas-Diener and Dean observed that coaching and positive psychology are a good fit because they share the underlying assumption that "people are basically healthy, resourceful, and motivated to grow" (p. 11).

Relatively little is known about the effectiveness of group-based programs for developing clients' financial capabilities. Peeters, Rijk, Soetens, Storms, and Hermans (2016) offer theoretical evidence that points to the potential positive effects of group-based programs and suggest that groups provide added benefits of recognition and peer support. Further, they suggest that group coaching might enable more long-term effectiveness and be able to focus on the mechanisms of changing important financial behaviors and increasing clients' knowledge and confidence surrounding their finances. Collins, Eisner, and O'Rourke (2013) suggest that the advantages of coaching in a group setting offer potential benefits that should be explored further.

Working in groups often enables team learning to occur. Team learning is defined as a collaborative effort to achieve goals through mutual dialogue, discussion and practice (Senge, 1991). Johnson, Johnson and Smith (1991) purport that there are five benefits of cooperative team learning. These include interdependence, members promoting each other's successes, accountability, good interpersonal skills, and a general idea of how well the team is working together. In a recent study of the differences in individual coaching, self-coaching and group training, Losch and colleagues (2016) found that group training successfully promoted the acquisition of relevant knowledge. Their study compared the effects of individual coaching, self-coaching and group training. It follows that group coaching for financial capabilities would be effective in that a key factor to financial capability success is the acquisition of relevant knowledge pertaining to elements such as credit scores, budgeting, and financial planning.

A group support system could potentially benefit clients seeking to develop their financial capabilities. Social support refers to the availability of another individual to turn to for information, affection, comfort, encouragement or reassurance (Wanberg & Banas, 2000). There is much empirical evidence that supports the notion that social support is positively related to change and adjustment to new situations. Social support from all sources can be helpful to an individual attempting to cope with an organizational change that has an impact on his or her daily work life (Shaw, Fields, Thacker, & Fisher, 1993). In the context of behavior change, research has shown that the availability of social support enhances an individual's adjustment to a variety of stressors (Terry, Callan, & Sartori, 1996).

An important outcome for the development of financial capabilities is having clients finish their programs with increased confidence about achieving their financial goals. According to self-determination theory (Deci & Ryan, 1985), a critical element of development of self-determination is the idea of relatedness (along with competence and autonomy). Relatedness is concerned with caring and being cared for by others and having a feeling of security within your community. In addition to developing competence and autonomy (which most financial education programs achieve), coaching in group settings has the potential to increase the critical third element of self-determination, relatedness, which cannot happen in an individual setting.

There are, however, some potential downsides to group coaching. According to Ward, larger groups might become too complex, and clients might be hesitant to share personal details if the group is too large (as cited in Collins et al., 2013). In group settings coaches must also be aware of confidentiality issues, communication issues, and a variety of learning styles.

Summary of the Benefits of Group Financial Coaching

The benefits of group financial coaching are multifaceted. First, group coaches are able to serve a larger number of clients thereby helping more people achieve their financial goals. Second, group coaching is more economical in that organizations would be able to pay one coach versus multiple coaches for their work. Additionally, many financial coaching models are facilitated by non-profit organizations and volunteer coaches; the group coaching model would have a further reach than the one-on-one coaching model.

Next, there is the potential for better outcomes for clients due to group learning as outlined in the previous section. In a group setting, clients may learn from each other. For example, one client might "get" more because others in his/her group have financial needs that they currently have or will have in the future. Further, in group coaching it is thought that individuals may become mutually invested in encouraging the new behaviors that each one has identified and committed to working together to achieve their goals. The opportunity to hear and identify with others' goals can bring a group together and offer opportunities to jointly discuss more effective ways of dealing with knotty issues such as those associated with one's finances (Kets De Vries, 2015). In a group setting, clients may provide better social support for one another. There is a potential for them to form relationships with each other that extend outside of and after the coaching sessions. There is also potential that the effects of group coaching may extend for a longer time period than when clients are coached individually (Collins et al., 2013). Accountability to more than just one's self and an individual coach is also potentially powerful. When clients are placed in groups they become accountable to their peers as well as to their financial coach. One final benefit of group coaching and its subsequent measure of success is that the client data will help coaches feel more confident in their abilities as a group coach and help them improve for their next group coaching experiences (Cockerham, 2011).

Research Question and Methodology

Based on the literature review above, we predicted that better outcomes would be achieved with group versus individual financial coaching. Our field study took place in a low income city in the northeast of the United States. In our study we compared group versus individual coaching in the same setting to test our theory that group coaching provides for better changes in clients' financial confidence, knowledge, stress and behaviors.

Program Description

In the fall of 2015, a mid-sized college near Boston, MA opened a Financial Capability Center to provide students with experiential service learning opportunities, advance financial inclusion and capability in the community, facilitate research initiatives, and promote healthier financial behaviors. The Center initially launched a semester-based financial coaching program where students were trained to become financial coaches for clients and staff of local nonprofits in the community. Most of the clients are from a city located near the college and surrounding areas. The majority of them, 85%, are Latino and belong to low- or very low-income households.

The central activity of the center is a semester-based financial coaching program designed to support participants to make meaningful changes in their financial behavior and well-being. To effectively deliver its services in the community, the center partners with multiple non-profit organizations and secondary schools. As described above, financial coaching integrates techniques from the behavioral and financial disciplines to support clients and help them develop the ability to reach their financial goals. Given the interdisciplinary nature of coaching and the characteristics of the target audience, the program draws from the diverse knowledge and skill set of faculty and students from disciplines such as business, economics, psychology, social justice, education, and world language and cultures, among others. To be trained as coaches, students participate in workshops led by faculty and industry experts where they develop coaching, intercultural, and personal finance competences.

After completing the training, students are matched, based on individual characteristics and interests, with local adult and youth clients from the community. Student coaches then offer three (3) financial capability workshops to provide clients with financial knowledge and skills and six (6) one-on-one or group financial coaching sessions to help clients plan a path for realizing their self-selected goals. Student coaches are supported in their coaching experience by faculty, experts in their respective fields and trained to deliver financial coaching for vulnerable populations, center staff, financial counselors from non-profit partners, and financial industry expert volunteers. In addition, coaches support each other at biweekly meetings, where they share insights, concerns, and lessons learned.

The material covered in the adult workshops include topics such as visualizing and setting goals, money beliefs, managing money, understanding and managing credit, the credit report and score, protecting money, and identity theft. The workshops for high school students focus on setting goals, managing money, financial aid & student loans, credit cards and identity theft.

The topics discussed in the one-on-one or group coaching sessions are based on client's needs and self-selected goals but the structure of each session follows the *COACH* model used by Neighborworks America, a leading financial coaching national organization. The model includes the following steps to support behavior change:

·*C*: Client-driven goal setting-- The coach guides the client to identify the most important aspects of her financial life and select the goal that matters most to her

·*O*: Ongoing Assessment of Current Situation-- the coach guides the client to identify where she is now with respect to her self-selected goal
·*A*: Action Planning--with the support of the coach, the client identifies the steps she needs to take to achieve her goal
·*CH*: Checking--the client selects mechanisms to help her keep on track, a timeframe for reaching her goal, and how to be accountable to the client-coach partnership

Goals selected during coaching depend on individual client priorities and needs. Most adult clients choose to focus on paying down debt, rebuilding credit, learning to budget, creating an emergency saving fund, or saving for a down payment on a house. Youth clients from secondary schools frequently select goals such as saving for the down payment on a car, saving for college, or opening a bank account.

Coaching Conditions
In order to be able to serve more people and to take advantage of peer-to-peer encouragement and support, the center implemented a pilot group coaching program in the spring of 2017. The pilot consisted of assigning clients to either individual or small-group coaching. Groups consisted of two or three individuals. Some groups consisted of clients that were participants at an affordable housing program at a local nonprofit. Other groups were formed by clients that were focused on credit repair. Coaches leading the groups were experienced students that had participated before in the coaching program. Group coaches received additional training and support from the center staff. Readings regarding group coaching techniques were assigned and discussed in Group Coaches Meetings. In addition, a co-coach was present in coaching sessions to provide support and take notes on group dynamics.

Sample Characteristics
The present study analyzed the effects of individual and group coaching for the adult clients participating in the financial coaching program during the springs of 2017 and 2018. The characteristics of the sample are presented in Table 1. Most adult program participants were women (82%) above the age of 35 (70%) and of Hispanic/Latino ethnicity (94%). Almost half of the clients served (48%) reported feeling comfortable being coached in English, while the rest required a Spanish translator. Regarding the level of educational attainment, the majority of clients (70%) had a high school diploma or GED and 13% of them had completed a college degree. All participants belonged to low to moderate- income households, and 35% of them had household incomes below the federal poverty line. The median household income was $22,410 (the average was $22,935) and the median household size was 3. Regarding employment status, 55% of participants worked full time, 36% worked part time, and 9% were retired. Only 15% of clients were homeowners. Credit scores, with a median of 641, ranged from a low of 488 to a high of 801. More than a third of clients, 39% of them, had a credit score below the subprime prime cutoff point of 620.

Clients were randomly assigned to either individual coaching or group coaching. There were 41 clients in the individual coaching condition and 18 clients in the group coaching condition. Clients met with coaches a total of six times and were allowed to miss one session. To participate in the study, interested clients signed an informed consent form prior to starting the program and completed several questionnaires with their coaches. Included in these questionnaires were questions about confidence, knowledge, stress, and behavior.

Variables and Measures
Questions utilized a variety of scales including yes/no and Likert scales. All items were scored such that higher numbers meant more of that item (e.g., stress). For yes/no questions, a yes was coded as 1, a no was coded as 0, and unsure was coded as .5. Participants were asked, “How much do you agree with the following statement? In the last three months, I was able to save money.” They responded on a 1 to 4 scale, with 1 being “Disagree a lot,” 2 being “Disagree a little,” 3 being “Agree a little,” and 4 being “Agree a lot.” They were also asked, “How confident are you that you could find the money within a few days to pay for a financial emergency that costs about $1000?” and “Please rate how confident you feel in each of the following areas today with 1 being low confidence and 10 high confidence: budgeting, debt management, saving for future, and retirement plans.” Both of these items were scored on a 1 to 10 scale, with 1 being “how confidence” and 10 being “high confidence.” Participants were asked to rate on a 1 to 5 scale, with 1 being “Nothing” and 5 being “A lot”, “How much do you know about the following financial topics?: Loans and interest rates, credit scores and reports, banking services and fees, and investing for retirement.” Additionally, participants responded with a “yes,” “no,” or “not sure” to the question, “Do you currently have a written budget or spending plan?” They also reported, as of today, how much money they had in savings (not

including any retirement savings they might have). Response options included: \$0, \$1 to \$100, \$101 to \$500, \$501 to \$1000, \$1001 to \$2500, more than \$2500, and don't know. Also, participants were asked, "How confident are you that you could fix a problem in your credit report?" and "How confident are you that you will reach your financial goal in the next year?", using a 1 to 5 scale, with 1 being "Not at all confident," and 5 being "Certain." These two items were doubled to allow consistency across confidence items. Finally, participants answered two questions about stress on a 1 to 10 scale, with 1 being "no stress"/"never" and 10 being "overwhelming stress"/"all the time." These questions were, "Currently, how much stress do you feel about your financial situation?" and "How often do you worry about being able to meet normal monthly living expenses?"

We examined whether confidence, stress, knowledge, and behaviors differed between individuals and groups, and whether they changed pre to post-coaching. To do this, we combined the seven confidence items (1. "How confident are you that you could find the money within a few days to pay for a financial emergency that costs about \$1000?", 2-5. "Please rate how confident you feel in each of the following areas today with 1 being low confidence and 10 high confidence: budgeting, debt management, saving for future, retirement.", 6. "How confident are you that you could fix a problem in your credit report?", and 7. "How confident are you that you will reach this financial goal in the next year?") to create the confidence scale (Cronbach's alpha = .735). The four knowledge items were combined ("How much do you know about the following financial topics?: 1. loans and interest rates, 2. credit scores and reports, 3. banking services and fees, and 4. investing for retirement?") to create the knowledge scale (Cronbach's alpha = .798). To create the stress scale, the two stress/worry items (1. "Currently, how much stress do you feel about your financial situation?" and 2. "How often do you worry about being able to meet normal monthly living expenses?") were combined (Cronbach's alpha = .576). The three behavioral items were kept separate as they did not create a reliable scale (Cronbach's alpha > .2).

Once these scales were created, data were analyzed in a 2 (coaching condition: individual vs. group) x 2 (time: pre-coaching vs. post-coaching) ANOVA with time as a within subjects factor and coaching condition as a between subjects factor. See Table 2 for all descriptive statistics.

Results

Confidence

Results showed no time x coaching condition interaction, $F\ (1, 52) = 1.02$, $p = .318$. In other words, time influenced individual and group coaching conditions in the same manner. There was also no main effect for coaching condition, $F\ (1, 52) = 2.51$, $p = .12$. Meaning, coaching condition alone did not influence confidence as both conditions had the same confidence levels. On the other hand, there was a main effect for time, $F\ (1, 52) = 54.84$, $p < .001$, such that all participants reported significantly more confidence post-coaching sessions ($M = 7.50$, $SD = 1.61$) than pre-coaching sessions ($M = 5.81$, $SD = 1.59$).

Knowledge

Results showed no time x coaching condition interaction, $F\ (1, 51) = 2.04$, $p = .159$. There was also no main effect for coaching condition, $F\ (1, 51) = 1.21$, $p = .277$. On the other hand, there was a main effect for time, $F\ (1, 51) = 74.82$, $p < .001$, such that all participants reported significantly more knowledge post-coaching sessions ($M = 3.64$, $SD = .87$) than pre-coaching sessions ($M = 2.66$, $SD = .98$).

Stress

Results showed no time x coaching condition interaction, $F\ (1, 49) = .78$, $p = .383$. There was also no main effect for coaching condition, $F\ (1, 49) = 2.68$, $p = .108$. On the other hand, there was a main effect for time, $F\ (1, 49) = 27.79$, $p < .001$, such that all participants reported significantly less stress post-coaching sessions ($M = 4.50$, $SD = 1.95$) than pre-coaching sessions ($M = 6.33$, $SD = 2.31$).

Behavior

For savings (i.e., "I was able to save money in the last three months."), results showed a significant time x coaching condition interaction, $F\ (1, 50) = 9.77$, $p < .01$. Independent samples t-tests showed that individuals ($M = 2.49$, $SD = 1.00$) reported saving significantly less money than groups ($M = 3.31$, $SD = .79$) pre-coaching session, $t\ (53) = -2.95$, $p < .01$, but not post-coaching session as individuals ($M = 3.46$, $SD = .72$) reported saving as much as groups ($M = 3.24$, $SD = .97$), $t\ (54) = .97$, $p = .336$. There was also a main effect for time, $F\ (1, 50) = 5.45$, $p = .024$, such that all participants reported saving significantly more post-coaching sessions ($M = 3.38$, $SD = .82$) than pre-coaching sessions (M = 2.77, SD = 1.00). However, this main effect needs to be analyzed within the context of the interaction. Additionally, there was no main effect for coaching condition, F (1, 50) = 1.59, p = .214.

For budget writing (i.e., "Do you currently have a written budget or spending plan?"), results showed no time x coaching condition interaction, F (1, 50) = 1.34, p = .252. There was also no main effect for coaching condition, F (1, 50) = 1.30, p = .261. On the other hand, there was a main effect for time, F (1, 50) = 9.94, p < .01, such that all participants reported that they had a budget significantly more post-coaching sessions (M = .76, SD = .43) than pre-coaching sessions (M = .39, SD = .48).

For actual saving behavior (i.e., "As of today, how much money do you have in savings (not including any retirement savings you might have)?"), results showed no time x coaching condition interaction, F (1, 51) = .08, p = .779. There was also no main effect for coaching condition, F (1, 51) = .41, p = .523. On the other hand, there was a main effect for time, F (1, 51) = 8.75, p < .01, such that all participants reported that they had significantly more in savings post-coaching sessions (M = 4.55, SD = 1.59) than pre-coaching sessions (M = 3.94, SD = 1.87).

Discussion

Overall in all four areas of financial capabilities measured (confidence, knowledge, stress, and behaviors) both individually coached and group coached clients showed increases in confidence, knowledge, and behaviors and decreases in stress over the course of their program. Contrary to our predictions, however, clients who were coached in groups demonstrated similar gains in confidence, reductions in stress, positive changes in behavior, and increases in financial knowledge as clients who were coached individually. While these results do not support our hypothesis that group coaching is better, they are still quite promising and provide data in support of the effectiveness of group coaching.

Even though the results seem promising, this is just a first step. The current sample included only 18 people in the group condition, a sample that was less than half that of the individual condition. Additionally, our analysis suggested that we could have measured behavior differently to allow more variability (e.g., some of the behavioral questions were yes/no responses and did not allow for variability). The behavioral measures utilized a variety of scales (e.g., yes/no, Likert), making it difficult to combine and create a reliable behavioral scale. In addition to using self-reported behaviors, a future study should include observational measures of clients' actions, such as taking steps towards their financial goals. Finally, the effects of group coaching may be more long-term (e.g., Peeters et al., 2016), and therefore we were not able to see significant differences between groups and individuals. However, we do plan to follow-up with all clients at a 6-month follow-up.

Future research in this area should include more comparison groups (versus individuals). More work also needs to be done on refining the measures of confidence, knowledge, stress, and behavior. Further research is also needed to determine the optimal core elements of a successful group coaching intervention. For instance, the selection of criteria to use to sort clients into groups and to match coaches' characteristics and background with the needs of each group of clients. Additionally, since group coaching may require higher level communication and facilitation skills than individual coaching, further research would help identify the additional training required for effective coaching in groups.

Implications

In spite of the limitations and the need for additional research, the results of this study show that group coaching is as effective as individual coaching in supporting clients' outcomes regarding financial knowledge, confidence, stress, and behaviors. These results have important implications for practitioners such as financial coaches and counselors and organizations dedicated to financial empowerment since they often have limited resources to support the needs of their clients. Financial coaching in groups also allows financial institutions, especially community banks focused on low-income households, to scale their financial capability programs to help more of their clients improve their financial health. In turn, the financial health of bank's clients will ultimately benefit banks' bottom lines.

Our study generated promising results for the powerful potential of group financial coaching. In fact, Morrison (2001) concluded from a review of several health-related areas that group and individual interventions were comparable in their effectiveness and that the efficiency of group work makes it preferable over individual interventions from a policy-based perspective by reducing costs and staff deployment. The fact that the individuals who participated in group coaching showed gains that were comparable to the individuals who received individual coaching suggests that there is potential for reaching more clients and spreading financial capabilities to more of the population without sacrificing results.

References

Baker, C., & O'Rourke, C. (2013). Group financial coaching: Summary of interview and survey findings. *University of Wisconsin-Madison, Center for Financial Security Issue Brief, 8.1.*

Bandura, A. (1969). *Principles of behavior modification.* New York: Holt, Rinehart and Winston.

Biswas-Diener, R., & Dean, B. (2007). *Positive psychology coaching: Putting the science of happiness to work for your clients*. Hoboken, NJ: Wiley.

Cockerham, G. (2011). *Group coaching: A comprehensive blueprint.* Bloomington, IN: iUniverse.

Collins, J. M., Baker, C., & Gorey, R. (2007). *Financial coaching: A new approach for asset building?* Madison, WI: PolicyLab Consulting Group, LLC.

Collins, J. M., Eisner, R., & O'Rourke, C. (2013). Bringing financial coaching to scale: The potential of group coaching models. *University of Wisconsin-Madison, Center for Financial Security Issue Brief, 7.1.*

Collins, J. M., & O'Rourke, C. (2013). Central New Mexico Community College financial coaching training survey: Final report. *University of Wisconsin-Madison, Center for Financial Security Issue Brief, 5.1.*

Collins, J. M., & O'Rourke, C. (2012). The application of coaching techniques to financial issues. *Journal of Financial Therapy*, *3*, 39-56.

Collins, J. M. Olive, P. & O'Rourke, C. M. (2013). Financial Coaching's Potential For Enhancing Family Financial Security. *Journal of Extension, 51*, 1FEA8.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior.* New York: Plenum.

Delgadillo, L. M. (2014). Financial clarity: Education, literacy, capability, counseling, planning, and coaching. *Family and Consumer Sciences Research Journal, 43*, 18-28.

Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Cooperative learning: Increasing college faculty instructional productivity. ASHE-ERIC Higher Education Report No. 4.* Washington, D.C.: The George Washington University, School of Education and Human Development.

Kauffman, C., Boniwell, I., & Silberman, J. (2010). The positive psychology approach to coaching. In E. Cox, T. Bachkirova & D. Clutterbuck (Eds.), *The complete handbook of coaching* (pp. 158-171). London: SAGE Publications.

Kets De Vries, M. (2015). Vision without action is a hallucination: Group coaching and strategy implementation. *Organizational Dynamics*, *44*, 1-8.

Losch, S., Traut-Mattausch, E., Mühlberger, M.D., & Jonas, E. (2016). Comparing the effectiveness of individual coaching, self-coaching, and group training: How leadership makes the difference. *Frontiers in Psychology, 7*, 629-645.

Lyons, A. C., Howard, S., & Scherpf, E. (2010). *In search of a fresh start: Can credit counseling help debtors recover from bankruptcy?* Urbana: University of Illinois at Urbana-Champaign.

Mangan, B. (2010). Advancing financial coaching for low-income populations: Midstream lessons from EARN. *EARN White Paper*.

N. A. (2015a). Financial coaching: Review of existing research. *University of Wisconsin-Madison, Center for Financial Security Issue Brief,* 10.0.

N. A. (2015b). Charity creates financial-coaching site. *The Chronicle of Philanthropy*, *27*.

N. A. (2016). Financial coaching leads to financial responsibility. *Credit Union Magazine, 80.9*, 12.

Peeters, N., Rijk, K., Soetens, B., Storms, B., & Hermans, K. (2018). A systematic literature identifying successful elements for financial education and counseling in groups. *The Journal of Consumer Affairs*, 1-25.

Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*, 390-395.

Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Doubleday.

Shaw, J. B., Fields, M. W., Thacker, J. W., & Fisher, C. D. (1993). The availability of personal and external coping resources: Their impact on job stress and employee attitudes during organizational restructuring. *Work & Stress, 7*, 229-246.

Shockey, S. S., & Seiling, S. B. (2004). Moving into action: Application of the Transtheoretical Model of Behavior Change to financial education. *Financial Planning and Counseling*, *15*, 1–12.
Stone, D. N., Bryant, S. M., & Wier, B. (2010). Why are financial incentive effects unreliable? An extension of Self-Determination Theory. *Behavioral Research in Accounting*, *22*, 105–132.
Terry, D., Callan, V. J., & Sartori, G. (1996). Employee adjustment to an organizational merger: Stress coping and intergroup differences. *Stress and Medicine, 12*, 105-122.
Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology, 85*, 132-142.
Ward, G. (2008). Towards executive change: A psychodynamic group coaching model for short executive programs. *International Journal of Evidence Based Coaching and Mentoring*, *6*, 67-78.
Xiao, J. J., O'Neill, B., Prochaska, J. M., Kerbel, C. M., Brennan, P., & Bristow, B. J. (2004). A consumer education programme based on the Transtheoretical Model of Change. *International Journal of Consumer Studies, 28*, 55–56.

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Table 1
Sample Characteristics

Female	82%
Age: Below 35 Above 35	 30% 70%
Hispanic/Latino	94%
Speaks English	48%
Education: Less than High School High School degree College degree	 17% 70% 13%
Median household size	3
Household income Low to moderate income Median household income Below federal poverty line	 100% $22,410 35%
Homeowner	15%
Employment status: Full time Part time Unemployed/retired	 55% 36% 9%
Credit score Median credit score Subprime (below 620)	 641 39%

Table 2
Descriptive statistics for the scales as a function of coaching and time condition

Scale	Pre-coaching		Post-coaching	
	Individual *M* (*SD*)	Group *M* (*SD*)	Individual *M* (*SD*)	Group *M* (*SD*)
Confidence	6.07 (1.67)	5.19 (1.19)	7.62 (1.68)	7.22 (1.46)
Knowledge	2.79 (.99)	2.34 (.91)	3.67 (.82)	3.57 (1.02)
Stress	6.14 (2.30)	6.75 (2.35)	4.13 (1.78)	5.31 (2.14)
Save money in last 3 months[a]	2.54 (.99)	3.33 (.82)	3.46 (.73)	3.20 (1.01)
Budget[b]	.39 (.47)	.40 (.51)	.82 (.38)	.60 (.51)
Amount in Savings[c]	4.05 (1.87)	3.69 (1.89)	4.62 (1.59)	4.38 (1.63)

Notes:
[a] Responses were on a 1 to 4 scale, with 1 being “Disagree a lot” and 4 being “Agree a lot.”
[b] Responses were yes or no, with 1 being “Yes”, .5 being “Unsure”, and 0 being “No.”
[c] Responses were on a 1 to 7 scale, with various dollar amounts: 1 = \$0, 2 = \$1 to \$100, 3 = \$101 to \$500, 4 = \$501 to \$1000, 5 = \$1001 to \$2500, 6 = More than \$2501, and 7 = Don’t know.

Post-Release Financial Intentions of Work Release Participants

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Key words: attitude, behavior, financial intention, incarceration, subjective norms

Introduction

Crimes are committed for a vast and varying number of reasons. Many of those who commit crime are found guilty and serve their sentences. In most situations, the offenders will complete their sentences and subsequently be released back into society. The question then arises, is the offender prepared to return to society?

The purpose of this primary data study was to use the theory of planned behavior as a paradigm to examine how aspects of incarceration history—the type of crime committed (financial and non-financial), total years incarcerated, and total number of convictions—may influence post-release financial intentions. Use of the theory of planned behavior in this special, vulnerable population is needed to assist educators and professionals to determine what training offenders may need to succeed once back in society. This study focuses on a large Southern State's Transitional Center Participants' (TCP) post-release financial intentions.

Population: Incarcerated

Over 1.56 million Americans were incarcerated in American state and federal prisons as of the end of 2014 (Carson, 2015). Prison sentences range from one year to more than 30 years. Time spent incarcerated may detract from one's perception of control over their own life due to having little control within the prison walls. Additionally, the sentences served reflect time spans in which prisoners are away from family, friends, conveniences, as well as financial products and services. As financial products and services expand and change, the day-to-day understanding of what to do and how to do it may decrease due to lack of exposure. This lack of exposure may also impact an offender's attitudes, subjective norms, and self-efficacy and self-control regarding financial matters.

Research Question

How do aspects of incarceration history influence financial intentions? In addition to total years of incarceration, this question also considered the type of crime and number of incarcerations. These variables address time away from financial services, how type of offense may be associated with financial intentions, and the potential differences associated with repeated incarceration.

The theory of planned behavior (TPB) suggests our attitudes—the positive or negative way we feel about a certain behavior and the control we believe we have over certain situations—influence how we *intend* to behave. Other influences include the norms we derive based on interaction with friends and family—whether friends and family are supportive of the behavior of interest. These behavioral intentions directly influence the behavior of interest. TPB has been used in a handful of studies regarding criminal behavior intentions, including recent studies on post-release behavioral intentions of the incarcerated (e.g. Forste, Clarke, & Bahr, 2011; Kiriakidis, 2006). While studies have made a connection between financial knowledge and behavior (e.g. Robb & Woodyard, 2011; Xiao et al, 2011), none have investigated financial knowledge and behavioral intentions of Transitional Center Participants (TCP). This project informs personal finance and sociological literature as well as criminal justice literature and policy from the personal finance perspective. Cross-disciplinary research is needed in personal finance and criminal justice due to the scarcity of research available on how incarceration influences personal financial matters.

Literature Review

Studies of incarcerated populations are often designed to determine ways to prevent crime and decrease recidivism. Via a multi-theory approach, including TPB, Forste et al. (2011) predicted recidivistic behavior of young offenders in England. The study found that one-fifth of respondents believed it would be difficult to stay out of trouble after release (Forste et al.). Behavioral control was measured using scores on perceived life control (1 = low to 4 = high) and self-efficacy. Of particular interest was a low average score—the offenders had an average of 1.7 for perceived life control. The study found perceptions of control was a key association of a young offender's intent to stay out of trouble.

As is the case for recidivism, if it is assumed the offender's *intention* is to be more successful, then aspects of incarceration history may be used to assist in understanding the primary tenets of the theory of planned behavior—attitudes, subjective norms, and perceived behavioral control—regarding the offender's financial intentions after release. Perceived behavioral control may also be directly connected to the financial behavior itself. When one feels little control over personal (financial) behavior because of a lack of resources, intention to conduct the appropriate (financial) behavior may be low even if attitude and subjective norms toward (financial) behaviors are favorable (Madden, Ellen, & Ajzen, 1992). Intentions about these behaviors are important because secure savings and financial management behaviors are of particular importance to low and moderate-income households (Lyons, Chang, & Scherpf, 2006; Perry & Morris, 2005; Zhan, Anderson, & Scott, 2006).

Financial Knowledge and Behavior

Increased financial complexity may account for low knowledge levels. Basic check writing and cash withdrawals at the teller window were replaced, in many cases, by the development of Automated Teller Machines (ATM). ATM cards then gave way to debit cards and online banking. The basic bill paying with personal checks of the 80s and 90s has given way to electronic payments that can be immediately deducted from accounts, rather than waiting for an item to clear. The changes in other financial services has grown exponentially as well. Not having contact with new and developing financial products can stunt and even reverse growth because the new replaces the old, the old becomes obsolete, and then what knowledge there was, has for all intents and purposes, just disappeared. Involvement in financial markets and with financial products and services is necessary for continued growth and understanding of financial literacy topics. When access to banking and other financial services is restricted, such as during incarceration, knowledge and capability may wane over time.

Though the prison population is vastly different from that of college students (where most research exists e.g. Shim, Barber, Card, Xiao, & Serido, 2010; Shim et al., 2009), the connection between financial knowledge and behavioral intention is worth noting due to overall low financial knowledge levels throughout the country. Shim et al. (2009) acknowledged a need for further investigation of variables which may influence perceived behavioral control. Additionally, as people—young adults or prisoners preparing to re-enter society—attempt to begin asserting their financial independence, this may be a "crucial developmental period for mastering critical life tasks related to financial behaviors" (Shim et al., 2009, p.721).

Financial Knowledge and the Incarcerated

To the extent that anything has been written on financial matters and prisoners, it has been directed towards identifying financial literacy levels and/or preparing inmates to return to society with "Just-in-Time" financial literacy courses (e.g. Mielitz, MacDonald, & Lurtz, in press). Incarcerated individuals may be particularly sensitive about the use of banks due to a lack of trust (Call et al., 2013). Research has only recently begun to investigate how the lived financial experiences of TCPs may influence financial behaviors, in particular working with federally-insured financial institutions (Mielitz, Clady, Lurtz, & Archuleta, 2017; Mielitz, Lurtz, Clady, & Archuleta, 2018).

Sample

The sample for this study was drawn from six work-release community corrections centers in a large Southern state. Of the 13 total Transitional Centers (TCs), the six selected were determined based on gender of inmates as well as location convenient to the researcher. The two TCs that house women were selected in an attempt to recruit a representative number of female TC inmates. The four TCs that house men were selected based on the availability of the researcher to meet with the inmates and geographic location. Data collection using surveys occurred over a 10-day period at the six Transitional Centers in mid to late September 2017. The work-release residents were within 180 days of their Tentative Parole or Max Release Dates.

Dependent Variables

Based on the literature review, the survey collected information about post-release financial intentions including likelihood of using an alternative financial service within one year of release, intent to save money each month, intent to use a written budget each month, and intent to open a bank or credit union account after release. This paper focuses on the intended use of savings and budgeting (Financial Management) after release.

Independent Variables

*Aspects of Incarceration History***.** Total years incarcerated was collected as a fill-in-the-blank response and was used as a continuous variable in year form. Response options for number of times incarcerated included "*once*", "*twice*", "*three times*", "*four times*", or "*five or more times*" incarcerated. Given the topic of the study overall, specific attention was directed to whether the respondent had committed a financial crime—including theft, burglary, robbery, larceny, non-identity theft, embezzlement, fraud, identity theft, and included any financial crimes listed under "other" which allowed the respondent to fill in any non-survey identified crime. Type of crime was divided into two categories, financial crime (1) versus non-financial crime (0), based on the specific crime selected, or filled in, by the respondent. Non-financial crime offense was the comparison group.

*Attitude***.** Financial attitudes were measured using questions from prior research (see Ajzen, n.d.; Ajzen, 2013; Xiao et al., 2013). The continuous attitude variable was measured by adding the individual scores of six attitude-specific inquiries measured with Likert-type scales. Each inquiry ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). The summated scales ranged from 6-42, where lower scores indicated a negative financial attitude.

*Subjective Norms***.** The financial subjective norms of the TC residents were measured with six Likert-type scale questions drawn from theoretical literature and prior research (see Ajzen, n.d.; Ajzen, 2013; Xiao et al., 2013). Subjective norms, a continuous variable, was measured by adding the individual scores of six subjective norms questions. The Cronbach's alpha for the scale was $\alpha = .805$.

*Perceived Behavioral Control***.** The questions used for measuring PBC were based on prior literature and included items which measured self-efficacy to ensure attention was paid to the respondent's perceived ability to perform a behavior, and also that they perceived that they had control over particular behaviors (see Ajzen, n.d.; Ajzen, 2002; Ajzen, 2013; Xiao et al., 2013). The summated scale values ranged from 9-63 where lower scores indicated lesser perceived control and lesser self-confidence in ability regarding financial matters after release. The Cronbach's alpha for the scale was $\alpha = .849$.

*(Pre-incarceration) Socio-economic Status***.** Pre-incarceration SES was measured based on prior literature (Coleman, 1983; Xiao et al., 2011). For this study, employment status prior to incarceration, gross income prior to incarceration, and respondent education were used to create the socio-economic status variable. Income reporting was not precise enough to support use of a continuous variable, therefore it was categorized for the SES variable. The income categories for this study were coded and scored. Each category was assigned a number to be used in the SES variable. No income was scored -1, $1-$2,000 per month was scored 0, and $2,001+ per month was scored 1.

Respondent education was the other component of the SES construct variable. Education was collected as Highest Level of Education Completed Prior to Incarceration with a follow-up question "Have you completed any additional education while incarcerated?" The highest level of education identified was used in the analysis. Education categories included: (a) Completed Less than High School, (b) Some High School, (c) High School Diploma or GED, (d) Some College, or (e) College Degree. Categories used for scoring SES were 1 for Less than High School Diploma or GED, 2 for High School Diploma or GED, and 3 for More than High School Diploma or GED. The income scores and the education scores were added to create the SES variable values. SES summed values ranged from 0-4. SES was used as a continuous variable.

Model: Predicting Intention of Financial Management

Total time incarcerated was significantly associated with one's intention to practice financial management after release. For every one-year increase in total time incarcerated, there was a standardized corresponding increase of intent to practice financial management ($\beta = .167$, $p < .05$). Number of times incarcerated did not have a significant predictive relationship with financial management intentions, nor did whether the respondent committed a financial crime.

Some of the other significant variables for explaining financial management accord directly with TPB. Attitude and Subjective Norms have similarly sized standardized coefficients ($\beta = .165$, $p < .05$; $\beta = .190$, $p < .05$) respectively. However, PBC had the strongest standardized coefficient of this model, ($\beta = .423$, $p < .001$) which indicates that of the variables measured and for this population, perceptions of control have the strongest relationship with post-release financial management intentions. The final financial management intentions model exhibited an improvement over the null model ($R^2 = .3226$, $p < .001$).

Implications for Policy and Practice

Overall, the results suggest an opportunity for the state Department of Corrections to employ an Accredited Financial Counselor (AFC®) to train and educate transitioning inmates on communicating about money and using financial resources. Additionally, the AFC® could be used to cross-train DOC counselors to have more in-depth discussions with their supervisory inmates as the DOC counselors prepare the men and women to return to society. The AFC® could work with the inmates to develop ways to discuss budgeting and savings with appropriate family members and then report back to the counselor regarding the discussion and what kind of support the TCP perceives they have after the conversation.

Additionally, though self-control and self-efficacy may be more difficult to teach, helping Transitional Center Participants who have been incarcerated for a greater number of years develop the confidence that they can find ways to budget, save, and make financial decisions is imperative to financial success after release. The counselor, again, may be a useful resource in generating some of the needed confidence simply through encouraging the TCP to ask questions.

Though nationally financial knowledge is low (Lusardi & Mitchell, 2014), it is higher than that of offenders (Galchus, 2014; Galchus, 2015). From a policy standpoint, implementing financial literacy education classes throughout all of the TCs may be beneficial. Financial education classes may positively influence self-efficacy and behavior change regarding financial matters such as budgeting and saving and can be useful in changing behavior in particular behaviors that can be changed in the short term (Lyons et al., 2006). With appropriate timing, providing financial education and investigating financial behavior change even while in the TC would be possible. This type of change could be measured at the TC by investigating how spending habits of the TCPs, who qualify for weekly spending money, may change after financial education. As was noted in the Lyons et al. (2006) study, further investigation is needed regarding how financial knowledge impacts financial behavior in low-income populations—this specialized prison-based population meets the low-income classification and would be an opportunity to expand the existing literature base.

Prioritizing financial training is important at both the practical application and policy levels. Financial knowledge of the incarcerated is not high (Koenig, 2007; Mielitz, MacDonald, & Lurtz, in press). Financial knowledge has been directly associated with increased financial attitude (Xiao et al., 2011) and with decreased use of risky borrowing behaviors (Nelson, 2015; Xiao et al., 2011). Further investigation is needed to identify if there is a connection between non-law-abiding behavior and financial knowledge.

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Show Me the Money! Communication, Financial Transparency, and Marital Satisfaction

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Key words: communication, emerging adults, financial transparency, marital satisfaction, marital education, privacy management, self-disclosure

Over the last 60 years, family structure has changed dramatically in the United States. The median age of first marriage has been steadily increasing, currently at age 27 for women and age 29 for men (U.S. Census Bureau, 2017), a time Arnett and colleagues (2000, 2014) define as emerging adulthood (ages 18 – 29). Factors such as person's educational attainment and student loan debt have been cited to delay the age of first marriage well in to adulthood (Aughinbaugh, Robles, & Hugette, 2013; Bozick & Estacion 2014). Approximately 40% of these first marriages will end in divorce, and one-fifth will end within 5 years (Bramlett & Mosher, 2001; Cherlin, 2010), leading scholars to examine predictors of marital dissolution.

Britt and colleagues (2012), found financial arguments to be a strong predictor of divorce. Money arguments may lead to marital instability as they are associated with dissolution due to ineffective communication strategies (Dew, Britt, & Huston, 2012). One crucial modality of communication in relationships is self-disclosure, one of the most important factors in predicting marital satisfaction (Dowd, Means, & Pope, 2005). However, when it comes to finances, partners are not always willing to self-disclose. According to the Harris Interactive survey, commissioned by Forbes Women and National Endowment for Financial Education, 40% of adults in relationships admitted to lying to their partner regarding their spending habits and 82% admitted they hid purchases from their partner (POP Goes Financial Infidelity, 2008; Junare & Patel, 2012). According to Markman (1981), self-disclosure is even more important in the early stages of a relationship, specifically during the premarital and newlywed stages as communication quality was been linked to divorce (Markman, Rhoades, Stanley, Ragan, & Whitton, 2010).

Markman and colleagues (2010) found that some of the roots of a couples' distress lie in communication quality, and such risk can be identified before marriage through interventions that focus on modifying communication patterns. Recently, federal and state Healthy Marriage Initiatives have focused on intervention and prevention. Intervention usually occurs in the form of couple's therapy, while prevention is typically curriculum-based education (Olmstead et al., 2011). Most of these initiatives focus on relationship skills such as communication, but little attention is given to finances.

While effective communication has been found to be positively correlated with marital satisfaction (Gottman & Notarius, 2000; Stanley, Markman, & Whitton, 2002), Koochel, Markham, Crawford, & Archuleta (in review) posited that communication surrounding finances also needs to be investigated and that this communication among couples should be transparent. Defined as the "open and honest disclosure of one's finances," financial transparency not only examines a couple's financial management practices, but also the likelihood for either partner to deceive or trust their partner's judgement.

Communication Privacy Management Theory

Communication Privacy Management (CPM) theory (Petronio, 2002) was used as a theoretical lens through which to view financial transparency. CPM was developed from a communication perspective to address the ways people manage and share their private information (Petrino, 2007, 2010). In a marriage, partners need to be both private and open at the same time. CPM presumes that dialectical tensions are at the core of privacy management; people struggle with the tension to reveal or conceal private information (Petrino, 2010). Individuals develop privacy rules to determine with whom and how they share private information (Petronio, 2002), including financial information. This is important to consider because self-disclosure is one the most important factors when predicting marital satisfaction (Dowd et al,, 2005).

Present Study

The purpose of the present study was to investigate how transparent communication about finances influences marital satisfaction. Due to current marital trends, as we see the age first marriage steadily increasing, the study will also explore if any differences exist between emerging adult individuals and adults. We hypothesize that financial transparency will uniquely predict marital satisfaction after accounting for communication for both emerging adults and older adults.

Methods

Participants

The current study is based on emerging adult individuals, ages 20- to 29-years-old (*M* =26.35*, SD* = 2.13, N = 75), and adult individuals, ages 30- to 45- years old (*M* = 33.0, *SD* = 3.6*,* N = 102) who were legally married for the first time, for less than 5 years (N = 177). Participants were recruited through (a) an email sent via listserv through a Midwestern university, (b) social media advertisements, (c) and advertisements through Amazon Mechancial Turk (see Table 1 for sample demographics).

Measures

Kansas marital satisfaction scale. The *Kansas Marital Satisfaction Scale* (KMS) developed by Schumm and colleagues (1986) is a self-administered, three-item survey ($\alpha = .95$).

Communication patterns questionnaire – short form. The *Communication Patterns Questionnaire – Short Form* (CPQ-SF) developed by Christensen and Heavey (1990), is an 11-item assessment of spouses' perceptions of their communication when issues arise and during the discussion of the issues ($\alpha = .86$).

Financial Transparency Scale. *The Financial Transparency Scale (FTS)* is a brief, self-administered questionnaire measuring the individual financial transparency of partners (Koochel et al., in review). The FTS is composed of three subscales: financial partnership, financial trust and disclosure, and financial secrecy ($\alpha = .90$).

Data Analysis

Hierarchal regression models were computed. For emerging adults, the first step controlled for demographics (i.e., gender, age, children, ethnicity, cohabitation, length of marriage, and prenuptial agreement), the second step added in communication, and the third step included financial transparency. The same initial analysis was run for adults; however, block one was insignificant. Following further analysis, cohabitation was removed from block one for the adults. The final regression model for adults included controlling for demographics in step one (i.e., gender, age, children, ethnicity, length of marriage, and prenuptial agreement), adding communication in the second step, and including financial transparency in the third step. Standardized coefficients for each model and the proportion of variance accounted for by the communication and financial transparency variables are provided in Tables 3 and 4.

Results

For emerging adults, there was a significant change in R^2 in the first step ($\Delta R^2 = .21$, F = 2.58, $p < .05$), the second step ($\Delta R^2 = .18$, F = 19.47, $p < .001$), and the third step ($\Delta R^2 = .05$, F = 5.87, $p < .05$) (Table 2). In step two, communication accounted for 18% of the variance in marital satisfaction. In third step of the HMR, financial transparency accounted for an additional 5% of the variance in marital satisfaction.

For adults, there was a significant change in R^2 in the first step ($\Delta R^2 = .19$, F= 2.43, $p < .05$), the second step ($\Delta R^2 = .34$, F = 44.53, $p < .001$), and the third step ($\Delta R^2 = .05$, F = 7.82, $p < .01$). In step two, communication accounted for 34% of the variance in marital satisfaction, and financial transparency accounted for an additional 5.4% of the variance in marital satisfaction.

Implications

Researchers have continued to find that communication (Gottman & Notarius, 2000; Lavner, Karney, & Bradbury, 2016; Stanley et al., 2002) and financial factors (Britt & Huston, 2012)) play important roles in marital satisfaction. This study indicates that financial transparency is also important to consider for marital satisfaction. Although many pre- and post-marital education programs have addressed couples' communication, specific attention should be paid to communication as it relates to finances. These findings suggest that although a couple may have effective communication, it is also beneficial to be open and honest about finances. As couples decide to marry, they are forming expectations about relationships, making this a critical point of interception.

Financial planners and therapists can use the FTS as a tool to illustrate to partners the importance of healthy open and honest communication about finances, pointing out that couples may find these conversations difficult because of the disclosure of private information. The FTS allows practitioners to identify potential financial conflict areas related to finances, and perhaps, through early detection, decrease the likelihood of marital dissolution. Several predictors of divorce occur prior to marriage or in the early stages, suggesting it is important to focus on premarital initiatives (Britt & Huston, 2012). The FTS could be used during group or individual communication-based premarital education programs to start the conversation about finances. Open communication will help to align future financial expectations of the individuals, and the household, effectively mitigating the effects of financial behaviors not addressed prior to forming a relationship.

References

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*(5), 469-480. doi:10.1037/0003-066X.55.5.469.

Arnett, J. J., Zukauskiene, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18 – 29 years: Implications for mental health. Retrieved from www.thealancet.com/psychiatry.

Aughinbaugh, A., Robles, O., & Hugette, S. (2013). Marriage and divorce patterns by gender, race, and educational attainment. *U.S Bureau of Labor Statistics 136 Monthly Lab Rev.* (1), 1 – 18.

Bramlett, M. D., & Mosher, W. D. (2001). *First marriage dissolution, divorce, and remarriage: United States. Advance data from vital and health statistics* (No. 323). Hyattville, MD: National Center for Health Statistics.

Britt, S. L., & Huston, S. J. (2012). The role of money arguments in marriage. *Journal of Family and Economic Issues*, *33(4),* 464-476. doi:10.1080/15332691.2011.588093.

Bozick, R., & Estacion, A. (2014). Do student loans delay marriage? Debt repayment and family formation in young adulthood. *Demographic Research, 30*, 1865-1891.

Cherlin, A. C. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage & Family*, *72*(3), 403-419. doi:10.1111/j.1741-3737.2010.00710.x

Christensen, A., & Heavey, C. L., (1990). Gender and social structure in the demand-withdraw pattern of marital conflict. *Journal of Personality and Social Psychology, 59,* 73-81.

Dew, J., Britt, S., & Huston, S. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, *61*(4), 615-628. doi:10.1111/j.1741-3729.2012.00715.x

Dowd, D. A., Means, M. J., & Pope, J. F. (2005). Attributions and marital satisfaction: The mediated effects of self-disclosure. *Journal of Family & Consumer Sciences*, *97*(1), 22- 26.

Gottman, J. M., & Notarius, C. I. (2000). Decade review: Observing marital interaction. *Journal of Marriage & Family*, *62*(4), 927-947.

Junare, S.O., & Patel, F.M. (2012). Financial infidelity – secret saving behavior of the individual. *Journal of Business Management & Social Sciences Research, 1*(2), 40 – 44.

Koochel E. E., Markham, M. S., Crawford, C., & Archuleta, K. L. (in review). Financial transparency: Scale development. *Journal of Financial Counseling and Planning*.

Lavner, J. A., Karney, B. R., & Bradbury, T. N. (2016). Does couples' communication predict marital satisfaction, or does marital satisfaction predict communication? *Journal of Marriage & Family*, *78*(3), 680-694. doi:10.1111/jomf.12301

Markman, H. (1981). The prediction of marital distress: A five year follow-up. *Journal of Counseling and Clinical Psychology, 49*, 760-762.

Markman, H., Rhoades, G., Stanley, S., Ragan, E., & Whitton, S. (2010). The premarital communication roots of marital distress and divorce: The first five years of marriage. *Journal of Family Psychology*, *24*(3), 289-298 10p. doi:10.1037/a0019481.

Olmstead, S. B., Pasley, K., Meyer, A. S., Stanford, P. S., Fincham, F. D., & Delevi, R. (2011). Implementing relationship education for emerging adult college students: Insights from the field. *Journal of Couple & Relationship Therapy*, *10*(3), 215-228.

Petronio, S. (2002). *Boundaries of privacy: Dialectics of disclosure.* Albany: State University of New Your Press.

Petronio, S. (2007). Translational endeavors and the practices of communication privacy management *Journal of Applied Communication Research,* 35, 218 – 222.

Petronio, S. (2010). Communication privacy management theory: What do we know about family privacy regulation? *Journal of Family Theory & Review*, *2*, 175–196. doi:10.1111/j.1756-2589.2010.00052.x.

POP Goes Financial Infidelity. (2008). *Journal of Financial Planning*, *21*(8), 10.

Schumm, W. R., Paff-Bergen, L. A., Hatch, R. C., Obiorah, F. C., Copeland, J. M., Meens, L. D., & Bugaighis, M. A. (1986). Concurrent and discriminant validity of the Kansas marital satisfaction scale. *Journal of Marriage and the Family*, *48*(2), 381-387.

Stanley, S., Markman, H., & Whitton, S. (2002). Communication, conflict, and commitment: Insights on the foundations of relationship success from a national survey. *Family Process*, *41*(4), 659-675.
United States Census Bureau. (2017). *Median age at first marriage 1890 to present.* Retrieved from https://www.census.gov/content/dam/Census/library/visualizations/time-series/demo/families-and-households/ms-2.pdf

Table 1.
Emerging Adult Participant Descriptive Statistics (N = 75)

Variables	*Range*	*Mean (SD)*
Age	20 - 29	26.35 (2.13)
Variables	*N*	*Frequency*
Gender		
Male	26	35.0%
Female	49	65.0%
Ethnicity		
White	57	76.0%
Hispanic or Latina	8	10.7%
Black or African American	4	5.3%
Asian / Pacific Islander	4	5.3%
Other Ethnicity (s)	2	2.6%
Prenuptial Agreement		
Yes	6	8.0%
No	69	92.0%
Cohabitation Prior to Marriage		
Yes	57	76.0%
No	18	24.0%
Length of Marriage		
Less than 1 year	16	21.0%
1 - 4 years	59	79.0%
Children		
None	49	65.3%
1 child	13	17.3%
2 children	9	12.0%
3 children	1	1.3%
4 children	3	4.0%

Table 2.
Adult Participant Descriptive Statistics (N = 102)

Variables	*Range*	*Mean (SD)*
Age	30 - 43	33.0 (3.60)

Variables	*N*	*Frequency*
Gender		
Male	44	43.10%
Female	58	56.9%
Ethnicity		
White	85	83.3%
Hispanic or Latina	1	1.0%
Black or African American	8	7.8%
Asian / Pacific Islander	3	2.9%
Other Ethnicity (s)	5	4.9%
Prenuptial Agreement		
Yes	4	3.9%
No	98	96.1%
Cohabitation Prior to Marriage		
Yes	83	81.4%
No	19	18.6%
Length of Marriage		
Less than 1 year	16	21.0%
1 - 4 years	59	79.0%
Children		
None	32	31.4%
1 child	36	35.3%
2 children	24	23.5%
3 children	8	7.8%
4 children	2	2.0%

Table 3.
Summary of Hierarchical Regression Analysis for Variables Predicting Marital Satisfaction in Emerging Adults (N = 75)

	Model 1			Model 2			Model 3		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	0.50	0.69	0.09	0.40	0.61	0.07	0.37	0.59	0.06
Length of Marriage	-2.03	0.78	-.30*	-1.73	0.70	-.26*	-1.82	0.67	-.27**
Cohabitation	1.42	0.72	0.22	0.81	0.65	0.13	1.40	0.67	0.22
Prenuptial Agreement	3.01	1.15	0.30*	2.01	1.04	0.20	2.06	1.08	0.20*
Ethnicity	0.24	0.22	0.12	0.27	0.20	0.14	0.24	0.19	0.12
Children	0.06	0.32	0.02	0.13	0.29	0.05	0.30	0.28	0.10
Age	-.07	0.15	-.01	-.06	0.14	-.05	-.02	0.13	-.10
CPQ – SF				0.17	0.04	0.45***	0.10	0.05	0.26*
FTS							0.06	0.02	0.30*
R^2		.21			.39			.44	
F for change in R^2		2.58*			19.47***			5.87*	

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

Table 4.
Summary of Hierarchical Regression Analysis for Variables Predicting Marital Satisfaction in Adults (N = 102)

	Model 1			Model 2			Model 3		
Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Age	-.19	0.11	-.20	-.23	0.85	-.24*	-.25	0.08	-.26**
Children	-1.09	0.54	-.25*	-.77	0.42	-.18	-1..02	0.40	-.24*
Gender	-.77	0.87	-.11	-.05	0.67	-.01	0.21	0.65	0.03
Length of Marriage	1.07	1.32	0.10	0.38	1.01	0.03	-.02	0.98	-.00
Prenuptial Agreement	6.08	2.67	0.30*	6.31	2.05	0.31*	4.92	2.01	0.25*
Ethnicity	-.19	0.39	-.63	0.03	0.30	0.01	-.07	0.29	-.02
CPQ – SF				0.27	0.04	0.61***	0.17	0.05	0.38**
FTS							0.07	0.03	0.35**
R^2		.19			.53			.59	
F for change in R^2		2.48*			44.53***			7.81**	

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

Theory of Planned Behavior and Retirement Preparation

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Abstract

Our understanding of the motivations for individuals to prepare adequately for retirement remains sparse. Using the 2015 National Financial Capability Study and guided by theory of planned behavior, this study identified factors associated with retirement preparation behavior. The study reveals that individual's attitudes, subjective norms and perceived behavioral control account for a high proportion of the variance in behavioral intention. The behavioral intention was the calculation of required retirement savings and was found to account for a high proportion of the variance in the actual behavior. This novel finding confirms the importance of retirement savings calculations on retirement savings behavior.

Key words: retirement preparation behavior, retirement savings calculation, theory of planned behavior

Background

Both popular media and academic literature have been concerned with retirement planning as a confluence of factors have challenged the ability of Americans to save enough for retirement. Some of these factors are global economic conditions, job instability, investment market performance, housing market volatility, government policies, and private industry trends such as the switch from defined benefit to defined contribution pension plans. Although these external forces have an influence on retirement preparation, the decision to plan for retirement is ultimately made at the individual level. Therefore, it is important to understand individuals' retirement preparations. In this study, retirement preparations are defined as the behaviors individuals engage in to be financially able to retire.

Retirement is a process that starts with planning some time before the actual end of an individual's working life (Beehr, 1986). The idea of a long and stable career rewarded by retirement at the end has become a fixture of the American social ethos and political economy (Hayward, Friedman, & Chen, 1998; Schulz, 2002). Thus, an underlying assumption of retirement planning behavior studies is that retirement is a normative phase of life that people anticipate and consequently can plan for. How normative a life event is in society influences how pervasive preparation for it will be.

To gain a deeper understanding of individuals' retirement planning behaviors, it is necessary to examine their attitudes and perceptions. Although many studies have been conducted to address issues related to retirement, only a few have examined retirement planning behaviors (Hershey & Mowen, 2000) and little is known about the psychological influences that underlie financial planning for retirement (Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007). Understanding these influences is important because while the need for individuals to plan for retirement and the associated benefits has been widely promoted, individuals seem to lack the motivation (Ekerdt, Hackney, Kosloky, & DeViney, 2001) and an understanding of this lack of motivation remains sparse (Griffin, Loe, & Hesketh, 2012).

Planning for financial needs during retirement can be beneficial to individuals in several ways. Preparation for later life financial needs has been associated with financial security in retirement (Fletcher & Hansson, 1991; Hershey, Jacobs-Lawson, & Austin, 2013), high retirement satisfaction (Elder & Rudolph, 1999; Moen, 1996), low levels of preretirement anxiety (Hershey & Mowen, 2000; Taylor-Carter, Cook, & Weinberg, 1997), and greater well-being in retirement (Noone, Stephens, & Alpass, 2009). These benefits of retirement planning accrue not only to individuals, but to families and the government as well since people who retire with adequate finances are less likely to need to rely financially on family members, or state programs which provide for older adults in financial need.

Purpose

The purpose of this study was to analyze the factors that influence non-retirees' retirement planning behaviors based on the Theory of Planned Behavior (TPB, Ajzen, 1985; 1991). The retirement planning behavior in this study is having retirement accounts (e.g., IRA, Keogh, SEO, myRA) not through the employer. Identifying the factors that influence individuals to engage in retirement planning behaviors is important to policymakers, educators, and financial professionals who are tasked with developing strategies to facilitate adequate retirement planning by individuals and families. The use of the TPB framework allowed us to examine why individuals often fail to engage in retirement planning behaviors. We contribute to the existing literature in three ways. First, we extend Griffin et al. (2012) study by utilizing the TPB framework with the National Financial Capability Study, a large nationally representative dataset. Second, unlike much of the limited previous work that often exclude the behavioral intention construct because of limitations on variables, we use the TPB with this construct. Finally, we contribute to the understanding of psychological factors that influence retirement planning behaviors.

Theoretical Framework

The Theory of Planned Behavior (TPB) is an extension on the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975). According to Montano and Kasprzyk (2002), TRA describes social normative perceptions and attitudes on a particular behavior that lead to an intention to perform the behavior. Similarly, TPB addresses context-specific individual motivational factors that explain the execution of a particular behavior that is under the person's volitional control, or will, to decide whether or not to execute the behavior (Ajzen, 1991). Starting with the formation of the behavioral, normative, and control beliefs, the TPB assumes a causal chain of effects, with these beliefs influencing attitudes, subjective norms, and perceived behavior control which, in turn, produce intentions and behavior (Ajzen & Fishbein, 2005). According to Ajzen and Fishbein (2005), a wide variety of cultural, personal, and situational factors influence the behavioral, normative, and control beliefs.
TPB is a validated model to address the multiple variables affecting individuals' behaviors (Ajzen, 2011; Armitage & Conner, 2001). According to the TPB, attitudes toward behavior, subjective norms, and perceived behavioral control determine an individual`s behavioral intention that in turn predicts actual behavior (Ajzen, 1985, 1991; Ajzen & Fishbein, 1980). In addition, the TPB posits that intentions and perceived behavioral control directly influence the actual behavior. An attitude toward a behavior is a person's positive or negative evaluation of the particular behavior based on the person's beliefs. A subjective norm is a person's perception of whether significant others approve or disapprove of the behavior. Significant others are individuals whose preferences about a person's behavior are important to the person. Subjective norms assess the social pressures on individuals to perform or not to perform a particular behavior (Conner & Armitage, 1998). Perceived behavioral control captures nonvolitional aspects of behavior (Ajzen, 1991) and is the self-perceived ability to performing the behavior including anticipated obstacles. According to TPB, more favorable attitudes, subjective norms and perceived behavioral control increase one's behavioral intention, which in turn increases the likelihood of engaging in the particular behavior. TPB postulates that demographic factors only affect the behavioral intention and the actual behavior indirectly through the attitude, subjective norms, and perceived behavioral control. Thus, demographic variables do not need to be included in the TPB framework in predicting human behavior (Ajzen & Fishbein, 1980).

The TBP is an appropriate theory for examining the influence of psychological factors on retirement planning behavior. The theory can be used to evaluate non-retirees' general attitudes about retirement planning behaviors, their feelings about the social norm pressure, and the difficulty of achieving the desired behavior. Previous research (Croy, Gerrans, & Speelman, 2010; Griffin et al., 2012; Warren & Kelloway, 2010) supports the use of TPB to examine and predict retirement planning behaviors.

Attitudes
According to the TPB, attitudes toward a behavior determine an individual`s behavioral intention that in turn predicts actual behavior (Ajzen, 1991). Attitudes consist of important behavioral beliefs that affect the outcome behavior (Azjen, 1985) with the relevant attitudes being those toward performance of the behavior and assessed at a similar level of specificity to that used in the assessment of the behavior (Connor & Armitage, 1998). According to Connor and Armitage (1998), two distinct processes by which attitudes can influence behavior are affective reactions and spontaneous impacts. Connor and Armitage (1998) define affective reactions as those based on the individuals' anticipated feelings of regret after performing a certain behavior, in contrast to spontaneous impacts that are based on previous deliberations, rational thinking, and careful planning.
Previous studies suggest a few retirement planning attitude factors: worry about running out of money in retirement, planning horizon, retirement goal setting and risk tolerance. We categorized risk tolerance and perceived retirement income adequacy as affective reactions since they are a reflection of feelings. Planning horizon and goal setting were categorized as spontaneous impact because they require deliberate thought and planning. A longer planning horizon has a significant effect on the likelihood of having an investment account like an IRA or 401(k) plans

(DeVaney, Anong, & Yang, 2007) and of saving (Fisher & Montalto, 2010). Therefore, it is hypothesized that planning horizon will be positively related to the intention to engage in retirement planning behaviors.

Previous studies have found that risk tolerance is related to retirement investment and savings (Callan & Johnson, 2002; DeVaney & Chien, 2001; Grable & Joo, 1997; Jacobs-Lawson & Hershey, 2005; Yuh & DeVaney, 1996). Yuh and DeVaney (1996) found that risk tolerance had a strong effect on the amount saved in DC plans by couples. Grable and Joo (1997) reported that risk tolerance is a significant factor of retirement investment and saving strategies. DeVaney and Chien (2001) found that people with high risk tolerance had larger amounts in their DC plans while having a tolerance for risk, was found to be associated with a willingness to save and invest by Callan and Johnson (2002). Jacobs-Lawson and Hershey (2005) found that risk tolerance, is positively associated with retirement savings. Therefore, it was hypothesized that risk tolerance will be positively related to the intention to engage in retirement planning behaviors.

Goals are defined as internal representations of desired states, with states broadly construed as outcomes or events that are motivating (Austin & Vancouver, 1996). Thus, individuals may be motivated to engage in retirement planning behaviors in order to achieve different types of long-term goals. Two important aspects of goals are goal commitment which is defined as how long an individual is willing to strive for a specific goal and specifying time frames for goals which is an important component of goal achievement (Austin & Vancouver, 1996). Mayer et al. (2011) found that those who had a retirement savings goal reported an increase in the amount they were personally saving for retirement. A study conducted by Stawski, Hershey, and Jacobs-Lawson (2007) found that retirement goal clarity was a significant predictor of pre-retirement planning behaviors, which in turn, predicted the amount of money individuals saved for retirement. Therefore, it was hypothesized setting long-term goals and striving to achieve them will be positively related to the intention to engage in retirement planning behaviors.

According to Bell and Mau's study (as cited in Neukam & Hershey, 2003), positive and negative images of the future are likely to differentially affect individuals' behavioral motives. Yet, the distinction between fear-and goal-based motives and its impact on saving practices is not addressed in retirement planning literature (Neukam & Hershey, 2003). An example of a fear-based retirement motive is worrying about running out of money in retirement. Neukam and Hershey (2003) examined how such worry is related to individuals' retirement planning behaviors and had two key findings. First, they found that when both fear-based (worry) and goal-based motives were used as predictors of retirement savings, there was an interaction effect. Specifically, savings of individuals with goal-based motives were contingent upon their level of worry and individuals who saved the most were those with goal-based motives and the lowest levels of worry. Second, they found that goal-based motives were better predictors of retirement savings than fear-based motives. Therefore, it was hypothesized that worrying about running out of money in retirement will be positively related to the intention to engage in retirement planning behaviors.

Subjective or Social Norms

According to the TPB, social norms toward a behavior determine an individual`s behavioral intention that in turn predicts actual behavior (Ajzen, 1991). Subjective or social norms are an individual's perception of social pressure stemming from the views and actions of significant others like family, spouse, friends or co-workers. According to Bandura's (1989) social cognitive theory, the environment, people and behavior, are constantly influencing each other. Thus, social environment such as coworkers can affect a person's behavior. Therefore, we suggest employer-sponsored financial education workshops exert social pressure on individuals when they coworkers attend and can play an important role in retirement planning behaviors, aside from the gained financial knowledge.

In a randomized experiment to examine the role of social interactions in employees' decisions to participate in a Tax Deferred Account (TDA) retirement plan, Duflo and Saez (2003) randomly selected participants and offered them an incentive to attend an employee benefits fair. They found that those who attended the fair were significantly more likely to enroll in the TDA. In addition, they found that savings choices of individuals who did not attend the fair tended to mirror those of their peers who attended the fair. The authors concluded that social interactions can have a significant impact on the decisions by individuals to take retire planning action. Madrian and Shea's (2001) study showed similar results, that an individual's decision of retirement savings choices was affected by the choices of his co-workers.

According to Laibson (1998), 401(k) plans can play an important role in retirement planning behaviors in terms of social interactions effects since the communication about the plan including contributions rates and investment choices is promoted through financial education workshops where social learning in retirement planning behaviors can take place with the end result being discussions among coworkers about saving and investment choices and these discussions can exert social pressure on individuals. Based on the conclusions of these studies it was hypothesized that attending workplace financial education workshops will be positively related to the intention to engage in retirement planning behaviors.

Socialization is the process that lead to adults being able to function adequately within their society and the family is seen as the major arena for socialization (Maccoby, 1992). Danes (1994) defines financial socialization as "the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and wellbeing of the individual" (p. 128). A few studies (Alhabeeb, 1999; Clarke, Heaton, Israelsen, & Eggett, 2005; John, 1999) have found that parents influence the financial socialization of their children through both explicit parental instruction as well as implicitly through observations.

A study by Jorgensen and Savla (2010) examined students' perception of parental influence on the financial socialization of their children. The authors tested whether young adults perceived their parents to influence their financial knowledge, financial attitudes, and financial behaviors. The results showed that: parents were perceived to have a direct and moderately significant influence on financial attitude; had an indirect and moderately significant influence on financial behavior, mediated through financial attitude; and did not have an effect on financial knowledge.

Hershey et al. (2010) found that financial socialization on retirement planning and saving had a significant effect on retirement goal clarity. Guiterrez and Hershey (2014) found that financial socialization had a significant effect on financial knowledge. In an interesting finding, Hira, Rock, and Loibl (2009), and Lunt and Livingstone (1991) found that having parents who planned for their own retirement was found to be predictive of one's savings contributions. Based on the conclusions of these studies it was hypothesized that being taught to manage finances by parents or guardians will be positively related to the intention to engage in retirement planning behaviors.

Perceived Behavioral Control (PBC)

According to the TPB, perceived behavioral control toward a behavior determines an individual`s behavioral intention that in turn predicts actual behavior (Ajzen, 1991). The theory postulates two ways in which the PBC construct affects behavior. First, in addition to attitudes and subjective norms, PBC has a motivational effect on behavioral intentions which mediate any effects of behavioral control on behavior. Second, based on the assumption that performance of any behavior is not solely based on motivation but on actual control over the behavior, there could be a direct effect of PBC on behavior in addition to the effect of intentions on behavior.

Financial literacy studies show that, compared to individuals with less financial knowledge, those with more financial knowledge are more likely to be involved in financial management and saving for retirement (Clark, d'Ambrosio, McDermed, & Sawant (2003); Hilgert, Hogarth, & Beverly, 2003; Lusardi & Mitchell, 2007; Lusardi & Scheresberg, 2016). In a related study, Madrian and Shea (2001), found that there is an inertia related to savings behavior for some 401(k) participants because they are under-informed and they don't know how much they need to save for retirement. Financial literacy strongly affects participation in both voluntary and automatic enrollment plans (Agnew, Szykman, Utkus, & Young, 2007; Bayer, Bernheim, & Scholz, 2009). These studies show that financial literacy can serve as an intervention strategy that raises awareness of a problem (e.g., not enrolled or contributing to 401(k) plans) and affects the adopting a new behavior that solves that problem. Therefore, it is suggested that financial literacy plays an important role in retirement planning behaviors. Based on the conclusions of these studies it was hypothesized that financial literacy will be positively related to retirement planning behaviors directly as well as indirectly through the intention to engage retirement planning behaviors.

Intention

According to the TPB, intention toward a behavior predicts actual behavior while attitudes toward behavior, subjective norms, and perceived behavioral control determine an individual`s behavioral intention (Ajzen, 1991). A few studies have examined the retirement planning behaviors associated with the calculation of retirement savings needs. Lusardi (2003) categorized those who attempted to do a retirement saving calculation as planners and found that planners accumulate far more retirement wealth than non-planners. In addition to making a similar finding, Lusardi and Mitchell (2011), also found that financial literacy was strongly and positively associated with planning.

The calculation of required retirement savings increases self-reported savings (Mayer, Zick, & Marsden, 2010) and the calculation of retirement income needs increases objective retirement savings (Bi, Finke, & Huston, 2017). Based on the results of these studies we hypothesize that calculation of required retirement savings serves as an intention to engage in retirement planning behaviors. Further, based on the conclusions of these studies it was hypothesized that the calculation of required retirement savings will be positively related to retirement planning behaviors.

Variable external to the TPB

In addition to the original TPB variables, Ajzen and Fishbein (2005) state that it is possible to consider adding other behavior-specific constructs to the TPB. However, they caution that, in general, such additions only slightly improve the prediction of intentions over and above the original TPB variables. Furthermore, Ajzen and Fishbein (2005) specify that these additional constructs should be: (a) behavior-specific, (b) conceptually independent of the TPB's existing variables, and (c) causal factors in the measured behavioral intention or actual behavior. Lastly, Ajzen and Fishbein (2005) recommend that the addition of any variables to the TPB model should be done with caution and based on empirical research. In considering these criteria, having any retirement plans through a current or previous employer meets all Ajzen and Fishbein's (2005) criteria for being added as predictors of intention beyond the original TPB variables. We hypothesize that workers who have existing retirement plans through a current or previous employer are less likely to have other retirement accounts not through the employer. Figure 1 represents the conceptual model developed for the study.

Hypotheses

The following hypotheses were tested:

H1: There will be a positive relationship between the attitude variables: (a) longer planning horizon, (b) setting long-term goals, (c) worrying about running out of money in retirement, and (d) risk tolerance and behavioral intention.

H2: There will be a positive relationship between the subjective norms variables: (a) being taught about finances as a child, (b) financial education at school, and (c) financial education at work and behavioral intention.

H3: There will be a positive relationship between the perceived behavioral control variables: (a) subjective financial knowledge and (b) subjective financial capability and behavioral intention.

H4: There will be a positive relationship between the perceived behavioral control variables: (a) subjective financial knowledge and (b) subjective financial capability and the actual behavior of having retirement accounts not through the employer.

H5: There will be a positive relationship between the behavioral intention and the actual behavior of having retirement accounts not through the employer.

H6: Having a retirement plan with a current or previous employer will be negatively associated with the actual behavior of having retirement accounts not through the employer.

Methods

Data and Sample

The dataset for this study came from the 2015 National Financial Capability Study (NFCS) commissioned by the FINRA Investor Education Foundation. The NFCS surveys Americans' financial knowledge, attitudes and behaviors. The first NFCS was conducted in 2009 to assess and establish baseline indicators of American adults' financial capability and evaluate how these indicators vary given underlying demographic, behavioral, attitudinal, and financial literacy characteristics (Lusardi & Scheresberg, 2016).

The 2015 NFCS comprises 27,564 respondents, aged 18 years or older. Our analysis used data from the 2015 wave and focused on non-retired households defined as households consisting of respondents and/or their spouses who are self-employed, working full-time for an employer or working part-time for an employer. After excluding respondents with missing data, our final sample is composed of 16,406 observations.

Dependent Variable

The dependent variable in the present study is having retirement accounts not through the employer. Respondents were asked the question, "Do you or your spouse have any other retirement accounts not through a current employer, like an IRA, Keogh, SEP, myRA, or any other type of retirement account that you have set up yourself?"

Independent Variables

The independent variables represented the three TPB constructs: attitudes, subjective norms, and perceived behavioral control and an additional factor outside the TPB model.

Attitudes. Attitude toward having retirement accounts not through the employer was measured by financial planning horizon, setting long-term financial goals, worry about running out of money in retirement, and risk tolerance. The financial planning horizon was measured as "the next few months," "the net year," "the next few years," "the next 5 to 10 years," and "longer than 10 years" in response to the question "In planning or budgeting your household's saving and spending, which of the following time periods in most important to you?" Setting long-term financial goals was measured using a seven-point Likert scale (1=strongly disagree, 4=neither agree nor disagree and 7=strongly agree) in response to the statement "I set long term financial goals and strive to achieve them." Worry about running out of money in retirement was measured using a seven-point Likert scale (1=strongly disagree, 4=neither agree nor disagree and 7=strongly agree) in response to the statement "I worry about running out of money in retirement." Risk tolerance was measured using a ten-point Likert scale (1=not at all willing and 10=very willing) in response to the question "When thinking of your financial investments, how willing are you to take risks?"

Subjective Norms. Subjective norms toward having retirement accounts not through the employer was measured by being taught how to manage finances by parents or guardians, and receiving financial education at school, college or at the workplace. New to the 2015 survey is a question on financial socialization during childhood. The respondents are asked "Did you parents or guardians teach you how to manage your finances?" A unique feature of the NFCS since the 2012 survey are questions to respondents about financial education courses they may have participated in at high school, college, through an employer, or through the military. Respondents are first asked if financial education was offered to them by a school, college, or a workplace. If the response is positive, the follow up question is about the source of the financial education (high school, college, employer, and military). For this study, financial education from high school and college were combined into a single category "from school" and the employer and the military sources of financial education were combined to form a single category "from the employer".

Perceived behavioral control. Perceived behavioral control of having retirement accounts not through the employer was measured through subjective financial knowledge and subjective financial capability. Since the theory sets "perceived" behavioral control, instead of using objective financial knowledge measure based on the responses to multiple financial literacy questions, this study took an alternative approach which is also prevalent in the literature involves asking survey respondents for a subjective or self-assessment of their financial knowledge or their financial capability. To measure subjective financial knowledge, the respondents were asked to respond on a 7-item Likert scale (1=very low, and 7=very high) to the question "How would you assess your overall financial knowledge." To measure subjective financial capability, the respondents were asked to respond on a 7-item Likert scale (1=strongly disagree, 4=neither agree nor disagree, and 7=strongly agree) to the statement "I am good at dealing with day-to-day financial matters, such as checking accounts, credit and debit cards, and tracking expenses."

Intention. Intention to have retirement accounts not through the employer was measured by respondents trying to calculate required retirement savings since this calculation has been shown to be positively associated with both self-reported and objective retirement savings. Respondents were asked "Have you ever tried to figure out how much you need to save for retirement?"
Variables external to the TPB. The variable external to the TPB that we considered was having a retirement plan through the employer. Respondents were asked "Do you or your spouse have any retirement plans through a current or previous employer, like a pension plan, a Thrift Savings Plan, or a 401(k)?"

Results

Multivariate analysis was conducted using a path analysis to determine the causal effects among the different TPB variables, variables external to TPB and having non-employer retirement accounts based upon the path diagram shown in Figure 1. Direct and indirect causal effects were estimated and the overall fit of the model was tested. Path analysis was selected as the appropriate multivariate analysis regression method since it is ideal for estimating the magnitude of linkages between theoretically connected measured variables and tests the overall fit of the model to the data. The model provided a close fit to the data (χ^2 (8, N=16406) = 1810.52; p<.0001; RMSEA = .117; RMSR = .034; CFI = .933). For large sample sizes, the chi-square value may lead to rejection of the model even though differences between observed and predicted covariances are slight (Kline, 2005). Accordingly, many researchers disregard the chi-square value if sample size is large (greater than 200) and other indices indicate model is acceptable (Schumacker & Lomax, 2012).

Table 1 shows the path coefficients which indicate the relationships between the model constructs. All predicted paths in the TPB model were significant except the path between financial education at school and retirement savings calculation (coefficient=-.007, SE=.008, *p*=.354). That is, financial education received at school did not predict retirement savings calculation.

Hypothesis testing
Results from the path analysis in Table 1 revealed that all variables for Hypothesis 1 were significant to retirement calculation savings (behavioral intention). Except for financial education at school in Hypothesis 2, all variables were found to be significant to retirement calculation savings. Both subjective financial knowledge and subjective financial capability were found to be significant to retirement calculation savings (supporting Hypothesis 3) and found to be significant to the actual behavior of having retirement accounts not through the employer (supporting Hypothesis 4). While Hypothesis 5, was supported, Hypothesis 6 was not. The relationship between having employer provided retirement plan and having retirement plan not through the employer was found to be positive, contrary to Hypothesis 6.

Direct, indirect, and total effects are presented in Table 2. The model showed that for the primary outcome variable of having any retirement accounts not through the employer, the determinants with the largest total causal effects were retirement savings calculation (.263), having a retirement plan through the employer (.207) and subjective financial knowledge (.155). The total causal effects for each of the model constructs' variables were: intention (.263), attitudes (.120), subjective norms (.033), perceived behavioral control (.235), and variable external to TPB (.207). Smaller total effects were found with subjective financial capability (.080) and setting long-term goals (.064). The total effects for the other variables were very small and, individually should be interpreted cautiously: planning horizon (more than 10 years) (.022), risk tolerance (.031), running out of money in retirement worries (.004), and taught finances as a child (.010). The smaller and very small total effects are in line with the weak to moderate correlations between these variables. Separate analyses for age, gender and income were performed and the model showed consistent outcomes.

Discussion
The role of social influence or personal attitudes in pre-retirees' retirement planning behaviors is understudied (Griffin et al., 2012). This study sought to address this by applying the theory of planned behavior (Ajzen, 1985; 1991) to the retirement planning behavior of having retirement accounts not though the employer. Total causal effects, from largest to smallest, were: behavioral intention (.263), perceived behavioral control (.235), variable external to TPB (.207), attitudes (.120), and subjective norms (.033).
The findings suggest that the TPB is helpful in identifying psychological factors, such as the attitude toward the behavior, subjective norms, perceived behavioral control (PBC), and behavioral intention, associated with the actual behavior of having retirement accounts not though the employer. Consistent with the TPB's prediction, the attitude, subjective norms and PBC affected the actual behavior indirectly through the behavioral intention, and the behavioral intention affected the actual behavior directly. Contrary to the TPB's prediction, the PBC showed a high direct effect on the actual behavior and a limited effect indirectly through the behavioral intention. A possible explanation for this is that the study's PBC variables capturing subjective financial knowledge accurately reflect the respondent's perceptions of actual control over the behavior of having retirement accounts not though the employer. In such instances, according to the Theory of Planned Behavior, PBC can serve as a proxy for actual control and can predict the target behavior directly (Ajzen & Fishbein, 2005).

In the current study, the subjective norms showed very low but significant effect on the behavioral intention while the attitudes showed low but significant effect. A possible explanation for this is that the variables we used for subjective norms do not specifically measure subjective norms toward the behavioral intention. These results should be interpreted in the context of the target behavior since according to Ajzen and Fishbein (2005), the importance of attitude, subject norms, and perceived control in the prediction of intention is a function of the target behavior and population under consideration with the possibility that at least one of the three predictors, may make low or no significant contribution to the prediction of intention. In the current study, based on literature review, one external variable to the TPB model, having a retirement plan through a current or previous employer, was added to the conceptual model. The findings provided strong support for including this external variable with direct effects of .207. This finding raises questions about the retirement preparation of self-employed individuals, who often do not have employer provided retirement plans since this result shows that they are less likely to have their own retirement plan (e.g., IRA, Keogh, SEO, myRA). Behavioral intention in this study was measured by "ever trying to figure out how much needed to save for retirement" and was a strong predictor of the target behavior of having retirement accounts not with the employer. This finding is a significant contribution to literature because few previous studies have linked specific retirement planning behaviors (e.g., the retirement savings calculation) with retirement outcomes (Mayer et al., 2011). Furthermore, this finding leads to three questions for future research that our study did not address: "Is there an optimal age to perform this calculation?", "How do people undertake this calculation", and "How accurate are the calculations?"

Two limitations of the study need to be acknowledged. First, the use of a secondary dataset makes it difficult to ensure that the respondent's attitudes, subjective norms, and perceived behavioral control are measured appropriately and relate directly to the target behavior. Second, the time order between the predictors and target behavior is unknown. Given these limitations, future research could follow the recommendations of researchers (Conner & Sparks, 1995; Godin & Kok, 1996) in constructing a questionnaire to effectively measure the TPB constructs for the target behavior of having retirement accounts not through the employer.

Implications

This study identified factors that measure attitude, subjective norms, and perceived behavioral control, which are predictors of the behavioral intention to calculate required retirement savings. Consequently, personal finance educators and financial advisors can gain an understanding of the psychological determinants of the behavioral intention to calculate required retirement savings and use this knowledge to encourage consumers to figure out their required retirement savings. For example, since workplace financial education was a significant predicator of retirement savings calculation, financial educators can focus their initiatives on helping consumers figure out how much to save for retirement through calculations based on different retirement scenarios. In addition, given the significance of workplace financial education found in this study, employers can offer financial education as a benefit to employees and policymakers can incentivize employers to offer this benefit. Mayer, Zick, and Marsden (2010) and Bi, Finke, and Huston (2017) found that the calculation of required retirement savings influences retirement savings and we found the calculation predicts retirement preparation behavior. Based on these findings, financial counselors and educators can provide employees with access to online retirement savings calculators. Furthermore, findings from this study provide further insight of how financial advisors and educators can help consumers have additional retirement accounts not through the employer. The finding that subjective financial knowledge had a significant impact on both the behavioral intention and the target behavior shows the importance of financial literacy in retirement planning behaviors and means financial educators and advisors must focus their efforts on improving consumers' financial literacy.

References

Agnew, J., Szykman, L., Utkus, S., & Young, J. (2007). *Literacy, trust and 401(k) savings behavior* (Center for Retirement Research Working Paper), Boston College.

Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*. Berlin Heidelberg: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211.

Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology and Health, 26*(9), 1113–1127.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, N.J.: Prentice-Hall.

Ajzen, I., & Fishbein, M. (2005). *The influence of attitudes on behavior*. In D.

Alhabeeb, M. J. (1999). Allowances and the economic socialization of children. *Financial Counseling and Planning, 10*(1), 25-37.

Allgood, S., & Walstad, W. B. (2013). Financial literacy and credit card behaviors: A cross-sectional analysis by age. Numeracy: *Advancing Education in Quantitative Literacy, 6*(3), 1-26.

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behavior: A meta-analytic review. *British Journal of Social Psychology*, *40*(4), 471–499.

Austin, J. T., & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin, 120*(3), 338-375.
Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, *44*(9), 1175-1184.
Bayer, P. J., Bernheim, B. D., & Scholz, J. K. (2009). The effects of financial education in the workplace: Evidence from a survey of employers. *Economic Inquiry*, *47*(4), 605-624.
Beehr, T. A. (1986). The process of retirement: A review and recommendations for future investigation. *Personnel Psychology*, *39*(1), 31-55.
Bi, Q., Finke, M., & Huston, S. J. (2017). Financial Software Use and Retirement Savings. *Journal of Financial Counseling and Planning*, *28*(1), 107-128.
Callan, V. J., & Johnson, M. (2002). Some guidelines for financial planners in measuring and advising clients about their levels of risk tolerance. *Journal of Personal Finance, 1*(1), 31-44.
Clark, R. L., d'Ambrosio, M., McDermed, A. & Sawant, K. (2003). *Financial education and retirement saving* (Working Paper 11-020103). TIAA-CREF Institute.
Clarke, M. D., Heaton, M. B., Israelsen, C. L., & Eggett, D. L. (2005). The acquisition of family financial roles and responsibilities. *Family and Consumer Sciences Research Journal, 33*(4), 321-340.
Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review of avenues for further research. *Journal of Applied Social Psychology*, *28*(15), 1429-1464.
Conner, M., & Sparks, P. (1995). The Theory of Planned Behaviour and health behaviours. In M Conner, P Norman (Eds), *Predicting health behaviour* (pp. 121-162). Buckingham: OUP.
Croy, G., Gerrans, P., & Speelman, C. (2010). The role and relevance of domain knowledge, perceptions of planning importance, and risk tolerance in predicting savings intentions. *Journal of Economic Psychology*, *31*(6), 860-871.
Danes, S. M. (1994). Parental perceptions of children's financial socialization. *Financial Counseling and Planning, 5*(1), 127 -146
DeVaney, S. A., Anong, S. T., & Yang, Y. (2007). Asset ownership by Black and White Families. *Financial Counseling and Planning, 18*(1), 33-45.
DeVaney, S. A., & Chien, Y. (2001). A model of savings behavior and the amount saved in retirement accounts. *Journal of Financial Service Professionals, 55*(2), 72-80.
Duflo, E., & Saez, E. (2003). The role of information and social interactions in retirement plan decisions: Evidence from a randomized experiment. *Quarterly Journal of Economics*, *118*(3), 815-842.
Ekerdt, D. J., Hackney, J., Kosloski, K., & DeViney, S. (2001). Eddies in the stream. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 56*(3), S162-S170.
Elder, H. W., & Rudolph, P. M. (1999). Does retirement planning affect the level of retirement satisfaction? *Financial Services Review, 8*(2), 117-127
FINRA (2015), "National Financial Capability Study". Available at http://www.finrafoundation.org/programs/capability/index.htm
Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Massachusetts: Addison-Wesley Publishing Company.
Fisher, P. J., & Montalto, C. P. (2010). Effect of saving motives and horizon on savings behaviors. *Journal of Economic Psychology, 31*(1), 92-105.
Fletcher, W. L., & Hansson, R. O. (1991). Assessing the social components of retirement anxiety. *Psychology and Aging, 6*(1), 76–85.
Godin, G., & Kok, G. (1996). The Theory of Planned behaviour: A review of its applications to health-related behaviours. *American Journal of Health Promotion, 11*(2), 87-98.
Grable, J. E., & Joo, S. H. (1997). Determinants of risk preference: Implications for family and consumer science professionals. *Family Economics and Resource Management Biennial, 2,* 19-24.
Griffin, B., Loe, D., & Hesketh, B. (2012). Using proactivity, time discounting, and the theory of planned behavior to identify predictors of retirement planning. *Educational Gerontology*, *38*(12), 877-889.
Gutierrez, H. C., & Hershey, D. A. (2014). Age differences in expected satisfaction with life in retirement. *The International Journal of Aging and Human Development*, *78*(2), 93-114. doi: http://dx.doi.org/10.2190/AG.78.2.a
Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education and economic outcomes. *Annual Review of Economics, 5*(1), 347-373.
Hayward, M.D., Friedman, S., & Chen, H. (1998). Career trajectories and older men's retirement. *Journal of Gerontology: Social Sciences, 53*(2), S91-S103.

Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *The International Journal of Aging and Human Development*, *70*(1), 1-38.
Hershey, D. A., Jacobs-Lawson, J.M., & Austin, J. T. (2013). Effective financial planning for retirement. In M. Wang (Ed.), *The Oxford handbook of retirement* (pp. 402-430). New York: Oxford University Press, Inc.
Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., & Hamagami, F. (2007). Psychological foundations of financial planning for retirement. *Journal of Adult Development, 14*(1-2), 26-36.
Hershey, D. A., & Mowen, J. C. (2000). Psychological Determinants of Financial Preparedness for Retirement. *The Gerontologist*, *40*(6), 687–697.
Hilgert, M., Hogarth, J., & Beverly, S. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin, 89,* 309-322.
Hira, T. K., Rock, W. L., & Loibl, C. (2009). Determinants of retirement planning behaviour and differences by age. *International Journal of Consumer Studies, 33*(3), 293-301. doi: 10.1111/j.1470-6431.2009.00742.x
Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement savings behaviors. *Financial Services Review, 14*(4), 331-344.
John, D. R. (1999). Consumer socialization of children: A retrospective look at twenty-five years of research. *The Journal of Consumer Research, 25*(3), 183-213.
Jorgensen, B. L., & Savla, J. (2010). Financial literacy of young adults: The importance of parental socialization. *Family Relations, 59*(4), 465-478. doi: 10.1111/j.1741-3729.2010.00616.x
Kline, R. B. (2005). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.
Laibson, D. I. (1998). Psychological perspectives on 401K's. In D. Wise (Ed.), *Frontiers in the economics of aging* (pp. 106-120). Chicago: NBER and University of Chicago Press.
Lunt, P. K., & Livingstone, S. M. (1991). Psychological, social, and economic determinants of saving: Comparing recurrent and total savings. *Journal of Economic Psychology, 12*(4), 621-641. doi: 10.1016/0167-4870(91)90003-C.
Lusardi, A. (2003, December). Planning and saving for retirement. (Working Paper, Dartmouth College). Retrieved from Financial Literary Focus website: http://www.financialliteracyfocus.org/alusardi/Papers/Lusardi_pdf
Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education, *Business Economics, 42*(1), 35-44.
Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and planning: Implications for retirement wellbeing. In O. S. Mitchell, and A. Lusardi (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 17–39). Oxford: Oxford University Press.
Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature, 52*(1), 5-44.
Lusardi, A., Mitchell, O.S., & Curto, S. (2012). Financial sophistication in the older population. *National Bureau of Economic Research*, Working Paper No. w17863.
Lusardi, A., & Scheresberg, C. (2016). Americans' Troubling Financial Capabilities: A Profile of Pre-Retirees. *Public Policy & Aging Report*, *26*(1), 23-29.
Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology, 28*(6), 1006-1017.
Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401(k) participation and savings behavior. *The Quarterly Journal of Economics, 116*(4), 1149-1187.
Mayer, R. N., Zick, C. D., & Marsden, M. (2011). Does calculating retirement needs boost retirement savings? *Journal of Consumer Affairs, 45*(2), 175-200.
Moen, P. (1996). A life course perspective on retirement, gender, and well-being. *Journal of Occupational Health Psychology, 1*(2), 131–144.
Montano, D. E. & Kasprzyk, D. (2002). The Theory of Reasoned Action and the Theory of Planned Behavior. In *Health Behavior and Health Education: Theory, Research, and Practice,* (pp. 67-98) edited by K. Glanz, B.K. Rimer, and F. M. Lewis (Eds.), San Francisco: Jossey-Bass.
Neukam, K. A., & Hershey, D. A. (2003). Financial inhibition, financial activation, and saving for retirement. *Financial Services Review*, *12*(1), 19-37.
Noone, J. H., Stephens, C., & Alpass, F. M. (2009). Preretirement planning and wellbeing in later life: A prospective study. *Research on Aging, 31*(3), 295-317.
Schulz, J. H. (2002). The evolving concept of "retirement": Looking forward to the year 2050. *International Social Security Review, 55*(1), 85-105.
Schumacker, R. E., & Lomax, R. G. (2012). *A beginner's guide to structural equation modeling*. Routledge.

Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *International Journal on Aging and Human Development, 64*(1), 13-32.

Taylor-Carter, M. A., Cook, K., & Weinberg, C. (1997). Planning and expectations of the retirement experience. *Educational Gerontology, 23*(3), 273–288.

Warren, A. M., & Kelloway, K. E. (2010). Retirement decisions in the context of the abolishment of mandatory retirement. *International Journal of Manpower*, *31*(3), 286-305.

Yuh, Y., & DeVaney, S. A. (1996). Determinants of couple's defined contribution retirement funds. *Financial Counseling and Planning, 7,* 31-38.

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Figure 1. Conceptual framework using TPB variables to predict retirement preparation behavior

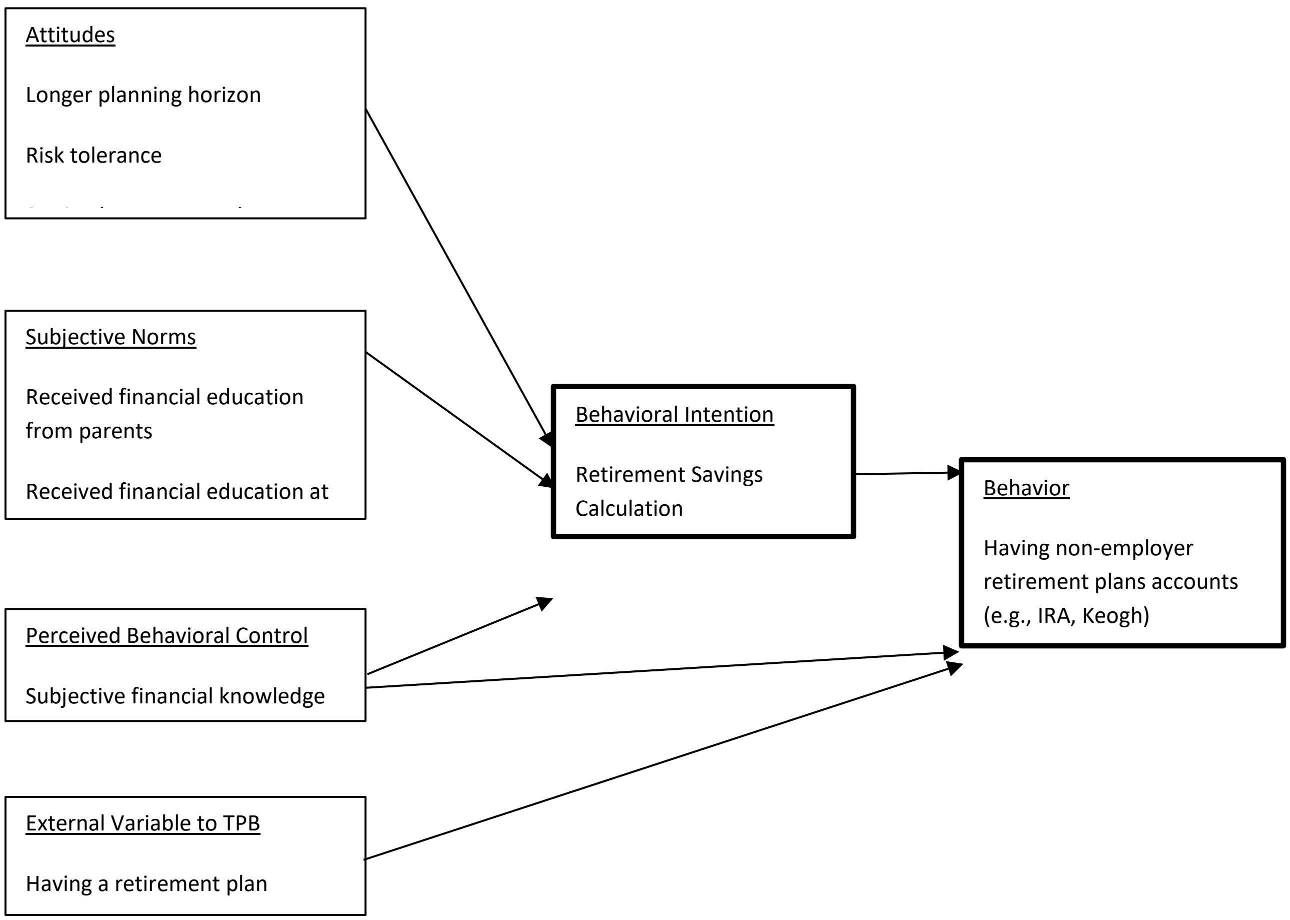

Table 1. Path analysis results for the effects of independent variables on having non-employer retirement plan

	Standardized Results			
Path	Estimate	SE	t	p
Having non-employer retirement plan ← retirement savings calculation	.248	.007	35.839	<.001
Having non-employer retirement plan ← subjective financial knowledge	.052	.003	16.045	<.001
Having non-employer retirement plan ← subjective financial capability	.023	.003	8.579	<.001
Having non-employer retirement plan ← having employer retirement plan	.131	.011	11.648	<.001
Retirement savings calculation ← longer planning horizon	.069	.002	29.649	<.001
Retirement savings calculation ← setting long-term goals	.004	.002	2.080	0.038
Retirement savings calculation ← running out of money worries	.022	.002	14.741	<.001
Retirement savings calculation ← risk tolerance	.034	.007	4.674	<.001
Retirement savings calculation ← financial education by parents	-.015	.010	-1.532	0.126
Retirement savings calculation ← financial education at school	.172	.013	12.771	<.001
Retirement savings calculation ← financial education at work	.043	.004	11.628	<.001
Retirement savings calculation ← having employer retirement plan	.018	.003	6.024	<.001
Retirement savings calculation ← subjective financial capability	.248	.007	35.839	<.001
Retirement savings calculation ← subjective financial knowledge	.052	.003	16.045	<.001

Table 2. Summary of Causal Effects

	Causal Effects		
Path	Direct	Indirect	Total
Having non-employer retirement plan ← retirement savings calculation	.263	-	.263
Retirement savings calculation ← longer planning horizon	-	.022	.022
Retirement savings calculation ← setting long-term goals	-	.064	.064
Retirement savings calculation ← running out of money worries	-	.004	.004
Retirement Savings Calculation ← risk tolerance	-	.031	.031
Retirement Savings Calculation ← financial education by parents	-	.009	.009
Retirement Savings Calculation ← financial education at school	-	-.003	-.003
Retirement Savings Calculation ← financial education at work	-	.026	.027
Having non-employer retirement plan ← subjective financial knowledge	.129	.026	.155
Having non-employer retirement plan ← subjective financial capability	.067	.013	.080
Having non-employer retirement plan ← having employer retirement plan	.207	-	0.207