



# Proceedings

of The Association for Financial Counseling and Planning Education®

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## **Editors' Note**

Welcome to the 2017 AFCPE® *Symposium Proceedings*. The broad range of items selected by the program task forces for posters, practitioner's forums, research papers, and student papers for presentation at the 2017 Research and Training Symposium represents the expertise and commitment of our members to building a community of financial wellbeing that includes both research and 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 2017 AFCPE® Research and Training Symposium. The *Proceedings* include the research papers, student papers, practitioner forum summaries, and poster abstracts presented at the AFCPE® Symposium in San Diego, California, November 15-17, 2017. We would especially like to thank Sara Martin-Fuller, AFCPE® Event Coordinator, and Katie Tornow, AFCPE® Operations Officer, who patiently and graciously answered our many questions during the preparation of the *Proceedings*.

The 2017 Symposium exemplifies AFCPE's® mission of "providing professional development experiences for financial educators, practitioners and researchers to improve the economic wellbeing of individuals and families worldwide." The commitment of the AFCPE® membership is reflected in their submission of quality research and presentations for this year's conference.

Please consider submitting your work for publication in the 2018 AFCPE® *Proceedings* and for presentation at the symposium November 14–16, 2018 in Norfolk, VA. Please visit the AFCPE® website ([www.afcpe.org](http://www.afcpe.org)) for 2018 symposium details and submission guidelines.

As we embrace the 2017 AFCPE® Research and Training Symposium theme, *Bridging the Gap: Building a Community of Financial Well-being*, let us continue to learn from – and with – each other.

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## **A Model for Understanding Student Need and Motivation in Offering Financial Education Programs on Campus**

*Jacqueline A.F.I. Carroll, Accesslex Institute, Center for Education and Financial Capability*

**Key words:** coaching, counseling, financial education, in-crisis, Maslow, motivation, need, stable, time-discounting

College and university leaders largely agree that supporting the financial wellbeing of their students is important. Many institutions provide some financial education to their student population, but industry-wide there is no clear standard nor consensus on the best way to do just that. When it comes to providing financial education to college students, many administrators will note that this is easier said than done. A common complaint from administrators is students are generally not interested or motivated and that turnout for financial education sessions oftentimes falls short of set goals, even when food or other incentives are provided. That makes it appear that the return on investment may be low for both students and administrators. However, the issue may lie in trying to deliver one “same solution” for all students, regardless of need. As such administrators need to identify whom they serve and understand that population before it can be determined what and how to deliver solutions. The purpose of this poster is to provide administrators with an easy to digest model for understanding how students’ needs and motivation may impact financial education offerings on campus.

The first step is understanding the financial education framework, differences between financial coaching, financial counseling, and financial education (Collins & O’Rourke, 2012), including three distinctive approaches to providing education including remedial, preventative, and productive phases (Pulvino & Pulvino, 2010). Also, this framework informs length of offerings, accountability and follow-up, outcomes, and best practice for delivery.

Secondly, administrators must assess their students’ needs. When it comes to financial education, one size does not fit all. Huitt (2007) describes Maslow’s Hierarchy of Need and how deficiencies and growth play into meeting individuals’ needs on their roads to self-actualization. Time discounting (Loewenstein & O’Donoghue 2002) takes it a step further in that it provides insights as to how students determine if their time is best spent, for example attending financial education sessions on campus vs another activities/events. Recognizing how meeting deficiencies and desire for growth impacts motivation at the different levels within Maslow tiers provides a clear connection for the application of time discounting theory, which is essentially at the heart of motivation and interest. As such, administrators may be better off targeting students based on commonalities ranging within a spectrum of financial crisis to stability and beyond, and leverage shared common attributes to impact motivation, workshop attendance, and learning.

Finally, to support financial wellness on campus, institutions must effectively create clear pathways to move from need, motivation and knowledge, to goal attainment and behavior change. The poster closes with a recommendation for a three-pronged approach addressing audience, opportunities, and financial education, and highlights three different institutional approaches.

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## **Arabic Translation of Financial Literacy Curriculum**

*Khurram Imam, Erica Tobe, Michigan State University Extension, Mary Jo Katras, and Sharon Powell, University of Minnesota*

**Key words:** Arabic, budgeting, credit, financial literacy, identity theft, immigration, insurance, Michigan, Minnesota, refugees, Syria, translation

### **Abstract**

Immigrants and refugees arriving to America are offered much support from the state and federal government to build a sustainable life in their new homeland. As pockets of Syrian refugees are relocated across America, local organizations have filled in the gap of acculturation. In Dearborn, MI for example, Syrian American Rescue Network was created to respond to the very real need of English classes, resume workshops, job trainings, and other simple life skills easily accessible for native speakers (Syrian, 2015). However, some displaced immigrants are arriving from a completely foreign financial culture which makes them vulnerable to scams and financial instability.

Currently, the highest number of refugees in the world are of Syrian nationality (UNHCR, 2017). In 2016, the White House raised the cap of accepted refugees per year to 110,000 starting October 1<sup>st</sup> (Gomez, 2016). In response to this situation, University of Minnesota Extension (UM), Who is Hussain—Michigan (WIH), Syrian American Rescue Network (SARN), Michigan State Housing Development Authority (MSHDA) and Michigan State University Extension (MSUE) partnered to translate the basics of a financial literacy curriculum into Arabic—the main languages of the Syrian, Iraqi, Yemeni, Lebanese and Middle Eastern population (Languages, n.d.). The team translated an easy-to-teach curriculum which covers making money decisions, goal-setting, budgeting, understanding taxes, basics of paychecks and saving, credit, insurance, and fraud.

The incoming refugee population in Michigan is housed in cities like Pontiac, Flint, and Detroit—areas with empty or abandoned infrastructure to house families. While the living conditions are not ideal, they are temporary until the families find a way to resettle. In this endeavor, financial empowerment is key. Understanding the basics of the US financial system is important to alleviate poverty. When MSUE met with SARN, the discussion revolved around developing an instructor's manual, a student manual, and a host of simple presentations to be used by other agencies. WIH's volunteer base of students, teachers, doctors, researchers, and other professionals worked solely on translation. SARN conducted the final review and edit. MSHDA generously provided funding. The entire process took nearly five months to complete from the first meeting to the finale publications.

In early 2017, the five-module manual was completed. The instructor's booklet was split into the following topics:

- Decisions about Money
- Budgeting
- Income/ Savings
- Credit
- Insurance and Fraud

The accompanying presentations matched those topics; however, the "Insurance and Fraud" section was released as two presentations—one of which covers scams and consumer fraud in depth. Training's, student booklet, and instructor manual are provided free of charge to any interested organizations—both in and out-of-state.

Currently, MSU Extension is forming partnerships with local *Office of Refugee Resettlement* agencies to conduct Train-the-Trainer's and organize classes. At the conclusion of each class, instructors and participants will evaluate the efficacy of the translated curriculum and the contents personal impact. This process is much simpler for the refugee population as participants have a long-term commitment with the organizations involved. Hence, a follow-up survey is easy to implement. The hope is that the curriculum will be paired with other services such as job readiness classes, nutrition programming, entrepreneurship classes, and certificate courses. This will provide a pathway for the Arabic population to become self-sufficient. The purpose of this poster is to provide best practice suggestions for replicating this procedure in other communities with various cultural groups. This includes the preliminary needs assessment that decided which pages of the curriculum will be translated, the translation process itself, and the resulting partnerships with refugee resettlement agencies.

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## **Asian College Students: Examining their Differences on Financial Matters**

*Yiting Li, Virginia S. Zuiker, Tai J. Mendenhall, University of Minnesota, and Catherine P. Montalto, The Ohio State University*

**Key words:** Asian college students; family financial socialization; financial attitudes; financial behaviors; financial knowledge

Asian Americans represent the largest minority group in U.S. colleges and universities (Thomas et al., 2016). Understanding money can be one of the most stressful components of this journey; it is thereby important to know how these students make financial decisions (independently or with parents). Asian American college students and their parents tend to work together to figure out how to finance college. International Asian students enter the country with financial support already-established, but nevertheless struggle to navigate complex economic policies relevant to them. The purpose of this study was to begin filling this gap in knowledge. The authors explored financial issues between these two groups; this effort was first to examine a large sample of Asians living in the United States by different citizenship statuses (n=671). Results suggest that Asian American college students are different in their financial behaviors compared to International Asian students, especially in regard to financial knowledge, stress, socialization, and financial experiences.

Financial professionals who work with Asian college students must consider thoroughly how to offer financial education and services in multiple ways so as to match the different financial backgrounds that said students represent.

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## **Can a solution focused financial therapy approach work in a student peer financial counselor center? A report of preliminary analyses**

*Kristy L. Archuleta, Derek R. Lawson, Jodi Kaus, Allison Becker, and Emily Koochel, Kansas State University*

**Key words:** campus financial counseling, college students, financial anxiety, financial behavior, financial counseling, financial knowledge, financial stress, peer financial counseling, solution focused therapy, solution focused financial therapy

### **Abstract**

The current study set out to preliminarily investigate whether or not there are different outcomes for students who work with a peer financial counselor (PFC) using a Solution Focused Financial Therapy approach and those who work with a PFC that do not use the approach. Preliminary results suggest that for the clients in the SFFT group, financial anxiety, objective financial knowledge, and financial stress improved, but worsened for the control group, suggesting SFFT was an appropriate approach to use with the clients in this study. Implications for practice and future research are provided.

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## College Student's Financial Wellness: The Impact on Individuals, Family and Communities

Linda Simpson, Eastern Illinois University

**Key words:** college student, financial literacy, financial wellness, student loan debt

College student loan debt has exceeded the \$1.3 trillion mark creating a staggering household debt that has doubled since 2009 (Nasiripur, 2017). Once a college degree is earned, reality sets in and the recently graduated alumni are responsible for the repayment of an average of \$34,000 in debt incurred during their college years (Pianin, 2017). This student debt is significant due to the negative impact it can have on the individual, family, communities, and overall US economic growth.

After the Baby Boomers, the Millennial generation (also known as the Echo Boomers) is the next largest cohort to have a significant impact on the economy. Unfortunately this group holds an estimated \$1.1 trillion in debt which creates a negative impact on big-ticket purchases (Hernandez, 2017). While a college degree should provide financial security with increased salary opportunities, oftentimes the opposite is true as graduates have limited disposable income due to high monthly loan payments. The debt embarked on college graduates has caused a significant drop in homeownership thus creating a snowball effect on additional purchases such as home furnishings, gardening equipment, repairs, etc. (Nasiripur, 2017). In addition to the overall decreased purchasing power, during the last quarter of 2016 student loan delinquency reached 11.2% as these college alums are having a difficult time with overall money management (Pianin, 2017). The loan defaults create poor credit ratings thus decreasing the opportunity to secure loans for major purchases. It is imperative to help families understand the complexities of student loans and help students understand that life-style choices can prevent or exacerbate debt load. Their spending choices ultimately impacts a whole community, beginning each day, not at some distant point after a degree is earned.

To examine the financial wellness of college students, 428 out of 1,406 (30%) graduate students, responded to a survey delivered via Survey Monkey which was sent via campus email. The majority of the respondents (51%) increased their knowledge on general financial issues based on life experiences. One-half *know the importance* of their credit score yet over one-half *do not know* their current credit score. Over one-half of students agree or strongly agree that they student loan debt is necessary and they accept a certain amount of debt so that they can live comfortably. They claim that they keep expenses to a bare minimum so they don't incur more debt than absolutely necessary. Eighty-four percent of respondents were very confident or confident on their ability to manage their own finances; however, when asked about what type of information they would most like to learn related to personal financial management, 56% reported *how to pay off financial debt*. Finally, over 50% of the respondents reported that they observe their fellow graduate students struggling to control spending and manage student loan debt.

Results are pending from a study on Collegiate Financial Wellness based out of Ohio State University where Eastern Illinois University was selected to distribute surveys to the student population. The purpose of the study is to determine the financial wellness of college student in the United States to allow us to better understand the needs and develop programs or services to help students succeed.

Results from both studies will be used to enhance the programs provided by the Literacy in Financial Education (LIFE) Center at Eastern. The Center was developed from funding received via a competitive grant received from the National Council on Graduate Studies and TIAA-Cref.

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## Empowering Personal Finance Educators: Two Professional Development Models

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**Key words:** financial education, personal finance, professional development, teachers

This poster will describe the content and format of two professional development models designed to build the financial education capacity of teachers. As financial education programs in schools have expanded, interest has increased in providing quality teacher professional development programs that build financial education capacity. Teachers cannot teach personal finance well if they do not understand the content themselves, cannot engage their students, and/or do not fully appreciate the characteristics and life experiences of those they teach (O'Neill and Hensley, 2016). Unfortunately, a number of studies, some going back decades, have concluded that teachers from many disciplines lack capacity to deliver financial education content and could benefit from training workshops. Lofgren & Suzuki (1979) administered a questionnaire, based on Oregon state personal finance standards, to teachers in four subject matter groups. Survey results indicated a need for teacher upgrading among all those sampled. More recently, an online survey by Way and Holden (2009) found that teachers who had taken a college course with personal finance topics were 50% more likely than others to rate themselves as competent to teach financial subject matter. However, only 37% of respondents had ever taken college courses with financial education content and fewer than 3% took a course related to personal finance education. Teachers felt limited in preparedness in both subject matter and pedagogy, particularly in the topic areas of insurance and saving and investing.

This poster will describe the content and format of two financial education professional development models that were developed to provide financial education professional development for teachers in a New Jersey. Other financial educators could easily replicate each model. The two program models described in the poster are *Financial Education Boot Camp* and *Financial Education Teacher Exchange*. Both programs are funded annually as the result of a state law that stipulated that a portion of credit union profits for serving as public repositories must be used for financial education professional development. Below is a description of each professional development model:

- ◆ *Financial Education Boot Camp* is a full-day conference that includes brief content “chunks,” hand-on learning activities matched to the content chunk topics, technology updates and activities, and guest speakers. Teachers receive seven continuing education credits.
- ◆ *Financial Education Teacher Exchange* is an after-school workshop featuring facilitated teacher networking about their favorite financial education lesson plans and financial education resources (e.g., videos and calculators). Teachers receive 2.5 continuing education credits.

Post-class and follow-up evaluations have consistently found that participants in both programs increased subject matter and pedagogical knowledge and self-confidence in teaching personal finance. Many also reported using learning activities that they were exposed to. Teachers are an important conduit for financial education. Many have not been sufficiently prepared to teach personal finance in the past. Increasing the financial education capacity of teachers can increase the financial well-being of teachers, their students, and, ultimately, the country as a whole.

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## Factors and Implications of Financial Socialization of Black Immigrant Women

Kimberly Watkins, University of Georgia, Bertranna Muruthi, Virginia Tech, Kenneth J. White, Jr., and Michael Thomas, Jr., University of Georgia

**Key words:** African, black-Caribbean, financial socialization, immigrants, women

Years after the Great Recession, researchers, educators, and policymakers continue their efforts to better understand how to ensure that households are prepared to navigate or avoid a financial crisis. With the growing number of foreign born workers in the US labor force (American Immigration Council, 2015), advocates have called for efforts to increase financial education and literacy for immigrant populations (Muruthi, Watkins, McCoy, Muruthi, & Kiprono, 2017). Researchers and practitioners have focused on the methods of households' personal finance education, and the impact financial education has on financial decision making. Yet, there is a gap in the literature when it comes to understanding the financial socialization of immigrants living in the US. The purpose of this study is to investigate the factors and implications of black-Caribbean and African women's financial socialization.

Sixteen black immigrant women were recruited for a single, individual interview. Participants native countries include Guyana, Kenya, Nigeria, and Rwanda. Participants ranged in age from 21 to 80 with a median age of 27. Eighty-one percent of the women received a bachelor's degree or higher. For this study, qualitative data were collected using semi-structured interviews. The following research questions were used to guide the study (a) How was money management discussed in your home when you were a child? and (b) How did you learn about financial management from your parents? A thematic analysis was conducted to identify, analyze, and report patterns within the data (Braun & Clarke, 2006). Four key themes were identified as influential on the women's financial behavior: (a) observation of household financial hardships, (b) guided financial management instruction, (c) the importance of saving, and (d) equal parental financial socialization involvement.

Common universal financial socialization themes were found from participants. The women noted that some of the most influential lessons about money were learned from explicit and implicit communication. Many participants reported that financial struggles in their households while growing up produced instrumental and profound financial socialization experiences. These financial hardships led to many of the women engaging in different financial behaviors than their parents to avoid the same experiences in their adulthood. What was interesting is that many of the women learned about personal finances from both parents. Parents were equally invested in the financial socialization of their daughters. Many of the women reported they were encouraged to be financially independent and hardworking by their mothers and fathers. Financial counselors, planners, and educators can use the results to better understand cultural influence on financial management behaviors of black immigrant women.

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## **Factors Associated with Fragile Families' Emergency Fund**

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**Key words:** debt, emergency fund, fragile family, income

Financial emergency preparedness is an important issue in personal financial counseling and planning. An emergency fund is a source when the income of a family accidentally declines or even loses and it is a key index to show a households' financial wellness (Gjertson, 2016). However, the Federal Reserve Board's report on the Economic Well-Being of U.S. Households in 2015 showed that many individuals lack preparations for financial emergencies. Only 47% of the respondents had an emergency fund set aside to cover three months of expenses. A lack of financial emergency preparedness is more severe for unmarried parents and their children as they are at greater risk of breaking up and living in poverty than more traditional families. In literature, these families are known as "Fragile Families." Fragile families have lower emergency savings than other groups. This paper explores the factors associated with having emergency funds for fragile families.

The present study used the fifth wave data from the Fragile Families and Child Wellbeing Study, which was conducted from August 2007 through April 2010. The study used probability weights to make the fifth wave representative of the original sampling frame. It also used replicate weights and jackknife method to estimate standard errors to improve standard errors estimation. The missing values in the dataset were handled using multiple imputation methods with ten iterations. The final sample size was 2661. The final dataset was analyzed using logistic regression models.

The study found that debt is significantly and negatively associated with having emergency funds. Both saving and home ownership is significantly and positively associated with having emergency funds. In addition, money controlled by father, income, financial reliance, and employment have no significant association with having emergency funds. At the same time, having debt undermines the positive influence of income on emergency saving. Furthermore, the odds of having emergency fund are statistically and significantly different from the higher income and lower-income group. A debt-free homeowner with higher income and saving behaviors are more likely to have an emergency fund. Thus, a program that supports fragile households to become homeowners and pay the debt in time or assist them financially will encourage them to develop an emergency saving behavior, eventually, protect them from financial hardship.

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## Financial Transparency Scale Development

Emily Koochel, Kansas State University

**Key words:** communication, decision making, financial management, financial partnership, financial secrecy, financial transparency, marriage, marital conflict, marital satisfaction, self-disclosure

Money is a central issue to couple relationships from the earliest years of partnership (Papp, Cummings, & Goeke-Morey, 2009). The ability for researchers, financial counselors and planners, and therapists to assess the multidimensional nature of financial transparency is critical in the early years of marriage as spouses combine their communication and management styles for the first time. Although researchers have looked at the role of financial decision making (Archuleta & Grable, 2012) and perceptions of unfairness in the marriage (Dew, Britt, Huston, 2012), both of which show positive associations with divorce and marital conflict, seemingly no research has been conducted on the relationship of financial transparency between married partners. Financial transparency is crucial in the early years of marriage when the couple is jointly managing resources for the first time. Based on the definition of transparent of “being open and honest; not secretive” (Merriam-Webster, 2016), financial transparency was defined as “the open and honest disclosure of one’s finances.” Although financial transparency is important, an instrument to measure financial transparency does not exist. To increase our capacity to study the role of finances in the marital relationship, the purpose of this study was to develop the Financial Transparency Scale (FTS) to assess financial transparency between married partners.

### Methods and Results

A sample of 183 married individuals in their first 5 years of their first marriage completed an online survey, consisting of the FTS and four related scales. Principal components analysis (PCA) was conducted to determine the FTS is comprised of three components: financial partnership, financial secrecy, and financial trust and disclosure of the individual partner. The first component, financial partnership (eigenvalue = 10.909), consisted of 18 items and accounted for 41.96% of the variance and had a high internal reliability of ( $\alpha = .95$ ). Component 2, financial secrecy (eigenvalue = 2.845), consisted of 3 items and accounted for 10.94% of variance with an internal reliability of ( $\alpha = .93$ ). Component 3, financial trust and disclosure of the individual partner (eigenvalue = 1.76), consisted of 5 items and accounted for 6.77% of total variance with an internal reliability ( $\alpha = .83$ ). The FTS was positively correlated with four related scales: the Kansas Marital Satisfaction Scale, the Shared Goals and Values Scale, the Frequency of Financial Management Scale, and the Communication Patterns Questionnaire – Short Form, each of which are key behaviors of financial and marital satisfaction.

### Discussion with Practitioner and Research Implications

The FTS will benefit financial practitioners as they can use the scale to determine the level of financial transparency between married individuals, drawing attention to areas of concern such as financial secrecy between partners. For researchers, this scale provides a measurement for a sophisticated perspective on the interpersonal factors that mediate financial transparency between married individuals.

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## **Foundational Knowledge for Evidence-Based Financial Coaching**

*Lucy M. Delgadillo, Alena C. Johnson, and Cindy R. Stokes, Utah State University*

**Key words:** behavior change, financial coaching, goal setting, motivation interviewing, solution focused

While not possible to review all coaching approaches in the scope of this poster, it is helpful to examine several common models appearing in the literature. Select models with well-defined frameworks were chosen to provide a reference for the emerging field of financial coaching. This poster will include a brief overview of the theoretical models and their application. The theories and methods described in this poster include: (a) the Humanistic Approach, (b) Goal Setting Theory, (c) the Transtheoretical Model of Behavior Change, (d) Motivational Interviewing, and (e) Solution-Focused Coaching.

**Humanistic Approach:** The growth-oriented view of the person, the coach-client relationship-- also known as working alliance-- and empathy are concepts borrowed from the humanistic perspective that is applied in coaching. Coaches are there to enhance the "client's natural potential for natural growth" (Stober, 2006, p. 20). Growth could range from achieving financial health to implementing small positive financial changes in one's life (Stober, 2006). Humanistic theorists see the coach-client relationship as an essential aspect of change and a core principle in the coaching process. When a financial coach approaches a client with the belief that the client is capable of [positive] growth, they then work *with* the client rather than *on* the client. The result of this engagement is a working alliance.

**Goal Setting Theory:** Goal setting is an important component of motivation, self-regulation, and achievement. The goal-setting theory was developed by Locke and Latham (1990). Goal setting theory states that not all goals are created equally. There are different types of goals (e.g., learning, performance), and there are even goal hierarchies. Ives and Cox (2012) highlights three most important aspects of goal construction: (1) goal setting (what), (2) action planning (when and how), and (3) motivation (why).

**Transtheoretical Model of Behavior Change (TTM):** The TTM assesses an individual's readiness to act on a new, healthier behavior, and provides strategies and processes to guide the individual through the stages of change (Prochaska, 1999). The key insight of this model is that it introduces different stages of change. These stages are: (a) pre-contemplation, (b) contemplation, (c) preparation, (d) action, and (e) maintenance. Financial coaches may be able to help clients in every stage of the change process by using this theoretical approach.

**Motivational Interviewing (MI):** Not a coaching approach per se, MI was originally developed for counseling addictive behaviors in the 1980's. Grounded in a linguistic approach to behavior change, MI practitioners employ a highly stylized framework to assist clients in exploring and addressing ambivalence to change. The MI approach is cited as particularly effective in situations where the client is less motivated to change and stuck in a less than ideal behavioral pattern (Butterworth et al., 2006). An MI process follows four stages: 1. engaging – to discuss issues and establish trust, 2. focusing – to determine specific patterns to be addressed, 3. evoking – to advance motivation, confidence, and readiness for change, and 4. planning – to develop specific implementation strategies.

**Solution-Focused Coaching Models (SFM):** Influenced by the field of brief therapy and earlier work by psychologists Maslow and Rogers, SFM espouse a philosophy that clients have the capacity to build skills to solve their own problems through self-directed learning. A solution-focused approach is centered on helping clients to gain different perspectives on a current situation, as well as develop new behaviors (Wilson, 2011). This coaching approach focuses on future possibilities, rather than past problems, and is typically conducted over a shorter duration, perhaps 2-6 sessions.

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## Gender Differences in the Financial Socialization of Adolescents: An Exploratory Qualitative Study of Parental Instruction

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**Key words:** financial education, financial socialization, gender, parents, youth

### Abstract

The purpose of this study is to explore gender differences in the financial socialization of adolescent boys and girls. Children enrolled in a financial education summer camp were interviewed to discuss their knowledge, and the methods their parents use to teach them about money. In addition to the children, parents were recruited to participate in an interview about the socialization methods used in their homes, and the methods their parents used. Preliminary data suggests that gender may influence how a child is financially socialized.

### Background and Purpose

The National Financial Educators Council (2015) reported that youth ages 10-14 had an average score of 54% on a financial literacy survey given, and teens, ages 15-18, scored 60% on average. In addition, research has found that boys perform better on financial literacy tests than girls (Hanna, Hill, & Perdue, 2010; Butters, Asarta, and McCoy, 2012). This gender gap has also been found to be prevalent in adulthood (Lusardi & Mitchell, 2011; Bucher-Koenen, Lusardi, & Alessie, 2014). Researchers have postulated that economic, cultural, and social structures that treat men and women differently may have implications on how men and women learn about money. The purpose of this study is to explore gender differences in the financial socialization of adolescent boys and girls based on their parental financial socialization.

### Method and Results

An in-depth, semi-structured interview was conducted to explore themes related to financial socialization, resource management, and feelings and beliefs about money. Based on a preliminary analysis of the data, several themes emerged. Both girls and boys reported feeling comfortable talking to a parent(s) about money. Both groups reported their parent(s) coached them on financial matters. For girls, parental instruction focused on comparative shopping skills or savings goals e.g., college. Boys reported receiving instructions on how to earn and save money. Both groups were aware of the role each parent played in managing household finances. Although the “financial manager” in the home varied, neither group felt that one gender was solely responsible for managing money. They also reported that competency and not gender should determine the role of the household financial manager.

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## **Impact of Coaching on Student Loan Exit Counseling**

*Danielle Champagne, University of North Texas*

**Key words:** assessment, exit counseling, financial coaching, loan repayment, student loans

According to lendEDU (2016), 43.3 million Americans are carrying student loan debt and 9.1 million are not actively repaying their student loans. This means states, institutions of higher education, and the federal government must provide more proactive and effective repayment education to borrowers. Student loan borrowers are being educated through a variety of means, but little research has been done on how these educational methods impact borrowers' confidence level in repaying their loans and in picking a plan that works best for their financial life. Research from the CFPB (2015) shows that servicers often confuse borrowers and even discourage them from alternative repayment plans that may relieve their financial stress.

The UNT Student Money Management Center began providing exit loan counseling sessions to its graduates and alumni in 2014. Applying the existing coaching model used for traditional financial coaching sessions to the exit loan counseling sessions yielded a hybrid session that still fell within the compliance guidelines of the Department of Education's requirements for exit counseling, but added the enhanced roles of clarification, guidance, planning, and encouragement for students during the session. Exit loan counseling requirements were incorporated into the KSA (Knowledge-Skills-Action) coaching model and students were assessed on a variety of factors. Application of this model and practice can be made to community and military practitioners since repayment spans well beyond college years.

Through quantitative and qualitative assessment from students who received this counseling, the Center assessed whether coaching had: increased students' confidence in their ability to repay their loans, reduced financial stress related to repayment, and increased students' ability to advocate for themselves when working with their servicers. The Center then examined how their exit loan counseling program has empowered students.

Students were asked to rate themselves on a pre- and post-test form related to skills and perceptions. Their skills related to financial goals and budgeting were shown to increase by 31% and 24%, respectively, as a result of the exit loan coaching session. Student perceptions all increased as well – financial decision-making (19%), money management skills (22%), confidence in financial future (36%), and preparedness to handle financial struggles (41%). In addition, students were asked to identify learning that occurred during the session. Of the students who responded to the post-test, 75% were able to specify learning. A theme analysis was conducted for the qualitative data, and 6 themes resulted: Options, Making Payments, Action/Timing, Money Management, Resources, and Types of Loans. This is a clear cross-section of the hybrid of the traditional coaching session and the exit loan counseling session – students were learning from both areas and synthesizing the information.

The data also provide insight into how exit loan counseling can be improved to provide students with greater confidence in choosing a repayment strategy that allows them to address the repayment while working towards long term financial goals. This poster will highlight results and outcomes from FY16 attendees to show the effectiveness we have found in the individualized coaching model as applied to exit loan counseling. Discussion with attendees will show how to incorporate model into higher education, community, and military settings.

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## **Impact of Skegee Money \$mart on Bridging the Financial Knowledge Gap of Collegiate Youths**

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**Key words:** collegiate youths, financial literacy and education, financial capability, impact assessment, social learning opportunity

### **Introduction**

The need for financial education has become more important than ever, as collegiate youths have been taking increasingly more financial responsibilities and striving for financial independence at earlier ages. The financial decisions students make in college have a great influence on their academic performance and financial situation after college. Chen & Volpe (1998) mentioned that African-American (AA) students are the least financially literate among all ethnic groups. Lusardi & Mitchell (2008) underlined that AA students have lower financial literacy scores than their white peers. The major objectives of the study were to assess the training needs of collegiate youths regarding financial literacy education and to strengthen their financial capabilities.

The Tuskegee University Cooperative Extension (TUCE) has launched a financial literacy and education program named Skegee Money \$mart (SM\$). SM\$ was designed to strengthen the financial knowledge and skills of collegiate youths. The program is especially targeted towards freshmen, but open to other students as well. The SM\$ applied different approaches such as survey for needs assessment, series of financial workshops, quick fact sheet, money \$mart poster contest, piggy bank to develop saving habit, in-person and mini-group counseling and coaching, money \$mart booths set up at AgFair and Carnival; Extension Day, and National AgDay. SM\$ conducted a case study to measure the change in knowledge, attitude, skills, and aspirations of the participants followed by a summative evaluation. Frequency and descriptive analyses of the 57 respondents were carried out following the data cleansing.

The analyzed data reveal that 60% of students did not have any formal opportunities to acquire financial knowledge and skills in high school. The surveyed data also showed that 65% of the respondents have not had any opportunities to participate in financial education in college so far. Of the total, 86% of the students were willing to increase their financial knowledge and skills. Similarly, 79% of the respondents listed pay yourself first, preventing from identity theft and fraud, and predatory lending practices the other most preferred topics. The summative evaluation revealed that all (100%) of the respondents increased their awareness and strengthened their KASA (knowledge, attitude, skills, and aspirations) in the prioritized areas of financial literacy and education. Of the total, 75% of the respondents prepared their first ever savings plan but all of them (100%) liked savings in the piggy bank. The piggy bank project seemed to have a great impact on developing the saving habits of each student. Similarly, 80% of the respondents developed a monthly spending plan and challenged themselves to maintain a positive balance throughout the year. A majority (60%) of the students expressed their willingness to pass the acquired SM\$-KASA onto family members, friends, colleagues, neighbors, and anyone else in their contact.

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## **Love and Money**

*Camila Haselwood and Emily Koochel, Kansas State University*

**Key words:** attitudes, behavior, communication, couples, curriculum, finances, love, physiological stress, relationship satisfaction, stress

Love and Money was a curriculum developed to guide couples through conversations about the role money plays in their relationships. Conversations were monitored for indicators of physiological stress, while patterns of heightened stress were analyzed to identify curriculum revision. Couples' financial and relationship satisfaction, attitudes, and behaviors were evaluated through pre-and post-assessment, as well as follow up assessments at 3, 6, and 12 months.

The theory of stress and coping by Lazarus and Folkman (1987) serves as the foundation for this curriculum. During the stress appraisal process, individuals evaluate the situation, the significance, and how it will affect their well-being. If stress is determined to be manageable, available resources are utilized to reduce the impeding stress. If the stress is present after utilization of the available resources the individual will employ their coping strategies to overcome the stress to avoid a stress pile-up (Lazarus & Folkman, 1987).

### **Stress and Communication**

Archuleta, Britt, Tonn, & Grable, suggested financial stress and communication strategies may be indirectly associated with marital satisfaction (2011). When an individual is under stress, decisions are made based on emotions, habits, and instincts (Pham, 2007). As stress arises, it affects your rational judgement needed to meet financial goals and implement financial plans (Britt, Lawson, & Haselwood, 2016). Individuals who have lower physiological stress show stronger signs of wanting to change behavior, which indicates a readiness to make financial changes or set financial goals (Britt et al., 2016).

### **Methods**

Data was sought from 12 couples between May and August 2017. The curriculum included five lessons covered over a five-week period lasting 60 to 90 minutes each. Couples were randomly assigned to one of three facilitators. Objective physiological stress was collected from each partner utilizing Empatica E4 physiological stress wristbands. Subjective stress was measured with two questions, on a scale of 1 to 100, how much stress respondents experienced due to their financial situation, and how much stress their financial situation caused their relationship.

### **Results**

The study is in the early stages of implementation, and data is still being analyzed. Preliminary results indicate the curriculums mediating effects for reduced psychological stress, increased spousal communication and relationship satisfaction. Additionally, initial qualitative analysis reveals couples attribute conflict to three primary reasons—differing money priorities and management style, and feeling financially insecure. Personal backgrounds, previous financial decisions, communication, relationship inequality, and lack of financial knowledge were also cited.

### **Conclusion and Implications**

The purpose of this project was to test the immediate and intermediate effectiveness of an empirically-based curriculum to fill a supplemental need in Financial Therapy. This curriculum serves as a guide for couples, academics, and practitioners. As a greater result, completion of this program may reduce the likelihood of divorce due in part to the increased satisfaction within the marriage, and reduced psychological stress.

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## **Measuring Financial Knowledge, Confidence and Action via Site Intercepts**

*Jonathan Sparling and Lorinda Diehl, American Student Assistance*

**Key words:** budgeting, confidence, credit, jobs, student loans

### **Abstract**

This poster session reports on the results of outcomes measures, via web based interactions, through the utilization of one web-based, financial education platform. Results report on end user financial knowledge, confidence and intended action following financial content consumption. The financial education platform is built upon an approach grounded in adult learning theory that utilizes best practices associated with social networking and sustainable behavioral change and includes content on general financial topics, delivered using adult learning principles.

**Overview:** In 2015, our organization implemented a series of site intercepts to measure the impact of articles and videos within our financial education platform. We identified twenty-one pieces of financial content that fit (broadly) into four main areas: budgeting, credit, student loan repayment and job/career preparation. After consuming the content, users were asked to complete a three-question survey that measured knowledge of the content, confidence (i.e. "I now feel more confident?") and intended action (i.e. "How likely are you to?"). As of January 2017, nearly 1,200 surveys have been completed by 900 unique end users.

**Results:** Across all four areas, results are encouraging. Aggregate highlights for each area include:

#### **Job Content**

- 348 total completes from 332 unique users across eight job content site intercepts
- 75% of users agreed/strongly agreed that the content made them feel more confident
- 80% of users were likely or very likely to take action after viewing the content.
- "Building a Better Resume" article, 97% correctly identified the primary benefit of the PAR model

#### **Credit Content**

- 162 total completes from 155 unique users across four credit content site intercepts
- 74% of users agreed/strongly agreed that the content made them feel more confident
- 68% of users were likely or very likely to take action after viewing the content
- "How Your Credit Score is Calculated" article, 73% correctly identified the three most important factors that determine a credit score.

#### **Student Loan Content**

- 286 total completes from 278 unique users across six student loan content site intercepts
- 64% of users agreed/strongly agreed that the content made them feel more confident
- 78% of users were likely or very likely to take action after viewing the content (e.g. "x")

#### **Budgeting Content**

- 173 total completes from 164 unique users across the three budgeting content site intercepts
- 74% of users agreed/strongly agreed that the content made them feel more confident
- 82% of users were likely or very likely to take action after viewing the content (e.g. "x")
- "5 Budgeting Mistakes You May Not Realize You're Making" article, 94% correctly identified how much more the average person spends when using plastic instead of cash.

**Background of our Organization:** Building on 60+ years' experience working directly with student loan borrowers, our consumer-facing online program provides colleges and students with one-on-one student debt counseling, as well as educational articles, tools, and lessons that develop measurably better financial and career skills.

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## **Profile of Renters during 2002-2012**

*Yoon G. Lee, Danielle Schirner, and Rebekah Thomson, Utah State University*

**Key words:** affordable housing, financial education, homeownership, low-income families, renters

About 20 million low-income families are living in poverty, and most of these families are renters. An increase in foreclosures changed many homeowners into renters after the 2008 financial crisis (Mayer, Pence, & Sherlund, 2009). The main objective of this study was to identify a profile of renters in terms of their financial and socio-economic characteristics during the 2002-2012 period. Understanding factors associated with being a renter before and after the Great Recession can provide insights for financial educators, researchers, and policy makers.

Using data from the 2002-2012 Rand Health and Retirement Study (HRS) data file, this study investigated factors affecting being a renter. Logistic regression analyses were performed to identify significant predictors associated with the likelihood of being a renter; a binary variable (1 if Respondents reported renting housing, 0 if otherwise) was created, as a main dependent variable, and was included in the logistic regression models. The descriptive results indicated that financial asset ownership rates (e.g., checking accounts, IRA's, and stocks) among renters significantly decreased from 2002 to 2012. In particular, 20% of the renters reported having zero or negative net worth in 2002, but this percentage increased to 36% in 2012. The results of logistic regression analyses summarized that those with lower job tenure, part time workers, ethnic minorities (Blacks, Hispanics/Asians), unmarried singles, males, less than 50 year-old were more likely to be renters. With respect to the effect of economic status on the likelihood of being a renter long-term, the logistic regression results showed that, those with lower levels of income and wealth were more likely to be renters.

The findings of this study reveal that the percentage of renters increased from 14.5 percent in 2002 to 25.6 percent in 2012. The rise of renters implies that renters could be less likely to be involved in the community, and high mobility could create less stability and less control over living environments, which could influence jobs (Rohe, Quercia, & Van Zandt, 2007). Achieving housing security for every family could enhance their economic, physical, and psychological well-being. It is, therefore, essential for federal and state governments to consider increasing stable and affordable housing for low-income families. Financial educators could teach low-income populations financial topics such as budgeting, saving, investing, and homeownership.

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## **Socioeconomic Disparities in Mental Health and Financial Conditions**

*Rajashri Manjunath and Sophia Anong, University of Georgia*

**Key words:** cumulative advantage, economics, finances, human-capital model, mental health, socioeconomic status

### **Abstract**

The purpose of this undergraduate research project is to examine the relationship between self-rated mental health and financial well-being indicators such as bill payment difficulty, economic shocks, and general attitudes and concerns regarding financial management. While accounting for health care access and including factors such as insurance coverage, health care utilization, and chronic conditions, these relationships are further analyzed for socioeconomic disparities.

Although some studies have found that high debt (in relation to income) contribute to perceived stress and mental health, others have claimed that perceived financial strain has no impact mental health (Selenko & Batinic, 2011). The study of Hong (2012) and the study of Sweet et. al (2013) claim that education, job opportunity, and mental stability all have a positive relationship. Yet, the study of Selenko and Batinic (2011) shows that mental health and employment status are not connectable. These mixed results necessitate further studies of these relationships. The theory of cumulative advantage and the human capital model guide this paper (Merton, 1988; Grossman, 1972).

The main hypothesis is that poor self-rated mental health and actual depressive symptoms are associated with financial conditions and this varies across socioeconomic groups which are categorized in this study as race/ethnicity, gender, marital status, income, and education. To test this, data from the Sample Adult, Person and Family files of the National Health Interview Survey (NHIS) was merged using a match-merge technique resulting in a multi-year data pool from 2005 to 2015. The results show that perceived poor mental health is more reported by the historically disadvantaged groups e.g. less educated, lower income, ethnic minorities, and women. The results also show that those who reported financial worries and claimed to use financial coping strategies—such as working multiple jobs and skipping medications—were linked to lower mental health status. Financial and health counselors as well as education programs should target those with cumulative disadvantages specifically to raise awareness, improve coping strategies, and increase opportunities to remove stigmas associated with both mental health and negative financial situations. This will help reduce intergenerational negative cycles.

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## The Complexity of Retirement Decision-Making: Insights from a Literature Review

Yilan Xu, University of Illinois, Barbara O'Neill, Rutgers University, Michael Gutter, University of Florida, Lorna Saboe-Wounded Head, South Dakota State University, D. Elizabeth Kiss, Kansas State University, and David Evans, Purdue University

**Key words:** retirement planning, retirement saving, decumulation, Social Security.

In 2017 members of a multi-state research team investigating a variety of financial decisions facing consumers across the lifespan conducted a literature review focused on the complexity of the retirement decision for individuals and families. This poster presented a summary of what financial educators and planners need to know to meet the needs of pre-retirees. Selected findings include the following.

- There is a gap between planned retirement age and actual retirement age. While 17% of workers plan to retire between ages 60-64, 38% reported retiring in that age range. In addition, nearly 40% of active workers expect to retire at age 70 or beyond while only 4% of retirees report that they actually did (Greenwald, Copeland, & VanDerhei, 2017).
- Most people will face income decline after retirement. It is estimated that about 43% of Americans are at risk of facing significant declines in retirement income (Skinner, 2007).
- More people participate in defined contribution (DC) plans when enrollment is automatic. A Vanguard study (Clark, Utkus, & Young, 2015) found that DC plan participation rates were 91% when employees were enrolled automatically versus only 42% with voluntary enrollment.
- DC plan contribution rates are low. Most of the plans surveyed had a 3% deferral rate while 15% deferred 6% of workers' pay (Clark, Utkus, & Young, 2015).
- Retirement saving needs are higher than most people would expect. The average full-time worker needs to accumulate 11 times final pay to be sufficient (The Real Deal, 2012).
- Most Americans have not done retirement planning. Only 41% of respondents reported having done a retirement savings calculation (Greenwald, Copeland, & VanDerhei, 2017).
- Most Americans depend on Social Security for post-retirement income. It is true even for those with relatively high-income because of their safe investments as well as housing expenses and tax payments (Kotlikoff, Marx, & Rizza, 2006).
- Younger generations face unique challenges for setting and meeting their retirement saving goals. Millennials who graduate college and begin their careers with \$30,000 in student loan debt could wind up with \$325,000 less in retirement savings than their debt-free peers assuming a standard 10-year loan payback period (Bier, 2017).

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## **The Deference of Awareness, Planning, and Preparedness for Future Money Goals of Japanese Consumer**

Makiko Hashinaga, Sapporo Gakuin University

**Key words:** *financial awareness, financial planning, financial preparedness, Japanese consumer*

The Family Income and Expenditure Survey 2016 conducted by Statistics Bureau, Ministry of Internal Affairs and Communications in Japan, reported that the average savings of Japanese households with two or more persons was 17,910 thousand yen. It showed a gradual increase from 2,820 thousand yen for individuals under the age of 29 to 23,310 thousand yen during ages 60–69. On the other hand, the average minimum monthly living cost for a two-person retiree household was 220 thousand yen per month and the average comfortable monthly living cost was 349 thousand yen per month in Japan (Japan Institute of Life Insurance 2016). This implies that if one lives for 20 years more from the age of 65, the minimum retirement cost would be 52,800 to 83,760 thousand yen.

In the arena of financial planning, it is believed that the best savings method is to divide into several accounts according to the financial goals. Moreover, retirement planning should be started as early as possible so that the time value of money can be taken advantage of. When do consumers in Japan start saving for retirement? This study examined their awareness, planning, and preparedness for future money goals using the Financial Literacy Survey 2016 conducted by the central council for financial services information in Japan.

The central council for financial services information in Japan conducted the Financial Literacy Survey 2016. This was the first largest national survey ever conducted. It involved 25,000 people, aged 18 to 79, belonging to the same Japanese social demographic groups. It examined Japanese financial knowledge and behavior, collecting information through internet questionnaires from February 29 to March 17, 2016. The survey evened out the sample across prefectures, ages, and gender and corrected the data by random sampling; more than 100 samples per prefecture were corrected. This study utilized the survey to analyze the deference of awareness, planning, and preparedness for future money goals depending on the job classification.

The survey included nine financial goal questions on the following subjects: (1) retirement expense, (2) education expense for children, (3) housing expense, (4) medical/nursing care expense for self, (5) medical/nursing care expense for family, (6) car purchasing expense, (7) wedding expense for self, (8) wedding expense for children, and (9) other. These goals were examined in four stages. The first stage required those who answered positively for a certain financial goal to respond to further questions, such as how much they recognized the financial goal (awareness), how they were planning to achieve the financial goal (planning), and whether they had already obtained the amount required to achieve the financial goal (preparedness).

Demographic questions examined characteristics including private sector employees (n=8,061), government

employees (n=877), self-employed workers (n=1,747), part-time job workers (n=3,507), household wife/husband (n=5,225), students (n=1,212), and unemployed (n=3,910). For retirement planning, both male and female government employees (male: n=293, 40.3%; female: n=54, 36.0%) had the highest rate of awareness. They also had the highest rate for planned retirement (male: n=213, 29.3%; female: n=44, 29.3%). However, for preparedness for retirement, female government employees were the highest (n=28, 18.7%) followed by male government employees (n=162, 22.3%). The highest in preparation were the unemployed (n=674, 23.9%). This was because this sample comprised more than 90% individuals aged 55 to 79. On the contrary, the lowest awareness was for both male and female students (male: n=38, 5.6%; female: n=23, 4.3%). They also had the lowest rate for planning (male: n=19, 2.8%; female: n=9, 1.7%) and being prepared (male: n=8, 1.2%; female: n=2, 0.4%).

Based on these findings, foresighted preparedness was difficult for students without enough money. Thus, financial education should be provided in order to increase the awareness on early planning for long-term goals, such as retirement planning. This will allow them to gain the benefit of money's time value.

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## **The Impact of Emergency Financial Assistance: An Effort to Help Students**

*Diana Kyu Yacob, Kansas State University and Rachelle Thompson, Northern Virginia Community College*

**Key words:** emergency financial assistance, community college, completion, persistence, retention

The attraction of financial aid packages and scholarships puts college in the grasp of students who would have otherwise been unable to attend. However, even with financial aid and expected family contributions, the unmet need of these students can range from \$4,834 to \$10,181 (Choitz & Reimherr, 2013). Low-income families tend to experience financial hardship which include food and housing insecurity while enrolled in school (Broton & Goldrick-Rab, 2016). A recent study found that 49% of students ran out of money at least once in the past 12 months, with finances listed as the number one reason for dropping out (CCCSE, 2017). Community colleges, as well as policy and advocacy organizations across the country are attacking these gaps with resolves to provide students with more effective and holistic support to ensure student success.

Northern Virginia Community College (NVCC) offers academic and non-academic emergency grants to students on all of NVCC's six campuses. These grants are to provide students with financial support during an enrollment, when experiencing an emergency. Funds are paid directly to third party vendors but can be used towards rent, car payments, transportation, books, and other expenses. In addition to the grant, students are offered access to the campus food pantry and referrals to food banks are given, if needed. These implementations have been a part of the NOVA's Working Students Success Network, a student success initiative of Achieving the Dream which seeks to bolster the financial capability and academic persistence of low-income students in community colleges.

This poster reports the results of an exploratory analysis of the emergency financial support and will examine its impact on student persistence, retention, and completion. Desired outcomes include successfully finishing the semester with passing marks, enrolling in the next semester or completion. As defined by NVCC, student persistence is defined as completing classes with a Pass (in a Pass/Fail course) or a C- or higher (in a letter graded course). Retention is defined as enrollment in a subsequent semester and completion is defined as completion through transfer or earning a degree or certificate. Socio-demographic information was also collected. The results will have important implications for community college programs. As a whole, community colleges seeking to increase their support to students, may want to implement academic or non-academic financial emergency grants to reduce student dropout or courses failed.

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## **To Spend or Not to Spend: Where do Emerging Adults Learn to Manage Money?**

*Bryce Jorgensen, New Mexico State University and Jakob Jensen, East Carolina University*

**Key words:** Consumer socialization theory, emerging adulthood, money management, responsible spending behavior, geographic location

Using consumer socialization theory, this study explored the role of parents, peers, employment, and media as socialization agents of the spending behaviors of college students. Data from the Emerging Adult Financial Capability Study (N = 2,406) from three geographic regions (Northeast, South Atlantic, and Mountain) were analyzed using hierarchical linear regression models. Greater parental influence in learning about managing money, as well as greater employment influence predicted more responsible spending behaviors. Greater peer influence and greater media influence predicted less responsible spending behaviors. In addition, parents had a greater influence in financial learning for students from the Northeast region than for students from the other two regions. Peers had a greater influence for students from the Northeast than for students from the Mountain region. Additionally, both media and employment had a greater influence for students from the Northeast and South Atlantic regions compared to students from the Mountain region. Those with the most responsible spending behaviors were those from the Mountain or Northeast regions with high parental influence on financial learning. Conversely, the group with the least responsible spending behaviors were those from the South Atlantic region who reported low parental influence on money management. This study highlights the importance of the home and the workplace as the nexus for learning responsible money management behavior for emerging adults.

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## **Using a Financial Services Inventory to Improve Programmatic Delivery to Underserved Communities**

*Derrick Robinson, University of California, Patti Wooten-Swanson, and Katherine Soule, University of California Cooperative Extension*

**Key words:** financial services, geography, inequality, youth, young adults, access barriers, financial services access, GIS spatial relationship

Community developers and financial educators are interested in learning methods that can improve effectiveness of programmatic activities meant to improve overall economic wellbeing of community/clientele. The objectives of this study is to identify how GIS can be utilized to disseminate financial services access point (FSP) information, how this information is used to develop a FSP inventory for a specific spatial area, and increase overall capacity to develop spatially tailored programmatic activities, to introduce innovation and/or potential policy advisement. A financial service point is defined by money transferability, check cashing ability, savings capability, investment capability, loanable fund access. Alternative financial service points are nontraditional financial service institutions (i.e., check cashing storefronts, payday loan facility, liquor store, etc.).

We use ArcGIS to geocode FSP locations (N= 1815). We found that FSPs seem to locate densely in similarly defined areas based mainly on areas with higher household median income. This leads to identifiable FSP deserts. These deserts increase costs of creating effective development opportunities and economic self-sufficiency for households and communities. We believe this is especially true in areas with high density low income populations, and possibly high density youth populations.

Using ArcGIS, we further explore the spatial implications of location choice for FSPs. Specifically, as these location decisions relate to FSP deserts and population demographics. The poster will illustrate geospatially where FSP deserts exist. Viewers of the poster will be able to understand how this geospatial information can be used to focus programmatic activities and resources to FSP desert communities. We look at this issue from the lens of FSPs in the County of San Diego, CA. We are exploring how georeferenced FSPs allow users to match location characteristics (i.e., building characteristics, institution characteristics (i.e. youth, military, senior, mobile banking), neighborhood characteristics, etc.) to choice of a location versus another location by FSP. This information will help provide predictors of FSP deserts based on specific demographic neighborhood characteristics. This will allow professionals to develop programmatic activities focused on helping clientele in FSP deserts to mitigate costs for creating and maintaining effective economic development opportunities. We also can focus on efforts to increase housing and food security for communities, households, and youth in FSPs.

Currently, we have overlaid demographic information at the Census tract level using data from the American Community Survey (ACS) where we include household median income, proportion of population by age and race. We are also adding proportion of population participating in specific industry types. We are currently looking at other factors including, but not limited to: Bureau of Labor Statics Business Patterns, crime incident level data, consumer/producer surplus estimates for opening/closing locations

This information can help to provide technological innovation effectiveness in a specific area. Innovations such as increased usage of online resources and mobile devices to access financial services. Programs could be developed to encourage individuals and households on effective strategies for overcoming financial services deserts.

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## **Using Gamification (Digital Badges) to Structure Financial Education Across a University System**

*Andrea Pellegrini, University of Illinois System*

**Key words:** digital badges, financial capability, financial education, money management, virtual credentialing

### **Background**

After recognizing opportunities to combine existing digital infrastructure and campus programming to address student & staff desires for more structured financial education offerings, a model was implemented leveraging a digital badges platform to encourage participation in financial education programming and allow for the cross-promotion of opportunities across the University of Illinois System.

The U.S. Department of the Treasury (2010) proposed five Financial Core Competencies that serve as the foundation for the Financial Literacy Badges Program. These Financial Core Competencies address the minimum education requirements not provided in the University's basic education curricula.

### **Overview**

The Financial Literacy Badges Program structures University financial education initiatives to align with the National Financial Capability Standards produced by the Department of the Treasury: borrowing, earning, protect, spending & saving.

The program incorporates the use of Mozilla's OpenBadges platform, where students can display digital badges representing their accomplishments through this program online. The badges earned can be electronically credentialed via public backpacks on sites such as LinkedIn.

The goal of the Badges Program is to provide a structured option for expanding students' financial skills and knowledge related to each one of the previously mentioned financial topics or "financial core competencies". Badges are already commonly used in our culture to recognize achievements through existing institutions, which makes the concept of badges for financial education an easy parallel for college students. For instance, Girl Scouts and Boy Scouts have traditionally used badges and pins to recognize and display achievements. Social media sites have successfully used badges to encourage their usage and engagement. Additionally, grade point average, certificates and diplomas, although not referred to as "badges", are built on the concept of recognizing achievement.

### **Summary**

Students that participated in badge-eligible financial education programs were informed that they could earn one digital badge for each of the five core competencies if they complete a minimum of three educational activities (e.g. workshops or webinars) per competency, at least one of which was highly encouraged to be in-person. Since fall of 2014, over 14,000 individuals have participated in badge-eligible programming, including workshops, webinars, and other online programming.

A structured approach to financial education helps students identify skills they want to develop now and resources for how to make better financial decisions later. Using digital badges provides a cultural conduit for many young people to transition towards making informed financial decisions on their own, often for the first time in their lives. Mirroring the national financial capability standards helps the digital badges program align with federal initiatives surrounding financial literacy, making life-long learning another easy transition for participants.

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## **Visualization and Financial Knowledge**

*Michael Kothakota and Elizabeth Kiss, Kansas State University*

**Key words:** financial knowledge, financial literacy, instructional design, visual information

Financial independence is at the heart of healthy adult life. Basic numeracy and foundational financial knowledge are required for financial independence. Consumers need solid financial literacy in order to make appropriate decisions about financial products including credit cards and personal loans, as well as investments like stocks, bonds, or annuities. Education programs focusing on personal finance are important for developing an informed public. Improving the delivery of financial education is important, and the effects should be significant and long-lasting.

Modern instructional design techniques combined with visual display of financial information may improve comprehension of financial concepts. This study explored whether or not financial information presented visually can improve financial knowledge scores through increased comprehension. Using modern tools, properly constructed visual information as part of financial instructional design can be helpful in transmitting information to learners.

### **Methodology**

A survey was constructed to assess a between group difference using two treatments and a control group. The dependent variables were the individual scores on each of five financial knowledge questions as well as a total number of correct. The variable of interest was the treatment.

### **Results**

Multiple comparisons analysis of variance (ANOVA) was conducted between the three groups on individual questions as well as combined scores. Combined mean scores for the control, text treatment, and visualization plus text treatment were 3.29, 3.57 and 3.87 questions out of five correct, respectively. Results were significant at the .05 level. For all questions, the visualization plus text treatment had the highest percentage of correct responses.

Overall results of visualization plus text treatment having higher scores persists across demographics. Whether or not someone attended a financial class appeared to have no effect on the number of correct answers.

Given that the dependent variable of number of questions correct is identified as count data, multi-variable analysis was modeled using a Poisson regression, with backwards elimination variable reduction. Significant variables ( $p < .05$ ) included both the text and visualization treatments, Education-Masters, Education-Professional, Gender-Male and Race-White. Whether or not someone received the visual treatment had the largest effect on the dependent variable, with a coefficient of 0.86. Race-White had a coefficient of 0.31, while Education-Professional was 0.25 and Education-Masters was 0.27. Gender-Male had an effect of 0.13 and those who received the text-only treatment was 0.11.

### **Discussion**

These results are encouraging and should be studied further. They suggest that there may be ways of using visualization constructively in financial literacy education. Future analyses with these data are planned to examine how visual interventions can assist with cognitive scarcity.

Future research should focus on both replication and variation. Both the visuals used and text information provided can be varied to try approaches which may be more effective than those used in this study. This effort can go a long way in helping develop effective financial education interventions.

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## When do young adults in romantic relationships talk about money?

Joyce Serido, and Jessica Rudi, University of Minnesota-Twin Cities, and Soyeon Shim, University of Wisconsin–Madison

**Key words:** couples, couples and finances, financial communication, young adults

Although there is some evidence that that romantic partners gain influence with respect to financial matters during the period in which the relationship is being established (Serido et al., 2015), research examining the association between finances and romantic relationships among young adults is an understudied topic. However, examining this association in the early stages of a relationship (e.g., dating, cohabiting, or recently-married) may be particularly helpful in identifying strategies that promote positive financial communication and problem-solving skills. Such an approach may provide long term benefits to the individual and the couple, by identifying ways to avoid or at least minimize conflictual financial interaction patterns.

Negative financial interactions (e.g., financial problems and disagreements) are associated with lower relationship satisfaction (Britt & Huston, 2012), increases in marital distress and even relationship dissolution (Dew, 2007; Dew, Britt, & Huston, 2012). However, there is some evidence that shared values and discussions about finances are beneficial (Archuleta, 2013). Yet, if given a choice between talking about money or talking about sex, most couples would prefer to talk about sex (Atwood, 2012). Among Millennials (aged 18-34), 88% who are married or living with a partner reported that financial decisions were a source of tension in their relationship, yet only 42% discuss their financial goals as a couple (Eiger & Schiavone, 2016).

When do young adults talk with their partner about finances? Are there differences by sociodemographic factors (gender, race/ethnicity, family social class)? Is money talk associated with relationship satisfaction?

To answer these questions, we employed online survey data from young adults in committed relationships (N=545); 45% were married; 32% were cohabiting; and 23% lived apart. Participants consisted of 67% women and 33% men; 67% were white, 17% Hispanic/Latino, 8% Asian, and 2.4% African American 1.7% Native American; and 4.9% other/missing. Regarding parental socioeconomic status (reported in Wave 1), 34% were from low-income (annual income below \$50,000) 23% were medium-income (annual income between \$50,000 and \$150,000), and 43% were high-income (annual income above \$150,000).

### Preliminary Results

- The majority of young adults in our sample reported talking about finances (97.2%)
- Although there were no differences by gender or SES, Asian participants reported more and earlier dialog about finances compared to other groups.
- For women, talking about money earlier in the relationship was positively associated with relationship satisfaction. For men, there association was not significant

### Discussion

These preliminary results suggest that the majority of the young adults, at least in this sample, are both willing and indeed are talking about finances prior to marriage. Further, these conversations appear to be beneficial for women without being detrimental to men. Additional analyses will be conducted to provide further understanding of these results and implications for education and practice.

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## **51 Interactive Ways to Teach Personal Finance**

*Barbara O'Neill, Rutgers University*

**Key words:** financial education, personal finance, technology

### **Target Audience**

Youth and adult financial educators who are interested in learning about creative, personalized, and/or engaging financial education learning activities to incorporate into their work.

### **Objectives/Purpose**

1. Participants will learn about the importance of learner engagement in financial education.
2. Participants will learn about 51 interactive financial education learning activities.
3. Participants will try several financial education learning activities in a hands-on format.
4. Participants will use one or more new learning activities to engage their clients or students.

### **Description**

It is not enough for financial educators to simply impart personal finance information to learners and expect them to change their current financial practices. Learners need to be personally engaged in the delivery of financial education programs, especially at “teachable moments” when subject matter is most relevant to their lives. In addition, personal finance concepts should be delivered in engaging ways that capture learners’ attention and motivate them to change attitudes and adopt improved practices such as reduced spending and debt (Kingsbury, 2014). Learning activities matter because program outcomes matter. Financial educators today work in an “accountability era” where programs with measurable outcomes that are achieved, documented, and reported have a better chance of being funded than those with no, or a very cursory, evaluation. Program administrators and funders increasingly expect programs to show demonstrable outcomes, especially changed behavior and transformed lives (e.g., increased savings, reduced debt, purchase of a home, etc.). At the very least, they want to “see the needle moving” (i.e., evidence of small increments of positive progress by program participants).

To be effective financial educators who change the lives of clientele and keep stakeholders happy, practitioners need a “toolkit” of creative and interactive learning activities to make financial education more engaging to learners with different language skills, learning styles, interests, and prior personal finance knowledge. The toolkit should include both low-tech activities, such as Venn Diagram analyses, and technology tools, such as online Monte Carlo calculators, that can help students understand complex financial topics. The methodology of financial education programs is as- or more- important than subject matter content in fostering positive action and the key to success is engaging, interactive, and “sticky” (memorable) learning activities. This presentation will provide participants with a toolkit of 51 interactive personal finance learning activities that they can immediately put into practice. Examples include Coats of Arms, BINGO games, PowerPoint games, MovieMaker videos, Acrostics, “Paper Bag Theater,” graphic image design, word puzzles, polarity activities, Rule of Three comparisons, reality simulations, time value of money calculations, infographic insights, winners and losers activity, backwards planning, health insurance math activities, financial spreadsheets, index card activities, value clarification activities, online quizzes, soundbite summaries, savings challenges, online calculators, the Wheel of Money, web quests, Twitter chats, live video streaming, *Future Me* e-mails, seven word summaries, interactive evaluation and reflection activities, and powerful stories. Participants will receive a list of online financial education resources and a copy of the presentation slides.

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## **Bridging the Gap: Motivation and Strategies to Effectively Teach Financial Counseling and Planning to Differently Abled Post-Secondary Learners**

*Axton E. Betz-Hamilton, South Dakota State University and Jacquelyn B. Frank, Eastern Illinois University*

**Key words:** accommodations, Americans with Disabilities Act

### **Target Audience**

The target audience for this session was post-secondary instructors of financial counseling and planning courses.

### **Objectives/Purpose**

Three objectives were met in this session:

- Participants were able to describe common documented invisible disabilities among post-secondary students and their impacts on learning.
- Participants understood the provisions of the Americans with Disabilities Act as they apply to students who have an invisible documented disability and the potential consequences for faculty and institution non-compliance with these provisions.
- Participants were able to identify a minimum of two teaching strategies that could be utilized in teaching differently abled students.

### **Description**

This first 20 minutes of the session began with a detailed description of common documented invisible disabilities among post-secondary students, including dyslexia, dyscalculia, Attention-Deficit Hyperactivity Disorder and anxiety, along with misperceptions that exist about such differently abled students in the classroom.

The next 20 minutes of the session were devoted to discussing the provisions of the Americans with Disabilities Act, with special attention given to student accommodations, the role of faculty and institutions, and the role of the U.S. Department of Education (DOE) when there is an allegation of disability discrimination. This portion of the presentation included brief cases where disability discrimination was alleged and faculty, institutional, and DOE responses.

The final 10 minutes of this session focused on teaching strategies that have been successful as well as unsuccessful in teaching differently abled students in financial counseling and planning courses. Select assignment guidelines were available for participants to keep.

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## **Diversity: The Cost and Effect**

*Dora B. Mays, Department of the Air Force*

**Key words:** bias, culture, discrimination, diversity, ethnicity, finance, gender, implicit, inclusion

### **Target Audience**

Personal Finance Counselors/Coaches/Educators that assist diverse clientele.

### **Objectives**

1. To increase the awareness of diversity and inclusion of financial counselors, coaches, and educators, therefore improving their effectiveness when assisting clients of different backgrounds.
2. To challenge financial counselors, coaches, and educators to manage their own implicit biases when helping clients with their personal finances.
3. To expand the perspectives of personal finance professionals in order to better accommodate and make concessions for the different perspectives of their clients.

By learning about the concept of implicit bias and the perceptions that shape an individual's economic decision making; counselors, coaches, and educators will acquire the ability to understand the role unconscious bias plays in achieving desired goals and can consciously influence the dynamics of their interaction with their clients.

### **Description**

This session will use interactive activities to engage participants in a process of considering diversity, inclusion, and cultural sensitivity by first identifying what they consider to be the most important dimensions of their own identity. Research suggests that implicit biases and stereotypes—positive and negative—are maintained through persistent lack of contact with others beyond your “ingroup,” the term psychologists use to describe people who share certain characteristics. Implicit biases and prejudices are examined as participants explore and share stories about when they were proud to be part of a particular group and when it was especially hurtful to be associated with a particular group. Because the concepts of bridging the gap and building community has to include understanding the likenesses and differences of the members within it, this session will help practitioners to explore the likenesses and differences between their clients and themselves. The desired outcome is that the likenesses will help to bridge the gap and the differences will be the essence of building a community that respects and values diversity and inclusion. Diversity is not just about race, ethnicity, and gender.

Decades of research has shown that when it comes to business, technology, and most every other field, socially diverse groups are more innovative than homogeneous ones. In fact, diversity has become a buzz word within most organizations and is an undeniable necessity for ensuring competitiveness when it comes to ingenuity and creativity. It is simply remarkable that in the 21st century when major corporations would not hesitate to bring all of the diverse brilliance of designers, engineers, and builders to the table when investing millions of dollars into establishing the infrastructure to build a home, but when it comes to building the wealth of the families that will reside in those homes, the commitment to diversity is another story, especially if those families are of a lower socioeconomic-economic background. The appreciation for differences shifts when it means living in the same neighborhoods, attending the same institutions of higher learning, or sharing the same boardrooms as colleagues.

Freud compared the mind to an iceberg. The conscious mind is that which we see (above the water's surface) and the unconscious mind is the vast amount that is unseen (below the water level). The unconscious mind should not be disregarded because it is not what is most obvious. It exists and is a powerful source of influence. It can be considered implicit biases. Counseling professionals, like all others, have implicit biases. They should not pretend otherwise. They should acknowledge that the biases exist and navigate around them safely. To ignore them or pretend they are not there is to risk allowing them to interfere with their effectiveness.

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## **Effective Teaching through Storytelling**

*Summer Red, Rural Dynamics, Inc.*

**Key words:** *education, counseling, storytelling, financial literacy, interactive, best practice*

### **Objective/Purpose**

The purpose of this practitioner's forum is to teach financial counselors and financial educators the basics of effective storytelling.

### **Description**

Whether educating a group or counseling a client one-on-one, an effective story can be a transformative learning experience. A good story can engage and entertain, can alleviate the tedium of a long lecture, and can help clients imagine themselves in financial scenarios, making each scenario more immediate and the learning more effective. Conversely, a bad story can be boring, permanently alienating an audience. Thus, when using storytelling as an education tool, it is critical that the story be presented effectively.

There are three main parts to storytelling and all three must be done well for the story to be effective: the story structure, the pacing, and the delivery. Additional components that must be considered are the relevance of the topic, as well as the effective use of inoffensive humor.

A well-structured story for teaching purposes typically combines the three-part framework of teaching (summarize, teach, review) with the five-part format of storytelling (introduction, rising action, climax, falling action, and denouement.) The summary/introduction is the part of the lesson plan leading up to the story. The rising action and climax contain the actual story. The falling action occurs when the key points of the story are pulled out and explained, teaching the topic. The review serves as the denouement, repeating the key points to be learned and explaining the relevance to the larger topic at hand. Ultimately, an effective teaching story should be able to blend seamlessly into a lesson plan and, at the same time, be able to stand alone in a counseling session.

When conceiving and creating an educational story, extra attention should be spent on two things: the topic and the hook. The topic of the story must be relevant to both the storyteller and to the audience. If it is not relevant to the storyteller, it will lack the authority that comes from speaking from personal experience. If it is not relevant to the audience, it will neither engage nor educate. The hook is what catches the audience's attention at the start of the story and can often be the single most challenging part of a story to write. The hook can take many forms – a question, a joke, an observation. What is important is not the format, but that the hook be interesting.

Once the story has been created, it must be edited for pacing. The story should flow naturally, without too much time spent on initial exposition. Attention to the number of details is also important. Too many details and a story becomes boring; too few and it does not engage the audience. Learning how much detail to include is a learned process and comes from watching audiences listening to stories. Larger audiences are a better indicator of appropriate levels of detail, as they are less likely to feign interest out of politeness.

Finally, there is the matter of delivery. A good storyteller uses many non-verbal tools to engage the audience, including facial expressions, strategic pauses, and varying volume and tone of speech. The only way to learn delivery is to practice, ideally on a wide variety of audiences. Most important, however, is for the storyteller not to get bored with the repeated tellings of his or her own story: this results in a story that sounds rehearsed.

A final note on humor. Unless there is already a very strong relationship with the audience, the only person a storyteller can tease and/or make fun of is him- or herself. Even then, the teasing should be gentle. Otherwise a storyteller runs the risk of alienating the audience and losing any opportunity to use the story to educate.

Storytelling can be a very powerful teaching tool, but only if it is done thoughtfully and with the audience in mind. By carefully crafting the tale, ensuring it is relevant, and taking care with pacing and delivery, anyone can create an effective, engaging story.

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## **Experiential Learning: How to Engage Participants with Activity-Based Lessons**

*Kathryn L. Sweedler, Sasha Grabenstetter, and Karen M. Chan, University of Illinois Extension*

**Key words:** activity-based learning, financial well-being, financial literacy, experiential, limited-resource audience

Are you tired of using the same old presentation style time after time? Do you find yourself teaching small groups and struggling to engage them in difficult, uncomfortable topics like alternative lending and debt repayment? Are you looking for a positive way to facilitate money management discussions with limited-resource audiences? If yes, then join in a discussion about how to add more experiential learning techniques to your teaching repertoire.

### **Target Audience**

This presentation is targeted towards attendees who work with people (either individually or in small groups) who have limited financial education or experience, who may have low reading skills, and/or are low-to-mid income level.

### **Objectives/Purpose**

Experiential learning involves learning by doing and then having the opportunity (and guidance) to reflect on one's experiences. From this reflection, the learner can then grow in knowledge and achieve behavior change. Participants in this session will:

- gain in understanding about experiential learning;
- understand the benefits of experiential learning for challenging personal financial topics; and
- observe different facilitation techniques that lead to experiential learning.

### **Description of Content and Method**

Financial education strives to increase knowledge and to help people change behaviors. However, participants in financial education programs may be resistant to behavior change. Information presented in a lecture format is easy to tune-out and may not be the most effective teaching method in many situations. Unfortunately, many professionals are most familiar with the lecture-mode of teaching and may not be familiar with other more engaging teaching modes.

Participants in this session will have an opportunity to experience a variety of activity-based modes that go beyond lecturing, and lead to more engaged learners. For example, it's difficult for most people to grasp the impact of compounding returns. Two different ways to demonstrate compounding returns using visual aids will be shared. Other activity modes such as games, role-plays, case examples, and exploratory learning will be discussed. In addition, the difference between facilitating learning and lecturing will be explored. For example, a presenter is an expert who says, "Learn from me," while a facilitator says, "I'll help you learn." The presenters will demonstrate ways to facilitate discussions on topics such as comparing the costs of financial services that uses participants' current knowledge and facilitates interaction among participants -- ultimately increasing knowledge for all.

Participants will be able to take ideas and techniques home to use with their clients immediately. In addition, a newly revised, train-the-trainer money management curriculum that utilizes hands-on experiential learning will be introduced.

Once you've added a variety of teaching methods to your repertoire, you can then use them to grab attention – which may only require five minutes – or facilitate an hour long discussion. Using new methods is fun and facilitates learning.

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## **From Financial Education to Financial Inclusion: Bridging the Gap between for Persons with Disabilities**

*Mia B. Russell, Wells Fargo Bank and Michel Roush, National Disability Institute*

**Key words:** disability sensitivity, financial inclusion, persons with disabilities, financial education

### **Target Audience**

Financial counselors and other financial professionals that work either directly or indirectly with persons with disabilities will find this session useful. Financial professionals offer direct services or other programming will gain skills, tools, and new ideas for working with persons with disabilities.

### **Objectives/Purpose**

People with disabilities face challenges in making ends meet and planning for the future, including an overreliance on alternative financial services. Given the diversity of the disability community, some persons with disabilities may rely on public benefits as their main source of income. Without financial education and skills, these individuals may be prevented from achieving financial inclusion and may jeopardize their financial well-being. To address this challenge, a public-private collaboration was created to integrate financial education into select American Job Centers (AJC). This integration was achieved by providing training and technical assistance to AJC staff to bring financial literacy education activities (Hands on Banking®) to benefit youth and adults across the spectrum of disabilities as well as job seekers without disabilities. In addition to the training, financial tools, resources, and supplemental instructor guides were created to address employment and financial resources that can help to eliminate barriers to financial well-being and self-sufficiency.

### **Description**

This partnership allows us to work with a leader in the disability space and on national initiatives designed specifically to increase expectations and potential for all persons with disabilities to improve their financial health, improve job prospects, and participate fully in the economic mainstream.

An important characteristic of an effective instructor is being aware of diversity among the individuals to whom you are providing information. This supplement guide will provide you with information, resources and tips on how to interact more effectively with people with disabilities, eliminate myths and increase awareness of this growing demographic. It is important to assure that persons with disabilities have the same experience in your training program as others.

The first phase of this project increase organizational capacity by implementing 25 policies and developing over 9500 collaborations. Additionally, over 23,000 people were served with over 16,000 beneficiaries gaining skills and capacity to improve their financial wellbeing ultimately advancing financial wellness for over 4700 people. In addition to learning about disability sensitivity, results of the project will be shared:

- Number of policies implemented tied to goals of financial education programs
- Collaborations developed and implemented as part of program
- Review of service providers and leaders trained in providing Hands on Banking and joint-curriculum programs
- Toolkits used, resources created, programs/training improvements
- Individual end-user persons (beneficiaries) served
- Success measures of beneficiaries served who use the skills learned and improve their financial wellbeing

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## **How to Make an Effective Financial Education Video**

*Barbara O'Neill, Rutgers University*

**Key words:** financial education, personal finance, technology, videos

### **Target Audience**

Financial counselors and educators who are interested in creating a video to teach personal finance concepts.

### **Objectives/Purpose**

1. Participants will learn the steps involved in creating a simple one-minute financial education video.
2. Participants will learn about the impact of videos in amplifying their brand and key messages.
3. Participants will learn how to write a storyboard for a video that they will create.
4. Participants will be inspired to create videos to teach financial concepts and/or market their programs.

### **Description**

YouTube was launched in 2005. Fast forward 12 years and 300 hours of video are uploaded every minute and YouTube gets over 30 million visitors per day (YouTube Statistics, 2017). In 2016, AFCPE issued a call for one-minute #IamAFCPE videos to promote the impact of its members in improving the financial lives of Americans. The videos are housed on AFCPE's [YouTube channel](#). Twenty-six members and AFCPE staff responded to the call and their videos have collectively received hundreds of views. Some video creators also shared the links to their videos via social media channels such as Facebook and Twitter, which further expanded their outreach. Many more stories of the impact of AFCPE members' work remain to be told, however. Thus, the purpose of this Ignite presentation is to teach Symposium attendees how to make a simple one-minute video that they can use to promote their work or teach simple personal finance concepts such as "pay yourself first."

Videos are a powerful way to convey content (Hook, 2017) and attract attention on social media platforms. Well-produced videos with a clear purpose and key messages have the potential to attract attention and educate, entertain, and/or engage viewers. Simple videos can be created using footage recorded with a cell phone camera or with a collection of photos and/or images that are created using a graphic design program such as Canva or the Paint command in Windows Accessories on PC computers. Video editing programs such as Movie Maker (for PCs) and iMovie (for Apple computers) are then used to produce a completed video. Whether someone chooses to record and edit raw video footage to create a video or assemble a series of photos or graphic images, the starting point is the same: a storyboard. Like an outline for an article, a storyboard guides the content of a video and helps "road test" its visual appeal. It begins with a title and three or four key messages or concepts and then lists, in split screen format, the text that someone will speak or show on screen and its associated visual. For example, someone might speak or show the words "Do you want to save \$100 in 30 days?" and then hold up or show a picture of a \$100 bill.

This presentation will demonstrate the steps required to prepare both types of videos (edited raw footage and graphic images) using Windows Movie Maker. These steps include writing a storyboard, recording live video and/or assembling digital images, adding video and/or photos, trimming raw footage and adjusting the duration of text and/or graphic images, adding music, adding credits, previewing the video, saving the video, and publishing the video on YouTube. Participants will receive detailed step-by-step instructions about how to prepare a video.

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## **Mindfulness Methods for Taming Mischievous Money Habits**

*Susan Zimmerman, Mindful Asset Planning*

**Key words:** awareness, behavior, brain change, communication, habits, honor, mindfulness, motives, personality, psychology, values

### **Target Audience**

Financial Practitioners: Financial Counselors, Financial Therapists, Financial Planners, Credit Counselors, Budget Counselors; Mental Health Practitioners: Marriage and Family Therapists, Social Workers, Psychologists

### **Objectives/Purpose**

The purpose of this session is to provide practitioners with new and creative communication techniques with clients that make it easier to discuss difficult topics, while improving clients' follow through on needed actions. The objective for clients is to offer them the increased benefit of well-being while improving their financial life. This includes experiencing heightened self-awareness and enjoyable understanding of their strengths in money matters, while they implement strategies to improve money matters. This session's additional objective is to help professionals feel more confident in their long-term effectiveness and less stressed in their meetings with clients.

### **Description**

In this presentation, eight common problematic habits people display in their money lives will be summarized. The presenter will use power point slides to visually show the psychological and behavioral characteristics of each, and how to use the money mischief concept with clients. A worksheet for use with clients that walks them through the eight money motives that drive "personalities" will be shared, and participants will use them to discover their own combination. Client challenges for financial counselors will be briefly discussed, along with audience participation to provide their examples of what the presenter calls, "the hard part of soft skills" during counseling sessions. The presenter will share several communication programs she's developed to use with clients that help them non-defensively gain awareness of the psychological and behavioral habits they've had with money, what the strengths of each pattern are, and how to begin making modifications. Mindfulness and cognitive psychology methodologies are merged into several exercises that have been created using memorable acronyms that help clients continue processing insights on their own, after sessions have terminated. The methods will be described and three will be demonstrated live with volunteer "clients."

The first process to be taught in this presentation is bringing deepened awareness for clients of their cognitive habits about money management, using money motives and money rascals as the anchors for identification of strengths and challenge areas about finances. Use of the acronym, AHA, as developed by the author will demonstrate how to further use insights to honor new awareness into actions that improve financial experiences while helping to minimize and manage stress.

Participants will receive a worksheet that takes them through eight motivational drivers in their financial habits. It shows primary desires for finances of growth, control, security, virtue, simplicity, peace, spontaneity, and prestige. These motives are then further defined identifying the behaviors that tend to be avoided or followed most frequently, identifying both strengths and challenge areas when any of the motives are overly dominant. Participants identify their primary motives, placing them on a continuum provided in the worksheet, that matches their underlying motives with their corresponding money rascals. Discussion includes common emotions experienced by each of the motivational drivers with communication tips to encourage clients in their money management patterns.

A Mindfulness strategy will be shared using the author's acronym HIRE. This process helps people become more aware of their emotional drivers and how to notice them to inform their choices and emotions in ways that encourage greater peace and prosperity.

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## **Principles for Effective Financial Education**

### *Consumer Financial Protection*

**Key words:** financial well-being, measurement, effectiveness

### **Target Audience**

All types of financial education practitioners, including counselors, educators, coaches, financial planners, and others.

### **Objectives/Purpose**

With such a broad range of approaches and objectives, it has been a challenge for financial educators serving adults to identify a single, consistent definition of success. There is growing consensus in the field that the ultimate and unifying goal of these diverse financial education efforts is to improve the financial well-being of people served. This vision of effective financial education requires more than teaching factual knowledge. However, what does this vision really mean for efforts to help consumers improve their financial decision-making skills and choices?

Having conducted foundational research that resulted in a consumer-driven definition of financial well-being, the CFPB has focused more recently on identifying the knowledge, skills, and habits associated with financial capability and effective approaches to improving financial well-being. The principles for effective financial education translates insights from this research and from the growing body of external research into a framework and actionable strategies for financial educators serving adult consumers.

### **Description**

Because of the key role that financial education can play in people's lives, the CFPB has conducted research into what makes financial education effective for consumers. What do we mean by "effective?" It does not just mean training that helps people perform better on a test of financial facts. It means equipping consumers to understand the financial marketplace and make sound financial choices in pursuit of their life goals. It means helping consumers as they work to bridge the gap between their knowledge, their intentions, and the actions they take. It means deploying a wide range of strategies that help consumers to achieve the ultimate goal of financial education: financial well-being.

To that end, the CFPB has examined what financial well-being means to consumers, in their own words, for their own lives. We also created a rigorous way to measure it, and developed a model of what factors drive an individual's financial well-being.

What the research demonstrates is that there is no single right way to help adult consumers improve their financial decision-making skills and choices, just as there is no single right way everyone should conduct their financial lives. There are many approaches that work, reflecting the diversity of people's circumstances, opportunities, and aspirations. We have distilled from this research certain principles, or underlying factors, that can be put into practice through adult financial education to help drive financial action and well-being. We also gathered tested strategies practitioners' tips for ways to put the principles into practice.

The five principles are:

- Know the individuals and families to be served
- Provide actionable, relevant, and timely information
- Improve key financial skills
- Build on motivation
- Make it easy to make good decisions and follow-through

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## **Should You Rollover 401(k) Plan Proceeds To An IRA?**

*Keith R. Fevurly, MSU Denver*

**Key Words:** CODA, direct rollover, NUA, safe harbor 401(k), rollover IRA, Roth IRA, traditional IRA

### **Target Audience**

Retirement counselors and advisors, including financial planners.

### **Objectives/Purpose**

To discuss factors to be considered in the most common question usually asked by an employer-sponsored retirement plan participant at the time of his or her separation from service or distribution: should I rollover my 401(k) plan proceeds to an IRA?

### **Description**

The decision of what to do with accumulated retirement savings that a retirement plan participant encounters at time of separation from service or distribution is very common. The typical options available to such a participant are: 1) a lump sum distribution, 2) a payout in the form of an annuity, 3) continuing to leave the money in the plan (plan terms permitting) and 4) rollover the plan proceeds to a traditional or Roth IRA. This presentation will focus on the last of these options.

The basic structure and types of the Section 401(k) plan will be addressed in the presentation. Specifically, the special non-discrimination rules that a traditional 401(k) plan must meet will be covered as well as the alternatives to the traditional plan, such as a safe-harbor 401(k) plan. Small business alternative 401(k) plans will also be outlined.

The presentation will cover the advantages and disadvantages of maintaining the 401(k) account proceeds within the plan versus transferring those proceeds to a traditional or Roth IRA. The mechanics of a direct rollover will be addressed, as well as the practical issues associated with establishing a rollover IRA. A contrast between a rollover IRA and a participant IRA will be detailed.

The presentation will conclude with an analysis of who is the preferable candidate for the rollover IRA option and who should maintain the account proceeds within the structure of the employer-sponsored 401(k) plan.

Note: Because of the rapidly changing status of the DOL (Department of Labor) “fiduciary rule”, this presentation will *not* discuss the particulars of the rule. However, the presenter will be pleased to answer any questions with respect to the rule, and most specifically the general versus contractual provisions of the rule, during the question and answer portion of the presentation.

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## Student Loan Decision-Making: What We Know and What Do We Do with It

Soo Hyun Cho, California State University Long Beach, Carrie Johnson, North Dakota State University, D. Elizabeth Kiss, Kansas State University, Barbara O'Neill, Rutgers University, and Michael S. Gutter, University of Florida

**Key words:** NC 2172, student loan, decision making, peer-reviewed publications, factsheets

### Target Audience

Financial counselors and educators with clients affected by student loans who would like to gather resources for effective practices regarding student loan decision-making.

### Objectives

1. Participants will learn about multiple aspects of student loan decision-making.
2. Participants will learn about strategies to improve clients' student loan decisions.
3. Participants will be introduced to student loan resources to be used with clients developed by the research team.

### Description of Content and Method

With the 2008 housing market crash, student loan debt amassing almost \$1.5 trillion, and aging baby boomers in or approaching retirement, understanding key personal financial decisions across the life span is more important than ever. While neoclassical economics assumes that people make rational choices given constraints in their lives, a growing body of literature illustrates the role of psychology and environmental factors in financial decision making (behavioral economics).

The purpose of this forum is to summarize results from North Central multistate research team, NC 2172 "Behavioral Economics and Financial Decision-Making and Information Management across the Life Span". This multistate project is supported by the USDA National Institute of Food and Agriculture (NIFA) and most team members hold either Cooperative Extension or Agricultural Experiment Station appointments. This research group has four objectives for this project which include: (a) determine motivators that affect economic decision-making in specific decision situations across the life-span of households; (b) determine barriers that affect economic decision-making in specific decision situations across the life-span of households; (c) determine how motivators and barriers to economic decision-making can be presented in specific decision situations across the life-span of households; and (d) suggest strategies that can be used to improve consumer financial decision-making.

Since 2013, four articles in peer-reviewed journals and ten factsheets on student loan through eXtension.org were published under this project. In this forum, each publication will be briefly introduced and key results will be summarized. Practical implications for financial educators, counselors, and coaches working with all life cycles of family will be shared.

### Publications to be summarized

#### Peer-reviewed Journal Articles

- Cho, S. H., Xu, Y., & Kiss, D. E. (2015). Understanding student loan decisions: A literature review. *Family and Consumer Sciences Research Journal*, 43(3), 299-243.
- Cho, S. H., Mountain, T., Porto, N. Kiss, D. E., Gutter, M.S. & Griesdorn, T. (2016). Experimental design to understand the student loan decision: A methodological note. *Family and Consumer Sciences Research Journal*, 45(1), 65-76.
- Johnson, C. L., Gutter, M. S., Xu, Y., Cho, S. H., & DeVaney, S. (2016). Perceived value of college as an investment in human and social capital: Views of Generations X and Y. *Family and Consumer Sciences Research Journal*, 45(2), 193-207.
- Johnson, C. L., O'Neill, B., Worthy, S. L., Lown, J. M., & Bowen, C. F. (2016). What are student loan borrowers thinking? Insights from focus groups on college selection and student loan decision making. *Journal of Financial Counseling and Planning*, 27(2), 184-198.

#### eXtension.org Factsheets

- College Savings Options: Travis P. Mountain, Virginia Cooperative Extension
- Student Loan Repayment Decisions: David Evans, Indiana Cooperative Extension
- Types of Student Loans: Barbara O'Neill, CFP, Rutgers Cooperative Extension

- Determining Student Loan Servicer and Balance: Carrie Johnson, South Dakota State University
- Student Loan Mistakes/Responsible Borrowing: Melissa Welsh, Maryland Cooperative Extension
- Student Loans: Later Life Impacts: Barbara O'Neill, CFP, Rutgers Cooperative Extension
- Understanding and Getting Out of Default: Carrie Johnson, South Dakota State University
- Loan Consolidation Considerations/Forgiveness Options: Melissa Welsh, Maryland Cooperative Extension
- Student Loan Legislation: Student Loan Changes You Need to Know About: David Evans, Indiana Cooperative Extension
- Paying for College, Elizabeth Kiss, Kansas State University

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## **Student Loan Delinquency, Default and Rehabilitation**

*Ryan H. Law, Utah Valley University*

**Key words:** student loan default, student loan delinquency, student loan rehabilitation

### **Target Audience**

The target audience for this session is financial counselors, planners and practitioners who work with either students taking out student loan debt or clients who have outstanding student loan debt.

### **Objectives/Purpose**

Financial counselors and planners are likely to encounter a number of clients who have student loan debt, and therefore need to be informed about how to best help those individuals. In this session we will explore the number of student loan borrowers in default and delinquency and explore all the ways they can avoid and get out of default.

### **Description**

According to the website Student Loan Hero (2017) Americans carry more than \$1.4 trillion in student loan debt spread across 44 million borrowers. The average amount of debt for undergraduate borrowers has skyrocketed to \$37,172, and the average monthly student loan debt payment is \$351.

With rising student loan balances and payments some borrowers are struggling to pay back their debts and are either falling into delinquency (90 days past due) or default (270 days past due).

Mitchell (2016) at the Wall Street Journal reports that more than 40% of student loan borrowers are either delinquent, in default, or in postponement, and therefore are not currently paying their debts.

The U.S. Department of Education (2016) reports that the national cohort default rate is 11.3%.

Students in default face a number of challenges (Federal Student Aid, n.d.) including:

- Loss of eligibility for deferment, forbearance, alternate payment plans and additional student loans.
- Aggressive collection tactics, including collection fees added to the loan.
- Seizure of tax refunds.
- Garnishment of wages.

Federal student loan borrowers have a number of options available to help them avoid default including deferment, forbearance and alternate repayment plans. If they are already in default student loan rehabilitation or consolidation can help them get back on track.

### **References**

- Federal Student Aid (n.d.) *Don't ignore your student loan payments or you'll risk going into default*. Retrieved from <https://studentaid.ed.gov/sa/repay-loans/default>.
- Mitchell, J. (2016, April 7). *More than 40% of student borrowers aren't making payments*. Retrieved from <https://www.wsj.com/articles/more-than-40-of-student-borrowers-arent-making-payments-1459971348>.
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- U.S. Department of Education (2016). *Official cohort default rates for schools*. Retrieved from <https://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>.

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## **Teaching consumers how to effectively use online coupon codes and mobile coupons to save money**

*Darlene Christensen and Teresa Hunsaker, Utah State University Extension*

**Key words:** coupons, education savings, shopping

### **Target Audience**

Consumers and financial educators interested in learning how to effectively use digital coupons and codes to save money.

### **Objective/Purpose**

After identifying a timely need to provide current research based information about digital coupons – Cooperative Extension developed the "Coupon Craze" program. The program teaches consumers how to effectively use coupons to save money. A large portion of the program covers how to use mobile device coupons and on-line coupon codes. The program is research based and peer-reviewed. The University and Cooperative Extension system have extensive criteria and processes to ensure programs meet specific standards.

During the ACPFE conference professionals will receive the multi-media presentation "Coupon Craze" participant handout, leaders guide, evaluation tools and sample promotion materials. In addition, tips will be given on how to customize the presentation for a local community so the program is even more effective and relevant to the local area. This will provide professionals with a program "ready to use" in their communities.

### **Description**

Couponing is at an all-time high in the United States. According to the 2017 Coupon Intelligence Report 41% of consumers are using more coupons than last year. (Valassis, 2017). Unfortunately, popular television shows like "Extreme couponing" have given an unrealistic perspective on how much money can be saved using coupons. New couponers can actually cost themselves additional expense by making common mistakes such as buying products they do not need or will not use. With costs increasing consumers are looking for ways to cut down on expenses. Using coupons can be an effective way to do so, if used properly. There is a timely need to educate consumers properly on coupon use – particularly digital coupons and coupon codes.

In today's coupon culture, digital coupon savings are the fastest growing. Digital coupons are attracting more new buyers than print coupons by a margin of 35%. The greatest increase in all coupons used came from young adults (Knowledge Networks Trend Report, 2016).

Consumers in the 2016 RedPlum Purse String study reported using their smart phones for couponing in the past 30 days in a variety of ways. Twenty-one percent had accessed a coupon they received in an email; 18% downloaded a coupon; 15% used a discount from a mobile text message and 12% looked for deals via social media.

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- Valassis. 2016. 2016 RedPlum Purse String Survey. Retrieved from: <http://www.valassis.com/about-us/newsroom/item/160829>
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## **Technology Solutions for Today's Financial Counselors, Coaches and Customers**

*Megan Kursik, the Financial Clinic, and Carmina Lass, Credit Builders Alliance*

**Key words:** community of practice, customer success, data collection, evaluation, peer sharing, solutions, technology, training

### **Target Audience**

The target audience for the session includes any individual providing financial counseling or coaching, either through a nonprofit program, for-profit firm or corporation, or as an individual. Counselors and coaches with access to the internet and a computer or tablet during their meetings with customers and a desire to integrate technology solutions with their daily activities will be best served by the session.

### **Objectives/Purpose**

The primary objective of the session is to help financial counselors and coaches think through the ways technology can aid their delivery of counseling and coaching services, and ways technology can help empower their clients to implement the actions they plan in their meetings. By facilitating interactive discussion, the session will yield important outcomes including a list of technology-solutions already in use and areas for further development. Using information gathered during the discussion, the presenters will create a document mapping needs and current technology solutions to be distributed to the field as a summary of best practices.

### **Description**

"Technology Solutions for Today's Financial Counselors, Coaches and Customers" will be an interactive session showcasing best practices in applying technology to improve the practice of financial counseling and coaching, as well as technology-based strategies for customers to increase financial knowledge, facilitate positive behavior change and achieve strengthened financial security. The session will begin with Ignite-style presentations from both presenters outlining areas in financial counseling and coaching practice where technology can facilitate and improve both delivery of the service and corresponding actions by customers. Highlighted areas for technology solutions are: training/professional development; customer data collection and program evaluation; counseling/coaching session facilitation; connecting with peers to share best practices and keep abreast of updates in the field (community of practice); and tools for customers. Both presenters will include relevant examples of technology-solutions employed by their respective organizations' staff, as well as examples from partners.

Following the two initial Ignite-style presentations, the presenters will move to a guided discussion with participants. The guided discussion will work through three major themes: 1. identifying technology solutions already employed by participants in their daily coaching and counseling work; 2. Identifying challenges and other needs that come up for counselors/coaches or their customers in sessions; 3. Mapping technology solutions presented by participants to identified needs; highlighting areas where new solutions are needed.

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## **The Comprehensive Household Spending Plan**

*Dylan L. Ross, Garrett Planning Network, Inc.*

**Key words:** budgeting expenses income planning spending

### **Target Audience**

Practitioners who provide budget and spending plan counsel to clients. It should be of particular interest to those whose clients' savings or surplus income is used in debt reduction planning or longer term savings strategies.

### **Objective/Purpose**

The three objectives of this forum are: (1) identify missing and underestimated expenses, including irregular future expenses, using interview prompts; (2) estimate future spending placeholders to reserve enough income for those expenses using formula guidelines rather than spending history which may be misleading; and, (3) identify methods to manage and maintain reserved income for households to aid in following the spending plan.

### **Description**

Some household expenses are easily referenced or researched, yet other expenses present a greater challenge because they will recur without present knowledge of frequency or amount. Missing and underestimated expenses in a balanced or zero-sum budget will eventually divert income away from other planned expenses or specific savings goals. Utilizing a one-page spending plan worksheet and an income allocation approach, a spending plan workflow process will be introduced that aids in identifying portions of a household's monthly income that need to be reserved for all recurring future expenses, including newly expected, existing but irregular, or other than typical monthly expenses.

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## **Thrift Savings Plan (TSP) Investment Options for Military Financial Educators**

*Stewart Kaplan, Federal Retirement Thrift Investment Board*

**Key words:** active management, core funds, diversification, Efficient Market Theory, fair value pricing, long term investing, market indexes, passive management, thrift savings plan, TSP, securities lending

### **Target Audience**

Personal Financial Managers (PFMs), educators, and counselors working in military environments.

### **Objectives/Purpose**

The objective of this session is to provide military financial counselors and educators a clear description of the long term design of the TSP's investment options and how well they form the building blocks of a diversified portfolio that can be an excellent foundation of uniformed service members' defined contribution retirement plans. This training may serve as a resource from which military financial educators and counselors may develop their TSP curriculum or as a reference for individual counseling.

### **Description**

The TSP's investment options span the risk/return spectrum and include the building blocks for a diversified portfolio without gaps or overlaps. There are four index investment funds that provide comprehensive coverage of the represented asset classes and one unique stable value fund.

The G Fund is stable because it has no risk of negative earnings. It is a non-marketable security issued by the US Treasury with an interest rate calculated based on the weighted average yield of mid to long US Treasury Securities, e.g., notes and bonds with maturities of four to thirty years, and backed by the full faith and credit of the US Government.

The four index investment funds benchmark broad market indexes designed as part of a passive strategy. Data gathered over the history of the markets shows passive investing yields higher returns when the investor chooses a "buy and hold" strategy which assumes periodic rebalancing and readjustments to the allocation on a long-term (strategic) plan. Because the TSP utilizes index investment funds, there is no option for a participant in the plan to choose individual securities. The participant may choose their own allocations and may make frequent changes to their allocations. These changes are known as interfund transfers. A participant may make interfund transfers for any reason and may make two unrestricted moves as often as every calendar month. Moves that increase the percentage of the account in the G fund are always allowed even after the two unrestricted moves are used.

As a part of a passive strategy, a participant may use interfund transfers for the purpose of rebalancing or readjusting one allocation percentages. This contrasts with using interfund transfers for the purpose of making short-term tactical moves in an attempt to outperform the benchmarks. This is not representative of a passive strategy. This is often referred to as "market timing," which is an active strategy that when used with index investment funds is generally accepted industry-wide as typically leading to lower returns than would be otherwise achievable using a passive strategy that employs periodic rebalancing and readjusting.

This training focuses on the key aspects of this issue specifically as it relates to the TSP by describing each of the five core funds and reviewing how they are diversified through the use of the index it tracks. It further looks at their composition, the relevant fund objectives, their risks, sources of earnings, their historical returns and other issues specific to that fund. Because a passive investing strategy is integral to the TSP, the training looks at the fundamental rationale for a passive strategy which is the "Efficient Market Theory." References are provided for participants to do their own research into this topic.

The training also looks at how each of the five core investment options fit together to form a coherent plan that's well-suited to meet the long-term retirement savings needs for Uniform Services members and Federal Employees regardless of their age, current level of income or their retirement goals.

The training also looks beyond the administrative expenses which are covered in the previous TSP session and delves into the investment expenses which reveal a little-known, but highly significant and unique aspect of the TSP which is that a securities lending program managed by the TSP's contracted investments manager, adds income earned from that program to the plan resulting in increased share prices which translates into higher

returns...and those returns result in annual returns that are consistently larger than the benchmark indices of each fund (F, C, and S) tracks. This is also true for the I Fund, but does not always result in larger returns than the benchmark index because of the fluctuation of currency exchange rates.

The training will emphasize the importance of military financial counselors being able to explain what a coherent investment strategy is and how to allocate in a way that makes sense for each individual. It will also emphasize the tangible benefits of the TSP and the real value of leaving their balance in the plan as opposed to transferring it out when they separate.

Upon conclusion of the training, it should be clear that the design and simplicity of the TSP underscore its value as an especially well-suited plan for Uniformed Services members and should elevate the knowledge of military financial counselor and provide sound, accurate and helpful information relative to their financial classes and individual financial counseling sessions.

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

### **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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## **Thriving with your AFC**

*Diana Kyu Yacob, Kansas State University*

**Key words:** financial coaching, financial counseling, small business

### **Target Audience**

The target audience for this presentation are Accredited Financial Counselors interested in starting their own business or for those just looking to supplement their income.

### **Objectives/Purpose**

The purpose of the forum will be to help identify next steps to having a successful small business. The goal is to leave everyone motivated on taking the next steps to make their AFC work for them.

### **Description**

We love what we do and we love the people we serve! However, the salary doesn't seem to match the quality work we provide. What steps can you take to thrive with your AFC? Is that even possible? This session will explain the process I went through to balance out this work-pay inequality. We see many people becoming successful but it's hard to find someone who will help you do the very same thing. This is not a session on how to get your EiD or whether you should be a sole proprietor or LLC. If you always wanted to make the jump and just needed a push, this is the presentation for you.

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## Understanding and Working with the Consumer Financial Protection Bureau Financial Well-Being Scale

Ryan H. Law, Utah Valley University, Graham McCaulley, and Andrew Zumwalt, University of Missouri Extension

**Key words:** CFPB financial well-being scale, CFPB scale, financial well-being

### Target Audience

The target audience includes financial counselors, planners, and practitioners who work with clients and want to learn how to measure their financial well-being through the use of the CFPB Scale. Attendees from academics to private practitioners will find value in the content of this session.

### Objectives/Purpose

The theme of the 2017 AFCPE Research and Training Symposium is *Bridging the Gap: Building a Community of Financial Wellbeing*. In order to truly embrace the theme, participants would ideally have an understanding and agreement of what financial well-being is. In this session we will introduce the scale, discuss the history and practical use of the scale, explore limitations, and walk participants through how the scale can be used in their practice. In addition to discussing the scale from our perspectives as scholars in personal finance, we will draw on our experiences implementing the scale with diverse audiences. We will discuss pros and cons of how we have been able to use the scale across different groups over time in measuring gains in financial well-being. Participants will leave the session with a solid understanding of financial well-being and the CFPB Financial Well-Being Scale.

### Description

In 2015 the Consumer Financial Protection Bureau (CFPB) determined that the goal of financial education is to increase an individual's financial well-being, which was defined as, "...a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow them to enjoy life" (CFPB, 2017). As the CFPB did research to define financial well-being it was determined that a scale that could numerically measure financial well-being would help to "measure and compare financial wellbeing across individuals and over time" (CFPB, 2017).

The CFPB Financial Well-Being Scale was developed out of that research. It is meant to be used in a variety of situations, including at an initial meeting, to track individual progress, to assess program outcomes, and for research (CFPB, 2015). Overall, our field testing has found the CFPB Financial Well-Being Scale to be an effective tool that is easy for practitioners to use as well as easy for participants to understand. However, practitioners should be intentional when choosing to use this tool, especially when using it to assessing program outcomes. Past research (e.g., Huston, 2010; Taft et al., 2013) has explored conceptualizations of financial literacy, knowledge, well-being, and capability, including the differentiations among these concepts. It is important to note that the CFPB scale, while sensitive to and encompassing past research, focuses on measuring subjective present and future assessments of one's financial security and freedom of choice. Programs designed around specific financial knowledge and/or those with limited interventions may be more focused on increasing financial literacy (a piece of overall financial well-being) and may want to consider measurements tools explicitly focused on such (e.g., Lusardi & Mitchell, 2011). Further, careful consideration should be given to the frequency the CFPB Financial Well-Being Scale is administered, so as to limit measurement error (e.g., social desirability bias).

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## **Updates in the Credit Industry: NCAP and More**

*Carmina Lass, Credit Builders Alliance*

**Key words:** credit, credit reports, consumer protection, debt, debt collection, medical debt, national consumer assistance plan

### **Target audience**

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

### **Objectives/Purpose**

Credit reporting and scoring is constantly evolving to adapt to changes in consumer protection laws, consumer and economic patterns, and the business needs of lending institutions. Participants will:

- learn how recent developments in the credit industry, in particular the implementation of new consumer protections through the National Consumer Assistance Plan, may impact clients' credit reports and scores; and
- Understand the best practices for helping clients proactively build and manage their credit profiles amid these changes.

### **Description**

Credit reporting and scoring is constantly evolving to adapt to changes in consumer protection laws, consumer and economic patterns, and the business needs of lending institutions. Recent developments in the credit industry, in particular the implementation of new consumer protections through the National Consumer Assistance Plan (NCAP), may impact the credit reports and scores of consumers engaged in financial coaching and counseling.

The NCAP is a comprehensive series of initiatives designed to enhance the accuracy of credit reports and make the process of dealing with credit information easier and more transparent for consumers. The NCAP was the result of a 2015 settlement between the three major credit bureaus and 32 state attorneys general of investigations that began when Consumer Advocates claimed that the bureaus were violating the FCRA by not meeting accuracy requirements and not responding adequately enough to consumer disputes. The settlement was not only critical to effecting change in the industry, it was also essential to doing so in a consistent way at a national level across all bureaus.

The NCAP is being rolled out over the course of three years and a few months. Several provisions may offer some relief for people who are facing credit issues as a result of coerced debt and economic abuse. This session will cover the key components of the NCAP, including:

- enhancements to the process of disputing information with the national credit bureaus;
- more stringent requirements on how creditors must report borrower information to ensure accuracy;
- changes to debt collection and medical debt reporting practices;
- removal of some public records information from consumer credit reports.

This forum will explore the ways that these changes will impact consumers, and best practices for financial coaches and counselors working with clients to establish and improve credit histories. In addition, we will explore some additional industry changes on the horizon, including the growing use of trended credit data, alternative credit data and changes to credit scoring models.

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## **Using Digital Tools to Engage a College Audience**

*Amy Marty Conrad, National Endowment for Financial Education*

**Key words:** college, digital tools, engagement, financial literacy, fintech, marketing, social media, students, workshop

### **Target Audience**

The target audience for this practitioners' forum is professionals who work on a college campus, typically counseling or educating young adults age 18-23.

### **Objectives/Purpose**

The purpose of this presentation is to give counselors and educators some creative ideas for ways to work with a college student population, and to increase educators' abilities to provide relevant, timely information delivered in a way that students are receptive to.

Participants will use research findings to understand student behaviors and attitudes toward personal finance, review and discuss strategies for in-person and online student engagement, and will receive a list of digital marketing tools to use in campus financial education work.

### **Description**

Building personal finance skills for college students is important to overall student success. It takes innovation, research, and planning to make the most of limited time and resources. By taking advantage of interactive learning technologies and marketing platforms, educators and counselors can expand their reach and provide learners with a more engaging experience.

This session will explore digital marketing strategies and tactics for college financial literacy programs, as well as online learning tools that can supplement workshops or classroom exercises. Examples include: social media marketing, creative video/audio media, fintech applications, and online analytics.

We will use information from the field, including current strategies used by specific colleges and universities with both large and small student bodies. This session will also delve into focus groups with Millennial and Gen Z students, as well as existing academic research and market research into behaviors among young adults.

This session will be grounded in academic research and criteria for effective college financial education.

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## **Vital Trends Impacting Personal Finance**

*Brent A. Neiser, National Endowment for Financial Education*

**Key words:** CFPB reform, child care costs, completing college in four years, corporate benefits, credit scores, fiduciary rule, myRA/Auto IRAs, payroll tax, pension options, rental prices, universal basic income

### **Target Audience**

Practitioners and researchers

### **Objectives/Purpose**

To learn about vital trends impacting personal finance.

### **Description**

Recognize and adapt to the breakthroughs being made all around us in education, finance, demographics, and public policy. Understand the threads that shape and bind these patterns so you will be prepared for new personal finance realities. Learn ways to distinguish and discern influential trends for your clients as well as your own professional practice and work.

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## **“When I’m 65”: Educating and Engaging Communities about Retirement Realities**

*Don Blandin, Investor Protection Institute and Rebecca Wiggins, Association for Financial Counseling and Planning Education*

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

### **Target Audience**

The *When I’m 65* 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.

### **Objective/Purpose**

Following our 2016 Practitioner’s Forum session which presented campaign plans for the Ohio *When I’m 65* program and other resources accessible to AFCPE members, Don Blandin of the Investor Protection Institute will co-present developments, lessons learned and next steps for the Ohio *When I’m 65* program with AFCPE Executive Director, Rebecca Wiggins. We will also present the updated *When I’m 65* documentary and provide *When I’m 65* updates from other States including those that have participated in the program for over a year and States that have recently joined the program or plan to join. The overall objective and purpose of the session is to share how attendees can utilize the *When I’m 65* program in their classes, workshop and larger communities and to provide them with investor education and protection tools and resources.

### **Description of Content and Method**

The presentation on the Ohio *When I’m 65* program includes engagement videos developed by AFCPE, Detroit Public Television (DPTV) with support by the Ohio Division of Securities, and provides feedback from various outreach events and key findings from a statewide scientific survey of Ohio residents about saving and investing for retirement. Some findings from the survey include: less than half (41 percent) of Ohio adults have a financial plan for retirement and only 24 percent of Ohio residents who got a “million-dollar windfall” would use most of the money to save or invest for retirement. We encourage audience input on how we can address these challenges in Ohio and in other States. We will also review the [www.WI65.org/Ohio](http://www.WI65.org/Ohio) website with the audience and show the Ohio engagement videos covering topics including freelancers and fraud myths. The Ohio *When I’m 65* program is designed to be replicated in whole or in part in States, cities and communities across the country. The program’s materials and videos tackle universal investor education and fraud topics and can be used by AFCPE symposium attendees with their constituencies and communities.

Representatives from other States will share program plans and developments in their State *When I’m 65* program. With these representatives, we will have a discussion about what has worked in different States, new ideas to expand each State program and how the States can work together.

We will also present the full *When I’m 65* documentary which has been updated to include more information on automatic Individual Retirement Accounts (IRAs), the fiduciary standard, annuities and reverse mortgages. The updates were made to help viewers understand important investor education topics and to emphasize the importance of asking questions, analyzing information and assessing their individual situation to determine the best strategies for their financial future.

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## **Which Financial Education Approach Works to Increase Financial Capability of College Students: Is Something Better Than Nothing?**

*Lorna Saboe-Wounded Head, South Dakota State University Extension and Soo Hyun Cho, California State University Long Beach*

**Key words:** college students, financial education strategy, program evaluation, strategies,

### **Target Audience**

Post-secondary educators, college money management center counselors and coordinators, and financial planners who are interested in learning about best practices to meet financial education and planning needs of college students would most benefit from this forum.

### **Objectives/Purpose**

The purpose of this practitioner forum is to present an evaluation of the effectiveness of five educational/program strategies used to increase knowledge and measure financial behavior for college students.

1. Participants will be able to assess the effectiveness of the financial program strategies.
2. Participants will engage in learning activities to identify financial education needs of college students.
3. Participants will identify a financial education strategy appropriate for their target audience.

### **Description**

The report, "National Strategy for Financial Literacy 2016 Update" by the Financial Literacy and Education Commission (FLEC), highlighted the need for financial education that occurs in diverse formats in order to meet the needs and varying situations of the audience. Practitioners continually need to identify effective approaches that not only increase financial knowledge but also emphasize financial skills, access to and management of resources, and empowerment to make informed decisions and set realistic goals.

Five program strategies used on a college campus to increase financial capability of students will be presented. The strategies employed were an educational video, a for-credit course, a one-time class presentation, a one-day event and student-led programs. A variety of quantitative data was gathered for each strategy, pre-survey, post-survey, retrospective survey, and six-month follow-up survey, to assess the effectiveness of the strategy and the change in knowledge and skills. This session will report the results of the assessments to evaluate the effectiveness of each strategy in meeting the needs of college students and to determine the significance in a change of knowledge and skills. Additionally, successes and failures will be addressed regarding student participation in the programs and how findings will be utilized to continue increasing financial capability of college students.

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## **Why the Thrift Savings Plan (TSP) Performs So Well in the U.S. Economy and Why It Is Well-suited to Blended Retirement System (BRS) Retirement Goals**

*Jim Murphy, Marine Corps Community Services, H&S Battalion, Headquarters Marine Corps (HQMC)*

**Key words:** blended retirement system, business cycle, thrift savings plan, index mutual funds, risk

### **Target Audience**

Financial counselors and teachers who are actively involved in teaching Service members about the new Blended Retirement System (BRS) and any AFCs who are currently contributing to the TSP or a 401(k), 403(b), or 457 Plan.

### **Objectives/Purpose**

As background, the National Defense Authorization Act of 2016 significantly changed the method by which retirement benefits will be determined for members of the Uniformed Services starting in 2018. Persons currently serving in the active forces and the reserves are grandfathered in the current system which is a defined benefit (DB) plan that vests at 20 years. While Service members can participate in the Thrift Savings Plan (TSP) (the 401(k)-like defined contribution plan (DC) established for Federal employees and Service members), the Service Secretaries do not provide matching contributions. Starting in 2018, all persons joining the Uniformed Services will be covered by the new “Blended Retirement System (BRS).” Persons currently serving who will have less than 12 years’ service as of 31 December 2017 are free to “opt-in” to the new system, if they wish. The new BRS system retains the current DB but reduces the benefit by 20%. Very important, however (and to off-set the reduced DB), the BRS also includes matching funds up to 5% for Service members enrolled in the TSP. The BRS also has a “Continuation Pay (CP)” feature which is a one-time payment of 2.5 times monthly pay. The payment is made at the 12 year point.

Many subject matter experts (SMEs) consider it essential that the Service members in the BRS who plan to retire from the Service contribute at least 5% to their TSP account to make up for the reduction in the DB. The better Service members understand the potential of the System, the more likely they will place a higher priority on a 5% contribution. Currently, the services do not have an intermediate level investments course that addresses financial and economic factors that bear on the short, intermediate and long-term performance of the TSP funds.

**Objective:** The objective of this presentation is to describe why the TSP in particular, and other portfolios made up of index mutual funds, perform so well in the U.S. economy, and why early participation in the TSP at the 5% contribution rate has a high probability of providing “cash flows” far greater than the current Retirement System.

### **Description of Content and Method**

The presenter has successively refined his presentation to demonstrate that a circumspect TSP investor can achieve relative “safety” in his or her investment(s) IF they understand, at a minimum, twelve major concepts: (1) differences between saving (no risk of losing money) and investing (risk of losing money); (2) basics of stocks and bonds in order to appreciate mutual funds; (3) composition of stock & bond indexes; (4) differences between an index fund and an actively managed fund and the sources of risk in each type; (5) the nature of the business cycle and the behavior of stocks and bonds at points along the business cycle; (6) time value of money and compound interest (but differentiating and illustrating rate of interest from rate of return; (7) historical rates of return for S&P 500 Index (50, 40, 30, 20, and 10 year returns), (8) investor time horizons and investor risk tolerance, (9) related to (8), the wisdom of bonds/bond index funds for short term goals; balanced index funds for intermediate goals; stock index funds for long-term goals; OR various combinations of life-cycle/target date funds for short, intermediate, and long-term goals; (10) the relationship of long time horizons to the rhythms of the business cycles to growth in retirement accounts, (11) “history” of taxes on investments (six graphics to highlight the evolution of capital gains taxes and the emergence and types of retirement accounts and their tax structures)(this series is helpful to clients’ understanding deferred taxes on contributions to traditional retirement accounts and “ordinary” taxes on withdrawals and conversely, current year taxes on contributions to Roth accounts, but “no taxes” on withdrawals of Roth accounts); and (12) how to purchase and manage index mutual funds.

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## **Your Money Your Goals: Meeting the Needs of Human Service Providers**

*Jesse M. Ketterman Jr., Mia B. Russell, Jinhee Kim, Diana Kyu Yacob, Patricia Maynard, Michael Elonge, and Audrey Orr, University of Maryland Extension*

**Key words:** CFPB, economically vulnerable consumers, financial empowerment, human service providers, Your Money Your Goals Toolkit

### **Target Audience**

Our target audience will be financial educators and other financial professionals that may work with human service providers including case managers, social workers, and volunteers in the community who work directly with economically vulnerable populations. These professionals are positioned to create and coordinate opportunities to financially empower clients by sharing resources and tools that build knowledge and skills.

### **Objectives/Purpose**

The objective of the forum is to share the findings from the University of Maryland Extension office's statewide implementation of the Consumer Financial Protection Bureau's (CFPB) Your Money Your Goals (YMYG) toolkit. Partnership development and marketing and evaluation (quantitative and qualitative) from the train the trainer sessions will be presented. These sessions were evaluated using the CFPB training survey assessments as well as through focus groups designed to understand participants' training experience, implementation plan, assessment of additional tools needed, and common financial challenges faced by clientele. This forum will help participants develop and implement an effective train the trainer program that can help human service providers financially empower individuals, families, and communities.

### **Description**

Human service providers provide a variety of services to enhance the lives of clients such as evaluating needs and helping to create an individualized client plan. While they serve diverse populations, who are often over extended, both emotionally and financially (Sherraden, Laux & Kaufman, 2007); these professionals often develop trusting relationships allowing the opportunity to provide resources and access financial empowerment services (Consumer Financial Protection Bureau, 2014). However, many human service providers may only have a basic level of financial literacy, thereby lacking the knowledge, tools, and resources to empower their clients. This often leads to low confidence among human service providers. One solution to help overcome this challenge is offering the YMYG toolkit to frontline staff and volunteers as they work with clients to navigate financial decisions.

As part of the national YMYG pilot, this forum will explore how we determined the need to train human service providers in the state, developed the marketing materials, identified and recruited the potential participants, and delivered statewide trainings in rural, suburban and urban areas. The evaluation of the program helps determine the effectiveness by equipping human service providers with the tools, resources, and skills that help them empower individuals and families with respect to financial issues. We plan to present the evaluation results using both quantitative (YMYG surveys) and qualitative (focus groups) data collection. In-depth information from the focus group research helps us better understand the effectiveness of the training, perceived challenges and additional resources for implementing the toolkit in empowering their clients.

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## **A Research-Based Approach to Building a Personal Finance Program for Law Students**

Lyssa L. Thaden, Jacqueline A.F.I. Carroll, and Jennifer M. Schott, AccessLex Institute

**Key words:** financial capability, financial coaching, financial counseling, financial education, motivation, program design

### **Detailed Abstract**

While most of the emphasis about student loan indebtedness and financial literacy programs are on undergraduate students, the significant debt levels of graduate students suggest that research in this area should be explored. This field study wanted to confirm whether law students perceived a need, and/or a desire, for a personal finance program, and if so, what – in an ideal world – that education would look like. From a needs assessment perspective, it is apparent that law students overwhelming saw the need and the benefit from a personal financial capability program built to meet their unique needs.

### **Background**

While much of the emphasis of financial education programming focuses on undergraduate students, the significant debt levels of graduate students are worth noting. Forty percent of the \$1 trillion student loan debt is attributable to the financing of graduate and professional degrees – with average indebtedness (undergraduate and graduate) of \$42k for an MBA, nearly \$51k for a master's in education, just over \$140k to achieve a law degree, and over \$160k to achieve a medical degree (Student Loan Hero, 2017). As it relates specifically to law students, not only do these debt levels suggest a potential need for financial education, but the current reality of rising law school tuition and increasing student loan debt (College Board, 2015) may have impacted access (visible as law school enrollments are on a decline). Furthermore, the overall median law firm salaries today are still below 2008 levels (National Association of Law Placement, 2016), indicating that paying back student loans and managing one's finances may become even more challenging in the years to come.

We believed there was potential value in a personal finance program created specifically to help law students better manage that significant debt, and their finances in general. We also wanted to confirm whether law students perceived a need, and/or a desire, for a personal finance program, and if so, what – in an ideal world – that education would look like.

### *Financial Education Programs*

Many students lack a framework for making good financial decisions, which can impact every aspect of their personal and professional future. To their credit, college and university leaders largely agree that supporting the financial well-being of their students is important. Many institutions have begun by providing at least some financial education, often around educational debt financing and repayment. Some colleges and universities have also incorporated larger co-curricular or free-standing financial literacy programs and offerings directed at general student populations (National Endowment for Financial Education, 2017; iGrad, 2017; Inceptia, 2015). Although resources may be provided on campus or within particular college programs, students are often not aware these services exist (Choi, et al., 2016). Additionally, they are not often robust enough to meet student needs, nor are they tailored to address individual circumstances.

Although students indicate high levels of financial stress, a common complaint from administrators around lack of student interest or motivation. Turnout for financial education sessions generally falls short of set goals, even when food is provided. This makes it appear that the return on investment may be low for both students and administrators. However, the issue may lie in trying to deliver one "same solution" for all students regardless of need. As such administrators need to identify whom they serve and understand that population before it can be determined what and how to deliver solutions.

### *Financial Education Frameworks*

To deliver effective solutions and to determine and measure goals, objectives and outcomes, it is important to use appropriate terms. In higher education, most personal finance programming is lumped under a general term of financial literacy. However, there are distinct differences worth noting. Financial literacy is defined as possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's

personal, family and global community goals (National Financial Education Council, 2013). Financial behavior on the other hand is defined as a manner of behaving or acting as it relates to circumstances involving finances and money. Financial capability is defined as more extensive and includes behavior, decisions, and practice skills (Orton, 2007).

In addition to the differences in terminology around “financial literacy,” the process of delivering information and promoting behavior change should also be delineated. Collins & Rourke (2012) denote similarities and differences between financial coaching, financial counseling, and financial education – each of which can be effective based on client type, program intent, length of offering, etc. For example, students in crisis focused on short-term problem solving may be best served with individual financial counseling. Students who are largely stable and have a goal of increasing knowledge and skills (with little or no short-term follow up needed) may benefit most from financial education. Financial coaching may be best suited for those going through stages of behavior change, working skill development, action and maintenance. Properly assessing students’ needs within this framework can help assign with educational approach may be best suited to the individual’s needs and help promote motivation and subsequent engagement.

Understanding students’ motivation and needs is key as it relates to behavior change. This allows the presenter or coach to work in concert with each student’s own natural change process (Passmore & Whybrow, 2007). As such, administrators may be better off targeting student-based commonalities ranging from financial crisis to stability. From there, it may be easier to understand how those shared common attributes can impact motivation, learning opportunities and programming approaches.

### **The Research Approach**

With the above in mind, this project focused on the following research questions within the context of law school students:

- RQ1: To what extent do students need and desire a program created for their unique law student experience?
- RQ2: What are the unique financial situations and decision making events students encounter in that experience?
- RQ3: What information should be included in a personal financial capability program?
- RQ4: How would a personal financial capability program be best delivered?

In August 2016, AccessLex Institute invited 199 American Bar Association law schools to apply to participate in a financial education feasibility study to learn how a large-scale financial education program designed for law school students might work in practice. Over 5,000 students from 43 institutions participated. Every effort was made to include a cross section of students drawing from urban, rural, public and private institutions. The study included three research based elements: a global online survey, in-person focus groups and online panels.

### **Discussion**

The data from this study support both a need for a personal finance program among law school students – and a willingness to work toward their financial goals. Overall these students are motivated to learn about personal finance. As one student wrote: “Many of us are moving into high income careers, and many of us will graduate with massive debt. Outside of the finance and accounting majors, most of us have little to no understanding of basic personal finance.” Unlike Millennials in general, law students are aware that they lack personal financial knowledge.

For a personal finance program to engage law school students it must address not only the general financial knowledge/content that is imperative for overall individual financial capability, but also the unique financial decisions/opportunities that law students face. This raises the point of motivation otherwise also referred to as the time discounting factor. Frederick, Loewenstein & O’Donoghue (2002) highlighted that individuals have very clear ideas about how they prioritize their time. Individuals are willing to give up their time if it is important and valuable. For example, as it applies to personal finance, for both financial counseling and financial coaching students there may be immediate benefits such as problem solutions or strategies for long-term gains. In both cases, the focus groups revealed that individuals are motivated to give up their time. However, as it relates to financial education, with most students not even knowing what they don’t know, they are less willing to give up their valuable time. Highlighting law school journey specific pain points will help drive home the importance and relevance all along their legal education pathway.

In looking at law students' financial goals over the next five years, significant interest is garnered across many important topics, meaning that providing personal financial education is not only a student loan debt issue, but contains much broader implications. Looking only at student loan debt in general provides a limited view of needs, wants and knowledge law students seek in a financial education program. Debt of all types is a concern for students in both the short- and long-term and students seek guidance and information which may be outside of the scope and expertise of most college and university staff. Furthermore, the realization that an effective program will need to include different components such as workshops, online materials, as well as personalized coaching sessions means that it a significant amount of time will need to be given toward development of the ideal program. Students clearly wanted all three options to be available to them.

### Limitations and Future Direction

While the schools that participated in this study included institutions that cover the gamut of law schools in this country (including public vs. private, large vs. small, geographic diversity, etc.), and the respondents themselves are representative of the law school demographic as a whole, there are some limitations related to potential selection bias. Schools elected to participate in this project. Subsequently, while the general survey was open to all students at most institutions, completion was not mandatory so students with high interest in personal financial issues may have been more likely to respond. Similarly, the focus group and online panel participants were in some cases specifically selected by administrators. (In other cases, it was a first-come, first-serve opportunity.)

Additionally, this project focused specifically with one group of students: law school students. Arguably, the effectiveness of a financial wellness program may be directly related to the targeting of a specific student group, allowing relevant content references and taking advantage of inherent skills that students in a profession are likely to have or learn. With that in mind, others are encouraged to consider how this approach may apply to building a program for other specific student groups.

Finally, this is but a starting point. A longitudinal study would increase our understanding of whether participating in a personal financial capability building program for law students as suggested above would ultimately result in positive financial behaviors, reduced financial stress and/or other improved related academic and personal outcomes.

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## **Are Students Prepared for Practice? An Assessment of Financial Capability and Asset Building in Social Work Education**

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### **Abstract**

Social workers, along with other human service professions, work with financially vulnerable clients. Many social workers, however, lack preparation to help clients build financial capability, improve financial circumstances, and manage their financial lives (Loke, Watts, & Kakoti, 2013). Although social work educators have begun to respond with curricula and other initiatives (CSWE, 2017; Frey, Sherraden, Birkenmaier, & Callahan 2017; Horwitz & Briar-Lawson, 2017; Sherraden, Birkenmaier, McClendon, & Rochelle, 2017), we know little about the impact of these initiatives. This study reports on results of a survey that examines financial and economic content in social work education, and social work faculty assessment of its usefulness.

**Key words:** curriculum, education, household finance, practice, social work, survey research

### **Background**

A quarter of low-income households lack access to a basic financial account, and often turn to expensive and sometimes risky alternative products to manage their finances (FDIC, 2016). At the same time, 9% of households lack a basic financial account in a bank or credit union, and beneficial wealth-building social policies are out of reach for many (FINRA, 2016; Howard, 1999; Steuerle, 2016). Overall, low-income and low-wealth households lack the financial knowledge and skills necessary for household management, and the ability to navigate increasingly complex financial services (Lusardi & Mitchell, 2014). Social workers are often the professionals most likely to intercede first in helping vulnerable households, and increasing financial capability is a fundamental component. By *financial capability*, we mean the financial knowledge, skills, and access to financial policies and services that are the foundation of financial well-being (Sherraden, 2013). This definition implies that practice includes working with individuals and families, communities, and the policy sector.

In the context of rising economic inequality, growing financialization, and economic precariousness in low- and moderate-income households, economic justice has taken on growing significance (Chetty, et al., 2014; Saez & Zucman 2014). In social work, economic inequality and lack of financial capability have been identified as “grand challenges” by academic leaders (AASWSW, 2016). The social work profession has an opportunity to re-affirm its historical commitment to the financial well-being of American families (Bent-Goodley, et al., 2016; Stuart, 2016). However, achieving this goal will require more emphasis in social work education on theory, evidence, and practical skills for improving household financial capability.

### **Purpose**

Today, despite growing numbers of social work practitioners in the field of financial capability, academic accreditation guidelines in social work include “economic justice” as a core competency, few social work degree programs adequately prepare students for practice (CSWE, 2015; Gillen & Loeffler, 2012; Loke et al., 2013). Financial capability curriculum can be developed but this will require a systematic plan with focused attention (Savage & Graves, 2015).

In collaboration with the Council on Social Work Education—and with funding from the National Endowment for Financial Education, we conducted a survey of social work faculty that assesses current financial and economic (F&E) content in social work education. It also explores faculty perceptions about the usefulness of specific F&E content, and faculty opinions about barriers and recommendations for including F&E content in the curriculum. The overall aim of the research is to inform curriculum development and preparation of social work graduates to improve financial functioning and financial well-being in vulnerable households.

### **Research Questions**

The research asks four questions: (1) What amount and type of F&E content is currently being taught in social work courses? (2) What are faculty perceptions about the usefulness of specific F&E content? (3) What barriers do faculty

perceive to teaching F&E content, and (4) What are faculty recommendations to overcome those barriers?

### **Methodology**

This study reports on a large survey of full time, part time, and adjunct faculty from 761 accredited social work programs (CSWE, 2016). With no database of all U.S. social work faculty, we identified the universe of faculty listed on social work program websites. From in-depth interviews conducted earlier, and experience in the field, we knew that those teaching financial content include adjunct instructors, clinical faculty, and other types of instructors. Therefore, we cast a wide net for this project.

The survey instrument design was based on a review of theory, empirical evidence, and items from similar surveys in other human service professions. It was also informed by findings from qualitative interviews with 30 social work faculty who discussed their views about integrating F&E content into the social work curriculum (Hageman, et al., 2017). To address the four research questions, the survey included four sections: (1) amount of F&E content taught (2) perceptions of usefulness of F&E, (3) barriers and recommendations on including F&E content, and (4) preferred ways to learn more about F&E content for teaching. The survey also included demographic details about respondents and the institutions where they teach, their prior instruction in financial education, and information about the courses each faculty member teaches. If the faculty member had not taught during the year of the study (since August 2016), they were released from the survey.

Data were collected using online survey software (Qualtrics). In March 2017, the researchers inserted faculty contact information into the survey software and sent email invitations. They repeated sending email invitations and downloading responses weekly for 8 weeks in March and April 2017. When the online survey was closed, the researchers cleaned the data, then conducted univariate analyses that are reported in this abstract.

### **Results**

#### **Faculty and Institutional Demographics**

Of the 1,707 individuals who responded to the survey, 1,577 indicated they had taught since August 2016, and are included in these results. Respondents were primarily female (77%), White (72%), with a doctorate degree (64%), who work in a public university (69%). Composition of faculty positions in the sample included associate or full professor (39%), assistant professor (27%), full-time non-tenure track (22%), and adjunct, part-time or other position (12%).

Only 11% of faculty respondents indicated having “a lot” of previous financial education training, while most reported having “some” (36%) or “a little” (36%) or “none” (17%). Overall, more than half (58%) rated themselves as having a “medium” level of financial knowledge or skills.

#### **Financial and Economic Content in Current Courses**

Nearly half of respondents (46%) said they did not teach a course with any F&E content. Of those who did teach a course with F&E content (54%), this content is taught most frequently at the bachelor’s (59%) and master’s (46%) levels, and infrequently (1%) at the PhD level. Of the 25 F&E topics covered in the survey, those most likely to be taught are related to general social and economic issues, such as housing, impact of race and ethnicity on financial well-being, and helping clients obtain government benefits and health insurance. (Less than 10% of survey respondents reported that they “never” taught these topics in the course.) However, specific financial products, services, and skills are rarely covered, including topics such as financial values and goals, identity theft and financial scams, bank products, and credit reports. More than half of courses with F&E content “never” included these topics. That is, social work faculty teach about economic inequality and vulnerability and access to social assistance programs, but they do not teach about household financial management and financial services.

#### **Perceived Usefulness of F&E Content**

Despite insufficient attention to financial capability and asset building in social work courses, 91% of respondents agreed that, in general, students can benefit from learning more F&E content. Among the 25 F&E topics, more than 50% of respondents agreed that certain topics were “very useful” for students, especially information on taxes, problem debt, student loans, housing, health insurance, government benefits, money conversations with clients, assessing financial well-being, emotions and mental health affected by financial issues, and policy practices on financial capability. The gaps between perceived usefulness of specific topics and their coverage in social work courses suggests future directions for curriculum development.

### Barriers to and Recommendations for Teaching F&E Content

Participants were asked to select from a list of possible barriers to and recommendations for teaching F&E content. Among those who agreed that students can benefit from F&E content (91%), the three most cited barriers to including more content in the curriculum are: (1) lack of flexibility and time to include F&E content in the curriculum (68%), (2) lack of faculty expertise and confidence (61%), and (3) lack of faculty interest (43%). Some faculty indicated that they did not think students would be interested in F&E content (20%), and a few (6%) did not believe F&E practice is an appropriate activity for social workers.

In terms of recommendations for teaching F&E content, most faculty recommended integrating or infusing F&E content into existing courses (81%), although some also thought the content could be offered in extracurricular workshops (57%), or in stand-alone elective course (39%). Fewer recommended a stand-alone required course (17%). In addition, survey respondents recommended providing online resources (72%) and webinars (50%) as the best way to teach social work faculty about F&E content.

### Discussion and Conclusion

Although faculty generally recognize the importance of F&E content for social work students, findings suggest that F&E content, particularly, topics related to household financial capability and management, generally have not been included in social work courses. To encourage more F&E content in the social work curriculum, faculty need more educational opportunities, along with curricular resources and ideas for how to infuse F&E content into existing courses. Accompanied by conceptual and pedagogical advances linking social and economic justice to financial practice, such an initiative could increase social workers' ability to improve financial well-being in vulnerable households (CSWE, 2017). Social work is among the professions most likely to be working with vulnerable populations. Financial challenges frequently co-occur with clients' presenting issues. Dissemination and application of the research findings from this study will be an important contribution to educate social workers to provide quality financial education, guidance, and counseling.

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## **Budgeting and Financial Capability: A Perspective of Behavioral Hierarchy**

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### **Abstract**

Budgeting is an important step in financial planning and counseling. Budgeting behavior is also considered a desirable financial behavior to indicate consumer financial capability. However, systematic research on budgeting behavior with a large scale national sample is limited. The purpose of this study was to address this research gap and examine characteristics of budgeting behavior from the perspective of a financial behavioral hierarchy. The assumption holds that consumer financial behaviors may be performed in a hierarchical manner along with an increase of economic resources. Using data from the 2015 National Financial Capability Study, evidence suggests that budgeting behavior is at the lower end of the behavioral hierarchy. This finding has implications for consumer financial planning and counseling.

**Key words:** budgeting, financial behavior, financial capability, National Financial Capability Study

### **Introduction**

Research indicates that budgeting behavior is common when it is broadly defined among consumers (Bankrate, Inc., 2015). Budgeting has also been found to be related to other desirable financial behaviors (O'Neill, Xiao, & Ensle, 2017). Previous research examined budgeting behaviors from the perspectives of first home buying and life cycle stages (Davis & Carr, 1992; Mullis & Schnittgrund, 1982; Shelton & Hill, 1995). Unlike previous research, this study examined budgeting behavior from a unique perspective of behavioral hierarchy using a large sample of American consumers. From a perspective of behavioral hierarchy, the study had four objectives, 1) to provide a profile of consumers who perform budgeting behavior, 2) to examine how budgeting behavior is associated with financial capability variables, 3) to explore the status of budgeting behavior in the behavioral hierarchy, and 4) to examine how budgeting behavior is associated with financial well-being.

### **Previous Research**

Studies have shown that people who prepare a detailed household financial budget are in the minority among U.S. residents (Jacobe, 2013; Davis & Carr, 1992). Despite urging by financial experts to develop a budget to allocate future income and expenses, recent studies have found that less than half of all Americans actually do. Hogarth, Hilgert, and Schuchardt (2002) reported results from a national survey about the financial management practices of U.S. households. Less than half (46%) of 1,004 respondents used a budget and only 36% planned and set goals for the future. O'Neill and Xiao (2012) investigated the performance of 20 financial management practices using an online financial self-assessment tool with 10,661 respondents from 2005 through 2010. Budgeting was among five quiz items that were least frequently performed, ranking 16 out of 20, in order of mean scores.

A widely quoted Gallup Economy and Personal Finance Survey (Jacobe, 2013) found that only 32% of American households prepare a written budget or use software to develop one. Davis and Carr (1992) also found that only a minority of households had written budgets. In addition, respondents in the retirement age stage of the lifecycle were least likely, compared to younger households, to have any kind of budget and least likely to have a written budget. When budgeting is described in less rigid and time-intensive terms (i.e., without having to be on written down on paper or in a computer spreadsheet), more Americans say that they do it. For example, a survey by Bankrate Inc. (2015) found that 82% of Americans kept a household budget. However, only 36% of those surveyed used a pen and paper while 18% kept information in their heads and 26% used a computer program or smart phone application.

The Consumer Financial Protection Bureau (2017) conducted research to help consumers deal with spending challenges and found that over 90% of consumers were interested in using a tool or mobile application to provide information on their spending and account balances in as close to real time as possible. In other words, how much money would be left in their budget if they made a purchase? The process of budgeting has also been shown to have benefits. O'Neill, Xiao, and Ensle (2017) reported findings of multivariate analyses that indicated positive and statistically significant relationships between the practice of using a formal (hand-written or computer generated) budget and eighteen positive health and financial practices. Specifically, their results suggested that consumers who reported following a budget scored higher in both health and financial practice indexes. A study of a program for

first-time homebuyers found that exposing participants to budgeting principles could be a factor in helping consumers become successful homeowners (Shelton & Hill, 1995).

Several studies have also raised questions about the emphasis that financial educators and advisors place upon budgeting. Davis and Carr (1992) noted that it may be a mistake to assume that retirement-aged clients who do not have budgets need them. Perhaps they have developed stable and predictable patterns of income and spending and thus perceive no need for a budget, which requires time to gather and analyze income and spending information. Mullis and Schnittgrund (1982) studied the use of budgeting, the style of budgeting used, budgeting and non-budgeting household's satisfaction with income, and attitudes toward money management practices. Their conclusions showed that families who budget were no more satisfied with their incomes than those who did not budget.

## **The Perspective of Behavioral Hierarchy and Hypotheses**

### *The Assumption of Behavioral Hierarchy*

The human needs hierarchy was first proposed by Maslow (1954). Later, several economic theories acknowledged a hierarchy of economic behaviors. For example, the behavioral lifecycle hypothesis assumes that consumer propensities for consumption decrease based on asset types (people are more likely to consume current income, less likely to consume current assets, and least likely to consume future assets) (Shefrin & Thaler, 1988). The new consumer demand theory asserts that consumer preferences change along with their income (Lancaster 1991).

Hierarchical patterns of consumer financial behaviors are also documented in empirical studies such as saving motives (Canova, Rattazzi, & Webley, 2005; DeVaney, Anong, & Whirl, 2007; Lee & Hanna, 2015; Xiao & Noring, 1994) and saving behavior (Hilgert, Hogarth, & Beverly, 2003; Xiao & Olson, 1993; Xiao & Anderson, 1997). Consumer financial behaviors may be categorized in a hierarchical manner (Xiao, 2016). Based on these theories and empirical studies, a behavioral hierarchy assumption is proposed that consumer financial behaviors can be categorized along with economic resources. When the level of economic resources is low, consumers are more likely to perform a certain set of behaviors. When the level of economic resources is higher, consumer are more likely to perform another set of behaviors. Budgeting behavior is assumed to be at the low resource end of the behavioral hierarchy.

### *Budgeting and Economic Resources*

Budgeting may be more important for consumers with limited resources. If a consumer's income is higher than a certain level, he or she may not worry about budgeting as much because income is ample to cover projected expenses. Previous research shows that consumers with a written budget are in minority (Bankrate, 2015; Davis & Carr, 1992) and budgeting is not related to financial satisfaction (Mullis & Schnittgrund, 1982). Based on this reasoning and empirical evidence, the following hypothesis is proposed:

H1: Budgeting behavior is negatively associated with economic resources.

### *Budgeting and Financial Capability*

Financial capability can be defined broadly to include financial knowledge, resource, access, and habits (Lin et al. 2016). In the research literature, financial capability and financial literacy are often used interchangeably. For example, some researchers focus on financial literacy and define financial literacy as "people's ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions" (Lusardi & Mitchell, 2014, p.6). Other researchers define financial capability based on financial behavior measures (Atkinson et al., 2006). Financial capability is also considered to include access to financial resources for low income populations (Birkenmaier, Sherraden, & Curley, 2013). In this study, financial capability is defined as a skillful combination of financial knowledge and behavior, i.e., an ability to apply appropriate financial knowledge and perform desirable financial behavior to achieve financial well-being (Xiao, Chen, & Chen, 2014; Xiao & O'Neill, 2016b).

If budgeting is an indicator of financial capability, it should be correlated with other financial capability variables such as financial literacy and other financial behaviors. Previous research shows that financial literacy is associated with positive financial behaviors such as stock participation (Chu, Wang, Xiao, & Zhang, 2016; Van Rooij, Lusardi, & Alessie, 2011) and budgeting behavior is positively associated with other desirable financial behaviors (O'Neill et al., 2017). Thus, the following hypothesis is proposed:

H2: Budgeting behavior is positively associated with financial capability variables.

#### *Budgeting in the Financial Behavioral Hierarchy*

The assumption of behavioral hierarchy holds that when economic resources increase, consumers perform different behaviors to meet their new needs, which are shown in previous research (see the subsection of this section). Budgeting is a basic step in financial planning and counseling that should be considered at the low end of the behavioral hierarchy. Some evidence supports this notion. In the 2015 National Financial Capability Study, proportions of respondents holding a budget varied little across income levels (54-57%) while proportions of respondents who have long-term plans were positively associated with income levels, from 41% of the low-income group to 70% of the high-income group (Lin et al. 2016). The following hypothesis is proposed:

H3: Budgeting behavior is at the low end of the behavioral hierarchy.

#### *Budgeting and Financial Well-being*

Previous research indicates that financial capability variables are positively associated with financial well-being (Xiao et al. 2014; Xiao & O'Neill 2016b; Xiao & Porto 2017). If budgeting behavior is an indicator of financial capability and correlated with other financial capability variables, it should be contributing to financial well-being. Thus the following hypothesis is proposed:

H4: Budgeting behavior is positively associated with financial well-being.

## **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 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.

### **Variables**

Table 1 presents detailed information about variables used in this study. Budgeting behavior is the focus of this study. In the NFCS survey, budgeting behavior is asked in a question "Does your household have a budget?" In this study, the variable was measured by a binary variable with 1=having a budget and 0=other. Four other financial behavior binary variables were used to indicate if a respondent performed the following behaviors: underspending, saving for an emergency, long-term planning, and calculating retirement needs. These behavioral variables are considered indicators of financial capability.

Following previous research (Xiao & O'Neill, 2016a), besides desirable financial behaviors, other financial capability variables include objective financial literacy, subjective financial literacy, 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). Perceived financial capability is a self-assessment of money management ability with a range of 1-7 (1=very low, 7=very high). Financial well-being is composed of household income (measured by 8 income levels) and financial satisfaction (measured by a 7-point Likert scale). Since two variables have different metrics, a sum of Z-scores of the two variables is used for the variable. Several demographic and financial variables are also included in the analyses.

### **Data Analyses**

Both bivariate and multivariate analyses were conducted to test the hypotheses. Specifically, Chi-square tests and logistic regression were used to test H1. Chi-square tests were used to test the correlations between budgeting behavior and other financial capability and financial behavior variables for testing H2 and H3. Chi-square tests and OLS regressions were used to test H4. All analyses were conducted using SPSS software.

## **Results**

### **Profile of Budgeters**

Budgeters refer to respondents who reported having a budget in the survey. Table 2 presents the results of Chi-square tests showing profiles of budgeters. Among the total sample, 56.2% reported that they had a budget. Regarding demographic factors, respondents who were female, nonwhite, married, having dependent children, working, younger, and with higher education were more likely to be a budgeter. The pattern of household income is a reverse U shape, the middle income group was the most likely to be a budgeter. Regarding financial product holdings, respondents who had checking, saving, 401(k) type account, and IRA accounts were more likely to be a budgeter. Respondents who own a home, had credit card, and had health insurance were more likely to be a budgeter. Interestingly, respondents who owe all types of debt (i.e., mortgage, home equity, auto loan, unpaid medical bills, credit card debt, student loan, and high cost loan) were also more likely to be a budgeter.

Table 3 presents results of the logistic regression on being a budgeter when all demographic and financial factors were included in the model. The results are similar to those of the Chi-square tests with several changes. First, four variables' effects disappeared: having a home, auto loan, unpaid medical bill, and student loan. Second, two variables' effects in Chi-square tests changed. Home owning's effect changed from a positive one to a negative one. Income's effect changed from a reverse U shape to a negative one. For budgeting behavior, when all factors were included in one logit model, respondents with a higher income were less likely to perform budgeting behavior. This finding supports H1 (Budgeting behavior is negatively associated with economic resources).

### **Budgeting and Financial Capability Variables**

Figure 1 presents results of Chi-square tests on several financial capability variables by budgeting behavior. In these figures, blue bars mean non-budgeters and green bars budgeters; x-axis refers to a literacy or capability variable, and y-axis refers to the proportions of two subsamples. All the Chi-square tests results are significant (statistics are not shown but are available upon request). Two patterns are shown. For subjective financial literacy and perceived financial behavior, respondents rated higher in the two variables (6 or 7 on a 7-point scale) were more likely to perform budgeting behavior. The second pattern was shown in objective financial literacy, where respondents who scored in the low to middle range (2-4 on a 6-point scale) were more likely to perform budget behavior.

Figure 2 presents results of Chi-square tests on several financial behaviors by budgeting behavior. In these tables, blue bars mean non-budgeters and green bars budgeters; x-axis refers to a behavior variable, and y-axis refers to the proportions of two subsamples. All Chi-square tests results were significant (statistics are not shown but are available upon request). The results show that desirable financial behaviors were positively associated with budgeting behavior, implying that budgeting behavior is also a desirable behavior. These findings provided strong evidence to support H2 (Budgeting behavior is positively associated with financial capability variables).

### **Budgeting Behavior in the Behavioral Hierarchy**

To test H3, planning was selected as a behavior at the high end of the behavioral hierarchy. Planning behavior is associated with high economic status and financial capability variables, and contributing to financial well-being (Xiao & O'Neill, 2016b). Figures were constructed to compare budgeting and planning behavior by financial resource variables. In Figure 3a and 3b, blue bar means budgeters and green bar means planners; x-axis refers to the income or financial satisfaction variable, y-axis refers to mean scores of the two subsamples. From the two figures, it is interesting to see that, for two variables measuring financial well-being, household income and financial satisfaction, they show different patterns. The proportions of budgeters across income or financial satisfaction categories are very similar, but proportions of planners across the two financial well-being variables' categories are positively correlated. In other words, the proportions of budgeters in all financial well-being categories are similar but planners are more likely to be found in higher financial well-being categories. The patterns support H3 (Budgeting behavior is at the low end of the behavioral hierarchy).

### **Budgeting and Financial Wellbeing**

Figure 4a and 4b shows Chi-square results on two financial well-being variables by budgeting behavior and two patterns are shown. In these figures, green bar means budgeters and blue bar means non-budgeters; x-axis refers to the income or financial satisfaction variable and y-axis refers to the percentage of the two subsamples. The results are statistically significant (relevant statistics are now shown but available upon requests). For income, only income levels in several low to middle categories (from \$15,000 to \$100,000) were more likely than lower or higher counterparts to be a budgeter. However, financial satisfaction was positively associated with being a budgeter. On a 10-point scale, respondents rated 5 or higher were more likely to perform budgeting behavior.

Table 4 presents results of OLS regressions. The results show that the coefficient estimate of budgeting has a positive sign when only the budgeting variable was regressed with the financial well-being variable. When other financial capability variables were entered the model (model 2) or demographic and financial variables were entered the model (model 3), the coefficient of budgeting became negative. These findings do not support H4 (Budgeting behavior is positively associated with financial well-being.). Further exploration showed that, when other financial behavior variables were entered the model, budgeting's sign changed to negative. This suggests that, if other desirable financial behaviors are performed, budgeting may reduce financial well-being. A possible explanation is that budgeting is a basic financial management behavior. If no other behaviors are performed, budgeting may contribute to financial well-being. If other desirable financial behaviors are performed, budgeting may indicate a low economic status that shows a negative association with financial well-being, confirming H3 again that budgeting is at the low end of the behavioral hierarchy.

Additional analyses among income subgroups were conducted (results are not shown but are available upon request) and the results do not support H4 but do support H3. Among low income groups, budgeting behavior showed a positive effect after other financial behavior variables were entered to the model. However, among middle and high income subgroups, the effects of budgeting behavior changed to a negative one when other financial behavior variables were entered to the model. The results suggest that budgeting is a basic financial behavior and is especially important for low-income consumers. When consumers have more income, other financial behaviors become more important. This may also imply that higher order behaviors need budgeting as a prerequisite. For example, to do long-term planning, budgeting is a basic step to earmark the savings required to achieve financial goals.

## Discussion

This study tested a behavioral hierarchy assumption where consumer financial behaviors can be categorized in a hierarchical manner along with economic resources. The results suggested that budgeting behavior is negatively associated with economic resources, desirable financial behaviors are positively associated with budgeting behavior, and budgeting behavior is at the low end of a financial behavioral hierarchy. Budgeting behavior is more important for low-income consumers to achieve financial well-being.

It appears that benefits of budgeting vary according to consumer characteristics and that budgets are especially helpful for those with limited resources. This result supports the findings of Davis and Carr (1992), who noted that it may be a mistake to assume that everyone who does not have a budget needs one, especially older consumers. The benefits of budgeting for enhancing financial capability found in this study are also in line with prior research (Shelton & Hill, 1995; O'Neill, Xiao, & Ensle, 2017).

Limitations of this study include the simplified measure of budgeting behavior and self-reported behavior. In the survey, only one question is asked about budgeting behavior. More details about budgeting format, purposes and patterns are not available. Also, budgeting and other financial behaviors are self-reported and may have validity and accuracy problems. Actually observed behaviors would provide more accurate information regarding consumer financial behavior. These issues may be addressed in future research.

Keeping the limitations in mind, findings of this study have the following implications:

*Encourage Low-Income Consumers to Budget.* The findings suggest that, among low-income consumers, budgeting behavior contributes to financial well-being. This finding is understandable because this subsample presumably lacks economic resources such as an adequate income and emergency savings reserve and, thus, have few or any economic "buffers" to make ends meet. Thus, they must track every penny of income and stretch it as far as possible. Budgeting requires time and advance planning, however. Perhaps the budgeting process can be broken down into simpler steps that do not necessitate the time-intensive tracking of every purchase for a defined period of time. Budgeting phone apps might also encourage this practice.

*Reframe Budgeting.* This study showed that budgeting has positive effects on financial capability. People often know that they *should* budget, but may not *want* to or know how. Perhaps they need procedural knowledge (i.e., what to do and how to do it). If the issue is, instead, related to motivation (e.g., time constraints and/or perceived "deprivation" as a result of budgeting) reframe budgeting a small spending restrictions today to insure a better future

tomorrow. Planners and counselors could illustrate the benefits of budgeting with tools that provide personalized spending analyses to help people understand the impact of their daily spending habits on their “future self.”

*Continue Exploring Behavioral Hierarchy Practices.* This study supported the assumption that consumer financial behavior may be performed in a hierarchical manner and can be categorized on a continuum of increasing economic resources. This study specifically explored the practice of budgeting and found that respondents with a higher income were less likely to perform this behavior. Additional research about hierarchical financial behavior should be conducted with other aspects of financial planning including saving and investing, banking and borrowing, the purchase of insurance, and retirement planning.

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**Table 1: Variable Specifications**

Variable name	Variable label	Attribute
J31	<i>Financial behavior</i> Budgeting	The original question “Does your household have a budget? A household budget is used to decide what share of your household income will be used for spending, saving or paying bills.” If the respondent’s answer is yes, the variable is recoded to 1, otherwise 0.
J3	Underspending	The original question “Over the past year, would you say your household spending was less than, more than, or about equal to your house hold income?” If the respondent’s answer is less than or about equal to the income, the variable is recoded to 1, otherwise 0.
J5	Saving for emergency	The original question “Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?” If the respondent’s answer is yes, the variable is recoded to 1, otherwise 0.
J33	Long term planning	The original question “I set long term financial goals and strive to achieve them” on a scale of 1-strongly disagree to 7-strongly agree. If the respondent’s answer is 5, 6 or 7, the variable is recoded to 1, otherwise 0.
J8 and J9	Calculating retirement needs	The original question “Have you ever tried to figure out how much you need to save for retirement?” If the respondent’s answer is yes, the variable is recoded to 1, otherwise 0.
Sum(m6, m7, m8, m31, m9, m10)	<i>Other financial capability variables</i> Objective financial literacy	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).
M4	Subjective financial literacy	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.
M1_1	Perceived 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.
J1	<i>Financial wellbeing</i> Financial satisfaction	The original question “Overall, thinking of your assets, debts and savings, how satisfied are you with your current personal financial condition? Please use a 10-point scale, where 1 means ‘Not At All Satisfied’ and 10 means ‘Extremely Satisfied.’”
A8	Income level	The original variable has 8 levels: 1 - <\$15,000 to 8 -

		\$150,000 or more. Recoded to 3 income levels: 1-0 to less than \$25,000 2-At least \$25,000 but less than \$75,000 3-At least \$75,000 and more
	Financial wellbeing	A sum of Z values of income and financial satisfaction variables.
	<i>Demographic and financial variables</i>	
A3	Being male (vs. female)	Recoded, 1=male, 0=female
A4a_new_w	Being White	Recoded, 1=white, 0=non white
A6	Being married	Recoded, 1=married, 0=not married
A11	Having dependent children	Recoded, 1=yes, 0=no
A9	Working	Recoded, 1=yes, 0=no
A3Ar_w	Age group	Recoded to 3 age groups: 1-18-34 2-35-64 3-65+
A5	Education level	Recoded to 3 education levels: 1-Did not complete high school; High school graduate – regular high school diploma; High school graduate – GED or alternative credential 2-Some college, no degree; Associate’s degree 3-Bachelor’s degree; Post graduate degree
B1	Have checking	Recoded, 1=yes, 0=no
B2	Have saving etc.	Recoded, 1=yes, 0=no
C1	Have 401(k)	Recoded, 1=yes, 0=no
C4	Have IRA etc.	Recoded, 1=yes, 0=no
Ea_1	Own home	Recoded, 1=yes, 0=no
E7	Have mortgage	Recoded, 1=yes, 0=no
E8	Have home equity loan	Recoded, 1=yes, 0=no
G1	Have auto loan	Recoded, 1=yes, 0=no
G2	Have medical bill	Recoded, 1=yes, 0=no
H1	Have health insurance	Recoded, 1=yes, 0=no
F1	Have credit card	Recoded, 1=yes, 0=no
F2_2	Have credit card debt	Recoded, 1=yes, 0=no
G30	Have student loan	Recoded, 1=yes, 0=no
G25	Have high cost loan	The respondents are asked if they have used several high cost loans such as auto title loan (G25_1), payday loan (G25_2), pawn shop (G25_4), and rent-to-own store (G25_5). If they used at least once to any of these loans, it is coded as 1, 0 otherwise.

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

**Table 2 Characteristics of Budgeter and Non-budgeter (N=27,564)**

		Non-Budgeter	Budgeter
Total		43.8%	56.2%
Gender	female	42.5%	57.5%
	male	45.4%	54.6%
Race	nonwhite	41.3%	58.7%
	white	44.7%	55.3%
Marital status	not married	46.7%	53.3%
	married	41.9%	58.1%
Have dependent children	no	47.4%	52.6%
	yes	37.5%	62.5%
Working	no	44.8%	55.2%
	yes	43.0%	57.0%
Age	18-34	39.7%	60.3%
	35-64	44.1%	55.9%
	65 or older	49.3%	50.7%
Education	High school	46.9%	53.1%
	Some college	42.6%	57.4%
	4-year college	42.9%	57.1%
	degree or higher		
Income	0-\$24999	45.8%	54.2%
	\$25000-\$74999	42.1%	57.9%
	\$75000 or higher	44.8%	55.2%
Have checking	no	53.4%	46.6%
	yes	42.9%	57.1%
Have saving	no	50.4%	49.6%
	yes	41.8%	58.2%
Have 401(k)	no	46.3%	53.7%
	yes	41.8%	58.2%
Have IRA, etc.	no	44.8%	55.2%
	yes	41.7%	58.3%
Own home	no	45.2%	54.8%
	yes	42.9%	57.1%
Have mortgage	no	46.1%	53.9%
	yes	39.8%	60.2%
Have home equity loan	no	44.4%	55.6%
	yes	38.2%	61.8%
Have auto loan	no	45.5%	54.5%
	yes	40.1%	59.9%
Have unpaid medical bill	no	44.4%	55.6%

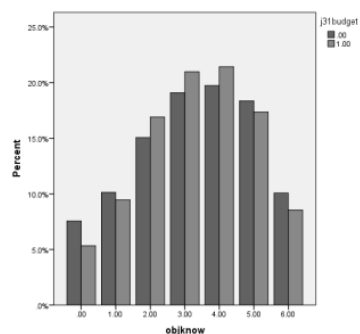
	yes	41.1%	58.9%
Have health insurance	no	48.9%	51.1%
	yes	43.1%	56.9%
Have credit card	no	46.8%	53.2%
	yes	43.0%	57.0%
Have credit card debt	no	45.5%	54.5%
	yes	40.8%	59.2%
Have student loan	no	45.1%	54.9%
	yes	40.3%	59.7%
Have high cost loan	no	45.6%	54.4%
	yes	37.9%	62.1%

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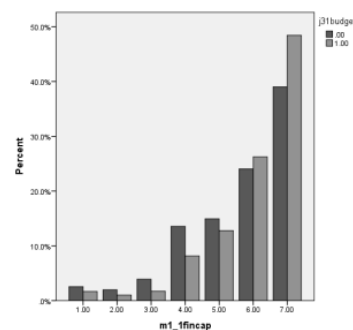
Notes: Chi-square tests were conducted for pairs of demographic and financial factors by planner status and all results were significant at 1%.

**Figure 1 Comparing Budgeting Behavior with Financial Capability Variables**

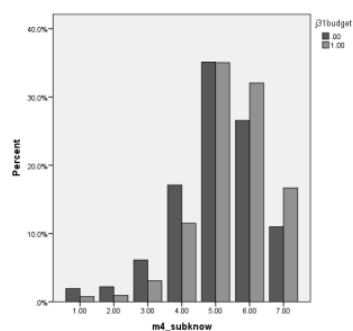
**A. Budgeting and Objective Financial Literacy**



**C. Budgeting and Perceived Financial Capability**

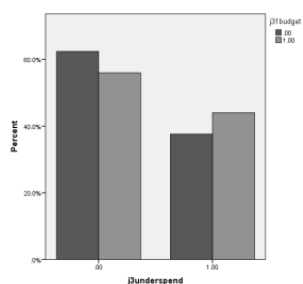


**B. Budgeting and Subjective Financial Literacy**

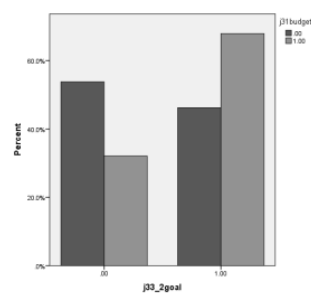


**Figure 2 Budgeting and Other Desirable Financial Behavior**

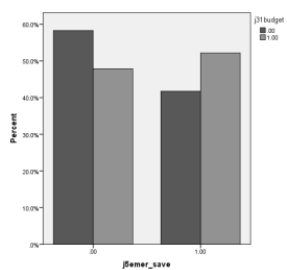
**A. Budgeting and underspending**



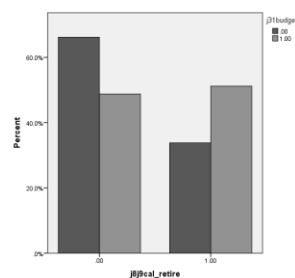
**C. Budgeting and Planning**



**B. Budgeting and Saving for Emergency Fund**



**D. Budgeting and Calculating for Retirement Needs**



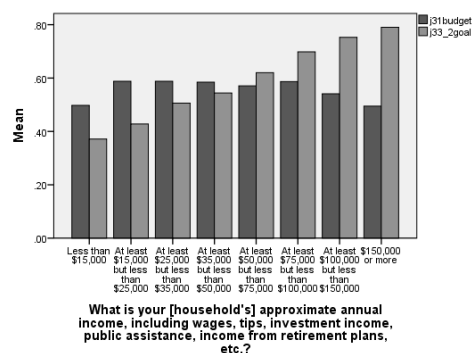
**Table 3 Binary Logistic Regression Results on Being a Budgeter**

	B	SE	p	OR
Male	-.087	.025	.001	.917
White	-.105	.029	.000	.901
Married/cohabiting	.104	.030	.001	1.109
Have dependent children	.289	.029	.000	1.335
Working	-.126	.029	.000	.881
Age 35-64	-.225	.031	.000	.798
Age 65 and older	-.396	.045	.000	.673
Income 25k-75k	-.092	.037	.012	.912
Income 75k or more	-.347	.047	.000	.707
Education – some college	.130	.033	.000	1.139
Education – bachelor degree or higher	.122	.036	.001	1.130
Have checking	.283	.051	.000	1.327
Have saving etc.	.287	.034	.000	1.333
Have 401(k)	.061	.031	.050	1.063
Have IRA etc.	.154	.031	.000	1.167
Own home	-.003	.036	.936	.997
Have mortgage	.181	.034	.000	1.199
Have home equity loan	.116	.045	.010	1.123
Have auto loan	.050	.029	.091	1.051
Have medical bill	-.028	.034	.413	.972
Have health insurance	.166	.042	.000	1.180
Have credit card	-.029	.039	.457	.971
Have credit card debt	.076	.030	.012	1.079
Have student loan	-.034	.031	.273	.966
Have high cost loan	.303	.032	.000	1.354
Constant	-.347	.064	.000	.707

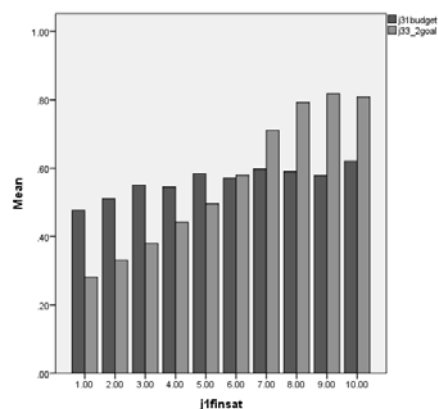
Notes: reference categories are age under 25, income under \$25,000, and education of high school or lower. OR refers to odds ratio. N=27564. -2 Log likelihood=36924.792. Cox & Snell R Square = .031. Nagelkerke R Square = .041. Overall percentage of correct predictions = 56.2%.

**Figure 3 Budgeting and Planning by Financial Wellbeing Groups**

**A. Budgeting and Planning by Income**

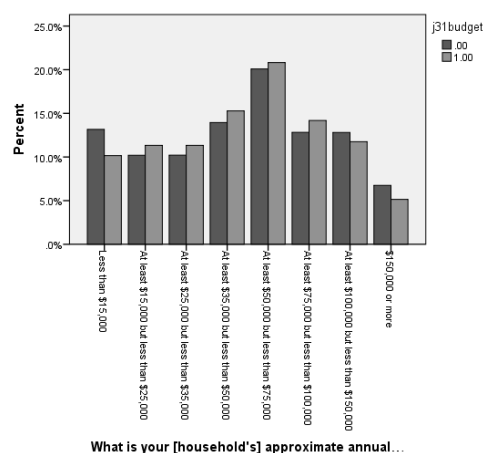


**B. Budgeting and Planning by Financial Satisfaction**

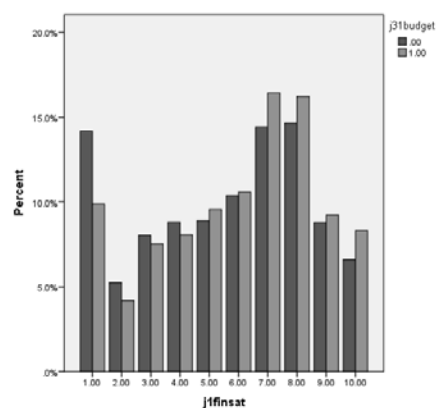


**Figure 4 Budgeting and Financial Wellbeing**

**A. Budgeting and Income**



**B. Budgeting and Financial Satisfaction**



**Table 4 OLS Regression Results on Financial Wellbeing**

	Model 1			Model 2			Model 3		
	B	beta	p	B	beta	p	B	beta	p
Constant	-.051		.001	-2.885		.000	-3.212		.000
Budgeting	.124	.037	.000	-.284	-.085	.000	-.177	-.053	.000
Underspending				.312	.093	.000	.264	.079	.000
Saving for emergency				1.043	.316	.000	.587	.178	.000
Planning				.486	.145	.000	.337	.100	.000
Calculating retirement needs				.480	.144	.000	.108	.033	.000
Objective financial literacy				.071	.070	.000	-.049	-.049	.000
Subjective financial literacy				.274	.198	.000	.206	.149	.000
Perceived financial capability				.042	.035	.000	.006	.005	.250
Male							.193	.058	.000
White							-.025	-.007	.102
Married/cohabiting							.594	.175	.000
Have dependent children							.123	.036	.000
Working							.258	.078	.000
Age 35-64							-.058	-.018	.001
Age 65 or older							.059	.014	.016
Education some college							.061	.018	.001
Education bachelor or higher							.356	.104	.000
Have checking							-.146	-.023	.000
Have saving etc.							.184	.046	.000
Have 401(k)							.414	.124	.000
Have IRA etc.							.301	.087	.000
Own home							.388	.114	.000
Have mortgage							.013	.004	.478
Have home equity loan							.103	.018	.000
Have auto loan							.167	.047	.000
Have medical bill							-.332	-.081	.000
Have health insurance							.151	.028	.000
Have credit card							.465	.112	.000
Have credit card debt							-.267	-.078	.000
Have student loan							-.125	-.034	.000
Have high cost loan							-.016	-.004	.343
R <sup>2</sup> change	.001			.402			.179		
F change	37			2551			493		
p	.000			.000			.000		



## **Childhood Financial Socialization and Financial Fragility in Adulthood**

*David Allen Ammerman, West Texas A&M University and Cherie Stueve, Kansas State University*

### **Abstract**

This study explored the influence of individual childhood financial socialization on two measures of financial fragility: the household debt ratio and current ratio. A sample was extracted from the 24th wave of *De Nederlandsche Bank* (DNB) Household Survey (DHS), and logistic regression was used to model the binary outcomes of the dependent variables. Results suggest that childhood financial experiences are important determinants of financial outcomes later in life, and that parental encouragement to save during childhood is particularly important. Childhood financial socialization was positively associated with reporting a debt ratio greater than 40%, and with reporting a current ratio less than 100%. As such, the present results also contrast those of previous studies in suggesting that encouragement to save during childhood is positively associated with a greater propensity to finance investments with debt. Implications for financial literacy programs are discussed. Interestingly, subjective financial knowledge had no influence on reporting healthy debt ratios or current ratios. Implications for practice, and for the development and refinement of financial education programs are discussed.

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## **Confidence with Financial Knowledge and Long-Term and Short-Term Goal-Setting**

*James Blair and Jing Jian Xiao, University of Rhode Island, Xu Cui, Renmin University of China, and Elton Parente de Oliveira, University of São Paulo*

**Key words:** financial confidence, financial literacy, goal-setting, overconfidence, under-confidence

### **Detailed Abstract**

Individuals can be overconfident or under-confident in many of their abilities, this is especially true in regards to confidence in their own financial knowledge. Understanding how financial confidence relates to goal-setting is an important topic to several stakeholders including policymakers, practitioners, and researchers involved with personal finance as this can lead to behaviors and decisions which can be helpful or detrimental to an individual's financial wellbeing (Porto & Xiao 2016). Previous research has examined consumer financial literacy and capability from diverse perspectives (Huston, 2010; Lusardi & Mitchell, 2014; Xiao & Porto, 2017), but little research has examined financial literacy confidence and goal setting behavior. Xia, Wang, and Li (2014) defined overconfidence with financial literacy is the positive differences between an individual's objective and subjective financial knowledge. In the context of personal finance, online financial literacy training and financial advice were suggested tools to overcome overconfidence with financial knowledge (Porto & Xiao 2016).

We do not yet know how financial confidence impacts individuals' goal-setting. Financial counselors and planners work with a diverse group of individuals who possess differing levels of confidence. It would be beneficial to identify which types of individuals need guidance with short-term and long-term goal-setting, so that financial counselors and planners would be able to better assist them with their future financial plans. Based on mean scores of objective and subjective financial knowledge, individuals are categorized to four groups: naïve, under-confident, overconfident and competent.

With data from the 2015 National Financial Capability Study, we found confidence with financial knowledge impacts long-term and short-term goal-setting. Additionally we found naïve individuals are the worst at setting long-term goals and competent individuals are the best at setting long-term goals. Overconfident individuals are the worst at short-term goal-setting, while under-confident and naïve individuals are the best at setting short-term goals.

One potential explanation for the results is the behavioral hierarchy of the different long-term and short-term goal-setting alternatives. Budgeting is considered a basic level of financial planning (Xiao & O'Neill 2017) and with it being a form of short-term goal-setting, competent and overconfident individuals may be more concerned with higher level financial planning aspects while the short-term goal-setting activity is a prerequisite for their long term goal setting activity. Other types of individuals, like under-confident and naïve individuals may be more inclined to take on lower level behavioral hierarchy activities, like budgeting. This may be why different types of individuals are better or worse at setting short-term and long-term goals.

Based on our findings there were some limitations to the study and areas for future research. In the current study, we only have one measure for each of our dependent variables of short-term and long-term goal-setting. Although single-item measures have been found to be reliable measures (Wanous & Reichers 1996), we recommend future research consider replicating the findings of these studies using multi-item measures to strengthen the reliability and validity of the results. The current dataset only includes consumers from the United States. It would be interesting to examine if the results hold when examining a sample of consumers from other cultures. This would increase the robustness and generalizability of the current findings to individuals of other cultures. In particular, emerging markets have been under-researched (Daly & Nsiah 2013; Cui, Xiao, & Yi 2017). Replicating this study with individuals from an emerging market would fulfill our need to better understand individuals in this setting and determine if there are any differences in their goal-setting in relation to their financial confidence. Lastly, financial counselors and planners would benefit from future research examining what tools are most effective with individuals possessing different levels of confidence on their goal-setting skills.

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## **I know I should, but do I do it? Introducing the Financial Cognition Scale**

*Kristy L. Archuleta, Christina Glenn, Derek R. Lawson, and Joy Clady, Kansas State University, and Syble Solomon, Lifewise Strategies*

### **Abstract**

The purpose of this study was to establish a new scale to measure financial cognitions and to conduct preliminary analyses about how financial cognitions and financial behavior are related. Preliminary analyses collected from employees who work for employers with 10 or more employees suggest that the financial cognition scale developed in this study shows high reliability and strong validity. In addition, higher financial cognitions and higher financial knowledge are positively and significantly associated with more positive financial behaviors. Implications for practitioners and researchers are presented.

**Key words:** age, education, financial behavior, financial cognition, financial knowledge

### **Introduction & Literature Review**

The purpose of this study was two-fold: (a) to establish a new scale called the Financial Cognition Scale and (b) to conduct preliminary analysis to understand how financial cognitions are associated with financial behavior. Cognitions are “mental operations people utilize to process information” (Nabeshima & Klontz, 2015, p. 143). In this study we define financial cognitions as thought patterns about how individuals think about what they should do or need to do with their money. Cognitive Behavioral Theory posits that cognition, emotion, and behavior influence one another (Nichols, 2008). In other words, if a person can change how they think about a particular issue, then they can alter the way they respond behaviorally or emotionally to it. Based on this assumption and data available, we hypothesized that controlling for age and education that financial cognitions and financial knowledge will be positively associated with financial behavior.

Previous literature guides the present study’s exploration of financial knowledge and financial cognitions as they relate to financial behavior. Both objective and subjective financial knowledge have been found to be associated with positive financial behaviors (Robb & Woodyard, 2011). If subjective knowledge is linked to financial behaviors, then perhaps another subjective self-assessment in the form of financial cognition may also be linked to financial behaviors. The present study begins to explore the concept of financial cognition.

### **Methodology**

Data was collected as part of a larger study that has three stages, including an initial survey, an online financial game (if randomly selected), and a follow-up survey. To recruit respondents, a team of researchers contacted a variety of employers that had ten or more employees from a mid-western region. Employers ranged from professional to industrial, including employees from banks, agricultural equipment retailers, and educational institutions. Employers who agreed to help with the study, were sent an email outlining the study’s expectations and benefits and inviting their employees to participate in a research project. Employers then emailed their employees asking employees to participate. Employees agreed to participate in the study by clicking on the link in the email directing them to the initial survey, which included an informed consent. At the time of submission, initial survey data collection (stage 1) was still in process; therefore, preliminary analyses are presented for data collected to date in stage 1. If respondents complete all steps to the research project, respondents will be entered into a drawing for one of ten \$50 gift cards.

### **Measurements**

Financial cognition consisted of a sum of responses to three items, with a possible range in scores from 3 to 15. Respondents were asked to rate their level of agreement to the following three questions, on a scale of 1 (*strongly disagree*) to 5, (*strongly agree*):

- I can predict the situations when I will spend more than I meant to.
- I know what I should do differently to manage my money better.
- I know what motivates me to spend or save the way I do.

A factor analysis was conducted to test the validity and reliability of the new financial cognition scale, with results indicating the scale is valid and reliable, having a standardized alpha of .87 and an Eigenvalue of 2.36 (see Table 1).

Financial behavior was measured using a sum of responses to five questions, asking respondents to indicate the frequency they performed the behavior in the past two months using a scale of 1 (*never*) to 4 (*always*). Behaviors included setting aside money for savings, having a plan to reach financial goals, paying credit card bills in full, reaching the maximum limit on credit cards (reverse coded), and spending more than earned (reverse coded).

## **Results**

Our preliminary sample consisted of 47 participants. Of those, 53% were female, 94% were white, and the average age of survey respondents was 43 years old. The majority of the sample had a Bachelor's degree (34%) or an Associate's degree (28%). The mean financial knowledge score for respondents was 3.8 out of 5. The financial cognition scale had a possible range from 3 to 15, with a mean score of 11.98 for the sample, indicating a moderate level of financial cognition among the group. Financial cognition was dichotomized into low financial cognition (scores between 3 and 12), and high financial cognition (scores between 12.01 and 15). Forty-five percent of the sample fell in the high financial cognition category. Financial behavior had a range from 5 to 20, with higher scores indicating positive financial behavior. The sample mean for financial behavior was 15.58 out of 20, suggesting the sample were more likely than to perform positive financial behaviors. See Table 2 for full results.

Correlation analyses were conducted among financial cognition, financial behavior, financial knowledge, education, and age. A positive correlation was found between cognition and behavior ( $r = .38, p < .05$ ), suggesting that when one knows what they should do with regard to their finances, they are more likely to perform those behaviors. Though not significant at the standard alpha  $p < .05$ , a positive correlation was also found between cognition and financial knowledge ( $r = .25$ ), which was significant at  $p < .10$ . Positive correlations were also found between financial behavior and financial knowledge ( $r = .52, p < .01$ ), and behavior and education ( $r = .35, p < .01$ ), indicating the more education and knowledge one has, the more likely they will perform positive financial behaviors. Full results are presented in Table 3.

A preliminary ordinary least squares regression was performed to evaluate the influence of cognition, financial knowledge, age, and education on financial behaviors. When compared to those with low financial cognition, individuals with higher financial cognition were significantly more likely to perform positive financial behaviors, as were those with higher financial knowledge, and higher education levels. These results supported this study's main hypothesis. Full results are presented in Table 4.

## **Discussion**

Preliminary analyses suggest that the financial cognition scale shows high reliability and strong validity. Although further testing should be done, the scale could be used to assess clients' cognitive thought process about what they need to do to manage their money and their motivation to do it. What might be more enlightening is that higher financial cognitions along with increased financial knowledge and education appear to be significantly and positively associated with financial behavior. This finding indicates that when one knows what they should do and are motivated to do it, have more financial knowledge and are better educated, they will follow through with better financial behaviors. For financial counselors, coaches, educators and therapists, tapping into clients' inner knowing and motivation may be a means to improving financial behaviors.

Two approaches—cognitive-behavioral (Nabeshima & Klontz, 2015) and solution focused (Archuleta et al., 2015)—financial therapies may be well suited to tap into financial cognitions and to change maladaptive financial behaviors. Interventions such automatic thought record and cognitive reframing from cognitive behavioral therapy (CBT) (Nabeshima & Klontz, 2015) and the miracle question and scaling questions from solution-focused therapy (SFT) (deShazer & Dolan, 2007) are interventions that could be utilized in practice with clients. Both approaches are theoretically informed and empirically validated in the mental health fields to treat a wide variety of issue. More recently, these approaches have been applied to financial behavior and empirically supported in research.

This study is not without limitations, including generalizability to a broader population and utilization of preliminary analyses. The purpose of the larger study is focused on individuals who work for employers with more than 10 employees in a Midwestern region. However, data collected in Phase 1 have useful implications as noted above

beyond an employee population. At the time of submission, we were still collecting data in Phase 1 of this project. In this study, we were limited to the number of variables we could include in the regression due to a small sample size collected to date. Data collection in Phase 1 will be complete and data from a larger sample will be analyzed and reported if accepted for a presentation.

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Table 1  
*Financial Cognition Factor Analysis (N=47)*

Variable	Factor 1
Predict Spending	.8988
Manage Money Better	.8677
Motivates Spending	.8950
Eigenvalue	2.3618
Standardized Alpha	.8650

Table 2  
*Sample Summary*

Variable	Proportions
Male	47%
Female	53%
Non-white	6%
White	94%
Age (years)	43.44
Cognition (Range 3-15)	11.98
Low Fin. Cog. (Score 3-12)	55%
High Fin. Cog. (Scores > 12)	45%
Some College or Less	21%
Vocation Associates	28%
Bachelor Degree	34%
Graduate Degree	17%
Fin. Know (Range 0-5)	3.81
Fin. Behavior (Range 5-20)	15.58



Table 3  
*Correlation of Key Variables*

	Cognition	Behavior	FinKnow	Education	Age
Cognition	-	.3827*	.2514	.0892	.1790
Behavior	.3827*	-	.5226**	.3511*	.1170
FinKnow	.2514	.5226**	-	.0676	.1221
Education	.0892	.3511*	.0676	—	-.1062
Age	.1790	.1170	.1221	-.0162	-

\*p<.05, \*\*p<.01

Table 4  
*OLS Regression Predicting Financial Behavior*

Variable	Parameter Est.	SE
Intercept	5.8415	2.3538
High Fin. Cognition	1.7885*	.8022
Financial Know	1.4000**	.3702
Age	.0023	.0325
Education	.7576*	.3198
Adjusted R-Squared	.3976	
F-Value	7.60	
Reference category: Low Fin. Cognition    *p<.05, **p<.01		

## **Peer Financial Evaluation and Depression among College Students**

*Sonya Britt-Lutter, Kansas State University and Danielle Winchester, North Carolina A&T*

### **Abstract**

The current contributes to the literature by exploring the impact of an inclusive evaluation of one's financial condition, as well as the mitigating effects of financial help seeking and mastery, on depression tendencies among college students. Students' perception of how they compare to their peers financially will help inform how depression is influenced by peer evaluations and efforts toward solutions of mitigating the effect.

### **Introduction**

More prominent than in other settings, college students' sense of self-worth is influenced by their peers and their environment (Palan, Morrow, Trapp, & Blackburn, 2011). Students are in a transitional life stage—they no longer rely as heavily on their existing social network of friends and family and transition to a different environment to face new challenges and opportunities (including financial independence) resulting in potential changes to identity and self-esteem (Montgomery & Cote, 2003). There are high levels of stress for college students to conform to the peer groups in which they aspire to belong. Oftentimes this conformity comes in the form of status consumption where students are driven to use status purchases as signals of belongingness, closeness to and acceptance by others, as well as self-esteem enhancements (Shrum et al., 2013). This status consumption peer pressure may result in students spending a disproportionate amount of their resources on status-laden goods possibly leading to the acquisition of burdensome debt, a greater tendency to overspend, lower money management skills, and risky financial behavior in an attempt to fit in (Wang & Xiao, 2009). A desire to “keep up” with peers despite a lack of money is a key stressor for college students (Heckman, Lim, & Montalto, 2014).

The effect of financial stress on mental health conditions is supported in older samples (Adams & Moore, 2007; Jessop, Herberts, & Solomon, 2005). When financial stress becomes too great, the risk of depression increases which is especially concerning for college students where one in three students experiences depression each year (American College Health Association [ACHA], 2013). The rate is slightly higher for females, although both males and females have difficulty functioning at times because of feeling depressed and 11% of college students meet the criteria for clinical depression. Depression falls within the top reasons students report for factors influencing their academic performance ranking below stress, anxiety, sleep difficulties, work, and physical illness, such as a cold or flu (ACHA, 2013). With prevalence rates higher than nearly all other mental illnesses—such as anorexia, ADHD, OCD, and substance abuse—and the known negative influence of depression on academic outcomes of college students, it is relevant to identify some of the financial patterns associated with depression to possibly intervene and provide remedies for students.

### **Theoretical Framework and Related Literature**

According to theorists, depression does not lead to a negative view of oneself, it is developed because of the negative view of oneself (Beck, Brown, Steer, Eidelson, & Riskind, 1987). Students may not have an accurate representation of their peers' financial conditions and therefore internally rank themselves lower. Unlike physical health indicators such as observations of jogging, engaging in sports' activities, healthy body mass index numbers, etc., financial health indicators are easily masked by the use of student loans and credit cards to support current consumption. Students may view themselves in lower financial light due to their unawareness of peers' situation and increase their depressive tendencies as a result.

Although studies that link financial stress—such as the inability to pay bills—to depressive tendencies in college students is sparse, the relationship has been established in other populations (Jackson, Brooks-Gunn, Huang, & Glassman, 2000). Students who have a financial plan generally fair better in terms of reduced stress. For instance, having financial goals influences the degree to which individuals encounter stressful situations and the way that they cope with the stressors they encounter (Elliot, 1999).

Financial education and counseling is oftentimes considered a means for reducing stress and anxiety as well as a conduit to better financial decision making and behaviors, which is confirmed with empirical data that shows that students with higher levels of financial stress are more likely to seek professional financial counseling as compared to students with lower stress levels (Lim, Heckman, Letkiewicz, & Montalto, 2014). If students who are seeking

counseling are already at a heightened stress level, it is possible that they are also at risk for a higher likelihood of expressing depressive tendencies. Over time, financial counseling has been shown to have a statistically significant association with changes in objective financial knowledge and greater satisfaction with one's financial situation (Britt, Canale, Fernatt, Stutz, & Tibbetts, 2015). As such, financial counseling should be associated with a reduction in financial stress and ultimately depressive tendencies even though that assertion has gone untested and is not the focus of the current cross-sectional analysis.

The reasons for seeking financial counseling and education vary substantially. For purposes of this study, students who sought help for proactive reasons with education-type questions—e.g., they had financial aid or credit questions—are hypothesized to be different than students who sought help for reactive reasons to more immediate needs—e.g., budgeting, financial crisis, resolution of old debt.

The majority of studies investigating the antecedents of financial stress for college students have included stressors related to their current financial condition such as having debt, managing debt, and the expectation of student loan debt following as well as having a major financial crisis and/or an inability to afford essential items (Heckman et al., 2014; Andrews & Wilding, 2004). A less explored influencer on financial stress is students' perceptions of financial control. Individuals experience stress within two different contexts—an internal context whereby the individual can exercise control to reduce the stress and an external context whereby the individual has no real control over what is happening (Sumarwan & Hira, 1993). Individuals under financial hardship—as measured by not being able to make ends meet—exhibit greater financial stress although those with higher levels of internal locus of control reported less financial stress (Prawitz, Kalkowski, & Cohart, 2013).

In terms of demographic characteristics, female students express higher level of financial strain and lower perceived financial well-being as compared to their male counterparts (Leach, Hayhoe, & Turner, 1999). Females also experience higher rates of depression (ACHA, 2013; National Institute of Mental Health, 2014). Researchers have reported that a race impacts the financial stress level of individuals—African-American college students tend to experience higher levels of financial stress than their White peers (Joo & Grable, 2004). This difference in financial stress may be a result of differing socioeconomic conditions such as income, education, and employment levels (DeNavas-Walt, Proctor, & Smith, 2007).

Researchers have found that freshmen are more likely to experience financial stress and contend that it may be a function of their new financial independence (Britt et al., 2015). However, empirical studies have also found that upperclassmen may exhibit greater stress levels because of post-graduation planning and/or the repayment of student loan debt (Beiter et al., 2015). In terms of graduate versus undergraduate students, research suggests higher rates of depression among undergraduates (Eisenberg, Gollust, Golberstein, & Hefner, 2007). Therefore, it is hypothesized that compared to graduate students, undergraduate students will be associated with a higher likelihood of depressive tendencies.

## **Summary**

The influence of peers and the perception of peers' financial situation can negatively influence students' financial behaviors and outcomes (Xiao, Shim, Barber, & Lyons, 2007). Students who feel deficient compared to their peers may be more likely to engage in risky financial behaviors such as poor use of credit, overspending, and exhibit poor day-to-day money management behaviors in an attempt to match their peers. The objective of the current study is to explore the influence of financial peer evaluation on depressive tendencies among college students by testing the following set of hypotheses.

- H<sub>1</sub>: Students with higher financial satisfaction will be associated with a lower likelihood of depressive tendencies.
- H<sub>2</sub>: Students with greater subjective knowledge will be associated with a lower likelihood of depressive tendencies.
- H<sub>3</sub>: Students who report more positive financial behaviors will be associated with a lower likelihood of depressive tendencies.
- H<sub>4</sub>: Students who seek financial counseling for education-type questions will be associated with a lower likelihood of depressive tendencies.
- H<sub>5</sub>: Students who seek financial counseling for immediate financial needs will be associated with a higher likelihood of depressive tendencies.

- H<sub>6</sub>: Students with higher perceived mastery will be associated with a lower likelihood of depressive tendencies.  
H<sub>7</sub>: Being a male student will be associated with a lower likelihood of depressive tendencies.  
H<sub>8</sub>: Being a non-White student will be associated with a higher likelihood of depressive tendencies.  
H<sub>9</sub>: Being a graduate student will be associated with a lower likelihood of depressive tendencies.

## **Methods**

Data were collected from a group of students who sought free financial counseling from an on-campus financial counseling center at a large Midwestern university between January 2010 and September 2016. Students filled out an intake questionnaire that provided socioeconomic and financial standing information as well as the presenting issue (e.g., budgeting assistance, credit repair, credit establishment, debt repayment, savings questions, and other topics). The initial sample is fairly representative of the college campus of approximately 24,000 students. Women are over-represented and first generation students, freshmen, and sophomores are underrepresented in the sample relative to the university population.

### **Depression Measure**

Depressive tendencies were measured using the nine item Patient Health Questionnaire (PHQ-9). Respondents are asked to indicate how frequently they have been bothered by the following items over the last two weeks: (a) little interest or pleasure in doing things; (b) feeling down, depressed, or hopeless; (c) trouble falling or staying asleep, or sleeping too much; (d) feeling tired or having little energy; (e) poor appetite or overeating; (f) feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down; (g) trouble concentrating on things, such as reading the newspaper or watching television; (h) moving or speaking so slowly that other people could have noticed, or being so fidgety or restless that you have been moving around a lot more than usual; and (i) thoughts that you would be better off dead, or of hurting yourself. Response options included not at all = 0, several days = 1, more than half the days = 2, or nearly every day = 3.

When used in clinical practice, respondents must indicate that they felt little interest or pleasure in doing things and/or felt down, depressed, or hopeless at least more than half of the days over the past two weeks to meet the initial criteria for depression. Then, response options are totaled and categorized by severity of depression. For purposes of this study, severity of depression was used as the sole indicator of depression (i.e., the initial diagnostic tool of considering depression was not used).

A score of 0 suggests no indication of depression. A score of 1-4 suggests minimal depressive tendencies, 5-9 suggests mild depressive tendencies, 10-14 suggests moderate depressive tendencies, 15-19 suggests moderately severe depressive tendencies, and 20-27 suggests severe depressive tendencies. According to the University of Michigan Health System (2011), scores of 15 or higher suggests treatment for depression may be needed. Scores were dichotomized where 1 = scores of 10 or higher (i.e., reports of moderate to severe depressive tendencies) and 0 = scores of 9 or lower (i.e., minimal to mild depressive tendencies) to predict likelihood of depressive tendencies in the logistic regression analysis.

### **Financial Satisfaction, Knowledge, and Behaviors**

Financial satisfaction and subjective financial knowledge were measured on 10-point scales where respondents were asked to indicate how satisfied they are with their overall financial situation where 1 = very dissatisfied and 10 = very satisfied and how they rate their financial knowledge where 1 = lowest level and 10 = highest level.

Financial behavior was proxied by three items. The first asked how frequently respondents have difficulty paying bills because of not enough income where 1 = almost never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = almost always. The same scoring system was used when asking respondents if they have a weekly or monthly spending plan that they follow and whether they have specific short- or long-term written financial goals.

### **Financial Help Seeking**

Financial help seeking was used to proxy how well students perceived they were doing compared to their peers. All members of the sample sought help, so the reasons for seeking help were split into (a) proactive/educational reasons for seeking help as an indicator of students feeling like they were in a better position than peers and wanted to further their skills/position and (b) reactive/urgent need reasons as an indicator of feeling worse off than peers and needing immediate assistance. The first group of positive help seeking included financial aid questions and establishing credit questions. The second group of help seeking included budgeting, financial crisis, resolving old

debt. Students could also indicate that they sought help for a different reason and they could select more than one reason for seeking help.

### **Mastery**

Mastery was measured with a seven item scale asking respondents to indicate how frequently they feel that events are in their control or the result of external factors in which they have no control (Pearlin, Lieberman, Menaghan, & Mullan, 1981). Scores could range from 7 to 35 with a mean of 29.97 ( $SD = 4.29$ ) and a Cronbach's alpha of .79 in this sample.

### **Gender, Race, and Grade**

Given the known higher rates of depression among females (ACHA, 2013) and non-whites (Dunlop, Song, Lyons, Manheim, & Chang, 2003), it was important to control for gender and race. Males and whites were coded 1, otherwise 0. Grade classification was divided by freshmen, sophomores, juniors, seniors, and graduate students where graduate students served as the reference category.

## **Results**

### **Descriptive Statistics**

Table 1 summarizes the descriptive statistics of the regression sample. The sample consisted of 32% males and 86% students who classified their race as white. Eight percent of the sample were freshmen, 11% were sophomores, 18% were juniors, 44% were seniors, and 17% were graduate students. Approximately 14% of the sample reported moderate to severe depressive tendencies in the last two weeks.

Respondents reported lower levels of financial satisfaction and knowledge possibly indicating their level of satisfaction and knowledge compared to peers. On a scale of 1-10 for both items, mean financial satisfaction was 4.78 ( $SD = 2.16$ ) and mean subjective financial knowledge was 4.70 ( $SD = 1.82$ ). Respondents reported, on average, that they seldom to sometimes have difficulty paying bills ( $M = 2.15$ ,  $SD = 1.19$ ), keep a spending plan ( $M = 2.54$ ,  $SD = 1.24$ ), and have written financial goals ( $M = 2.37$ ,  $SD = 1.22$ ).

Budgeting was the most frequently cited reason for seeking help (59% of respondents), which was closely followed by financial aid questions (58% of respondents). Approximately one-third (30% of the sample) sought help for credit-related questions, 18% were in some sort of financial crisis, 41% wanted to find ways to resolve old debt, and 37% of respondents sought help for some other reason. Respondents could indicate more than one reason, so frequencies do not total 100%. Respondents reported a fairly high mastery score, on average, of 29.97 ( $SD = 4.29$ ) on a scale of 7-35.

### **Regression Results**

As summarized in Table 2, mastery played the greatest role in predicting the likelihood of depression in the regression analysis based on standardized beta ( $B = -0.15$ ,  $p < .001$ ,  $\beta = -0.35$ ). Students with high mastery scores are 14% less likely to report depressive tendencies ( $e^B = 0.86$ ). How students view their financial satisfaction was the next largest contributor to the model with students with higher financial satisfaction reporting an 18% reduced likelihood of reporting depressive tendencies ( $B = -0.20$ ,  $p < .01$ ,  $e^B = 0.82$ ,  $\beta = -0.24$ ).

Of the reasons that students seek help, credit-related questions and being in financial crisis were predictive of the likelihood of depression. Students who sought help for credit-related questions were less likely to report depressive tendencies ( $B = -0.49$ ,  $p < .05$ ,  $e^B = 0.61$ ,  $\beta = -0.12$ ), whereas students who sought help for financial crisis were more likely to report depressive tendencies ( $B = 0.60$ ,  $p < .05$ ,  $e^B = 1.83$ ,  $\beta = 0.13$ ).

Financial behaviors that contributed to the likelihood of depressive tendencies included having difficulty paying bills ( $B = 0.19$ ,  $p < .05$ ,  $\beta = 0.12$ ) and having a spending plan ( $B = -0.21$ ,  $p < .05$ ,  $\beta = -0.15$ ). Student who have difficulty paying their bills are 20% more likely to report depressive tendencies and students who have a spending plan are 19% less likely to report depressive tendencies.

Gender and race did not play a significant role in predicting depressive tendencies. All grade levels below graduate students were nearly two times less likely to report depressive tendencies.

## **Discussion**

Depression is common on college campuses (ACHA, 2013). The sample from this study—students seeking peer-based financial counseling—is no exception. According to the American College Health Association (ACHA), about 30% of college students encounter depression each year and 11% are clinically diagnosed as depressed. Approximately 14% of the sample in this study scored in the moderate to severe range of depressive tendencies.

Depression was conceptualized as something that develops based on how one views oneself (Beck et al., 1987), especially as it relates to one's personal financial situation. The findings support that students' view of how much control they have in their life is the largest contributor to depressive tendencies, which was closely ranked to students' view of their financial satisfaction as a large contributor to depressive tendencies, as expected. How students view themselves in regards to financial knowledge does not appear to be negatively shaping their view of themselves.

Only two of the reasons for seeking help were related to depressive tendencies—one was positively associated with the likelihood of reporting depressive tendencies and one was negatively associated. As expected, the proactive reason for seeking help—i.e., educational questions about credit—was associated with a decreased likelihood of reporting depressive tendencies. It is possible that students who sought help for credit-related questions felt like they were in a better place financially and were ready to take the next step in establishing their financial future. In contrast, students who were in financial crisis (i.e., sought help because they were behind in monthly payments, had too much debt, had an unexpected financial crisis or medical expenses, or were unemployed) were associated with an increased likelihood of depression. Feeling like one is suffering financially appears to have a significant influence on perceptions of self and associated depression, as expected.

How students are handling their personal financial situation was associated with depressive tendencies as hypothesized. Students with difficulty paying bills (which could be correlated to the reason for seeking help) were more likely to report depressive tendencies, but students who kept a written spending plan were less likely to report depressive tendencies. This appears to be telling of students' perspective of current and future financial prospects with students having difficulty paying bills having a more negative view of themselves and students with a plan having a more positive view of themselves.

Gender and race did not play a role in predicting depressive tendencies. It is possible that there was not enough diversity in the sample to indicate differences in depressive tendencies among the demographic characteristics. It is also a possibility that the sample differs from the general student sample in other ways. For instance, this sample consisted of help-seekers. It is possible that male and female help-seekers and help-seekers of different races share more similarities to each other (i.e., being a help-seeker) rather than simply by their demographic classification. Findings indicate that undergraduate students were more likely to report depressive symptoms than graduate students.

## **Limitations and Implications**

A major limitation of this study is the restriction of data analysis to students who had sought financial counseling. Having a broader sample of students across multiple types of higher education institutions would likely reveal different patterns of depressive tendencies.

The findings suggest the need for more holistic services on university campuses. When students seek help for financial counseling or emergency financial aid services (such as emergency student loans, utility bill assistance, or food assistance), providers should understand the possibility for depression co-morbidity. Having discrete pieces of information about university counseling services available may prove useful to students unfamiliar with such services. Accessible counseling services is also important for graduate students who may not otherwise be involved with main campus activities. Having satellite offices for financial and mental health counseling in the remote buildings on campus could be more convenient and less intimidating to students who do not frequent the student union and activities building.

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Table 1

*Descriptive Statistics of Sample (N = 998)*

Variables	<i>M</i>	<i>SD</i>	<i>Range</i>
Experiencing moderate depressive symptoms	13.73	0.34	0-1
Financial Characteristics			
Financial satisfaction	4.78	2.16	1-10
Subjective financial knowledge	4.70	1.82	1-10
Has difficulty paying bills	2.15	1.19	1-5
Has a spending plan	2.54	1.24	1-5
Has written financial goals	2.37	1.22	1-5
Sought help for financial aid questions	0.58	0.49	0-1
Sought help for credit questions	0.30	0.46	0-1
Sought help for budgeting	0.59	0.49	0-1
Sought help for financial crisis	0.18	0.38	0-1
Sought help for resolving old debt	0.41	0.49	0-1
Sought help for another reason	0.37	0.48	0-1

Table 1, Continued

Variables	<i>M</i>	<i>SD</i>	<i>Range</i>
Demographic Characteristics			
Mastery	29.97	4.29	7-35
Male	0.32	0.47	0-1
White	0.86	0.35	0-1
Freshman	0.08	0.27	0-1
Sophomore	0.11	0.32	0-1
Junior	0.18	0.38	0-1
Senior	0.44	0.50	0-1
Graduate student	0.17	0.38	0-1

Table 2

*Summary of Logistic Regression Analysis for Variables Predicting Depression (N = 998)*

Predictor	<i>B</i>	<i>SE B</i>	$e^B$	$\beta$
Financial Characteristics				
Financial satisfaction	-0.20**	0.07	0.82	-0.24
Subjective financial knowledge	0.01	0.06	1.01	0.01
Has difficulty paying bills	0.19*	0.09	1.20	0.12
Has a spending plan	-0.21*	0.11	0.81	-0.15
Has written financial goals	0.01	0.11	1.01	0.01
Sought help for financial aid questions	-0.08	0.23	0.92	-0.02
Sought help for credit questions	-0.49*	0.25	0.61	-0.12
Sought help for budgeting	0.13	0.23	1.14	0.03
Sought help for financial crisis	0.60*	0.26	1.83	0.13
Sought help for resolving old debt	-0.04	0.24	0.96	-0.01
Sought help for another reason	0.35	0.23	1.42	0.09
Demographic Characteristics				
Mastery	-0.15***	0.02	0.86	-0.35
Male	-0.15	0.23	0.86	-0.04
White	-0.19	0.29	0.83	-0.04
Table 2, Continued				
Predictor	<i>B</i>	<i>SE B</i>	$e^B$	$\beta$
Freshman (ref = graduate)	0.87*	0.46	2.38	0.13
Sophomore (ref = graduate)	0.84*	0.41	2.31	0.15
Junior (ref = graduate)	0.83*	0.39	2.30	0.17
Senior (ref = graduate)	0.66*	0.34	1.94	0.18
Constant	2.73**	0.97		
Wald $\chi^2$		127.66***		
<i>df</i>		18		
Percent Concordant		80.5		

Note:  $e^B$  = exponentiated *B*. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## **Racial Differences in Housing Inheritance**

*Kenneth J. White and Andrew T. Carswell, University of Georgia*

**Key words:** down payment, homeownership, inheritance, race, wealth

### **Introduction**

In response to reports of the widening wealth gap (Asante-Muhammad et al., 2016), the purpose of this research is to determine whether the racial divide in wealth is impacted by intergenerational wealth transfer via residential real estate, home-buying down payment assistance, and heir property. To achieve this goal, secondary data is used to investigate the intertwining nature of race and inheritance as predictors of wealth accumulation. The central theme is that policy measures to encourage homeownership and/or provide down payment assistance may be necessary as an intervention into the racial wealth gap. Additionally, financial education could help families improve financial decisions and financial behaviors, such as cash flow management, saving, investing, tax planning and estate planning, which are necessary to maintaining residential real estate that ultimately becomes inherited property.

Wealth inequality is a persistent problem in the United States (Piketty, 2000). Wealth, in its simplest form, is savings and investments. It is estimated that for every \$1 of wealth held by Black families, White families hold \$17-\$19 (Asante-Muhammad et al., 2016; White and Heckman, 2016). Similar to the positive relationship of higher initial income to the facilitation of wealth accumulation (Rauscher & Elliott, 2016), higher initial wealth may be a facilitator of wealth accumulation. Thus, intergenerational transfers of wealth would appear to help families create cycles of wealth accumulation.

Homes are the largest investment that most American families make and by far the biggest item in their wealth portfolio. Homeownership is an even greater part of wealth composition for Black families, amounting to 53 percent of wealth for Blacks and 39 percent for Whites (Shapiro et al., 2013). As a result, inherited housing and down payments could theoretically bolster household wealth. Despite being only a modest hedge against inflation as a pure investment, ownership of residential real estate is considered foundational in the accumulation of a family's wealth (Wu & Pandey, 2012).

This research explores the following questions:

- 1) Does race play a part in whether a property is inherited by a household, *ceteris paribus*?
- 2) Does the inheritance of property give households an advantage in building wealth?

### **Literature Review**

Among the biggest drivers of the growing racial wealth gap are years of homeownership and inheritance. Inheritance involves financial supports by families or friends and preexisting family wealth. Most Americans inherit very little or no money, but over the past few decades, Whites have been five times more likely to inherit than African-Americans (36 percent to 7 percent, respectively) (Shapiro et al., 2013). Among those receiving an inheritance, 1) Whites received about ten times more wealth than African-Americans, 2) Inheritances converted to wealth more readily for White than Black families. Each inherited dollar contributed to 91 cents of wealth for White families compared with 20 cents for African-American families. This creates a cycle where Inheritance is more likely to add additional wealth to the already considerably larger portfolio Whites start out with since Blacks typically need to reserve their wealth for emergency savings (Shapiro et al., 2013). The number of years families owned their homes was the largest predictor of the gap in wealth growth by race (Shapiro et al., 2013).

### **Conceptual Framework**

Social capital theory may offer some insight into housing inheritance and down payment assistance. In its most general sense, capital is any form of wealth used or available for use to create more wealth (Halpern, 2005, page 4). Social capital comes through relations among persons that facilitate action (Coleman, 1988). Social capital is a particular kind of resource available to an individual that facilitates norms that encourage individuals to forgo self-interest and act selflessly for the greater good of the group.

Typically, two forms of social capital, bridging and bonding, are at work in interpersonal relationships. Bridging social capital consists of connections between colleagues, peers, acquaintances and associates. Bonding social

capital consists of relationships between family and close friends and are considered to consist of stronger connections (“strong ties”). Bonding tends to be homogenous and offers the social support often needed to help individuals get started and “get by” in life (Dominguez and Watkins, 2003; Seferiadis et al., 2015).

Bonding relationships and strong ties benefit the inner circle of family and close friends through reinforcing norms. Important in social capital is the norm that one should forgo self-interest and act in the best interest of the collective. This idea works well in bonding social capital since it strengthens families by leading family members to act selflessly in “the family’s” interest (Coleman, 1988). These selfless acts, combined with financial means, allows families to create cycles of wealth through inheritance and intergenerational transfers.

## **Hypotheses**

H1: Race is expected to be a significant predictor of wealth, with Black families having significantly less wealth than White families.

H2: Race is expected to have a significant impact on the intergenerational transfer of housing wealth.

## **Methods**

The study uses the 2011 wave of the American Housing Survey (AHS) published by the Department of Housing and Urban Development. AHS data will be analyzed using descriptive and binary logistic regression. Descriptive analysis will allow comparison of means. The logistic regression will be used to determine the significance of inherited housing and heir properties as correlated with race and wealth, controlling for other variables.

The dependent variable of research question 1 is a variable within the American Housing Survey related to the inheritance of a property (PREOCC). Independent variables include the racial/ethnic variable interest and a series of control variables including income, age, number of people in the home, first time homebuyer status, and education level of household. The dependent variable of research question 2 is the variable PQINT. This variable states whether the survey respondent receives interest income, which serves as the proxy for our wealth variable. Along with all the independent variables from question 1, we also moved the heir property variable (PREOCC) to the right-hand side of the equation and included it as an independent variable.

We create regression models replacing PREOCC with the receipt of down payment assistance from family, a form of inheritance or gift that is lower in magnitude than the receipt of an actual property but which still gives households an advantage over those who have to raise such funds themselves. As a result, it theoretically allows gift recipients to start investing sooner.

## **Results**

Based on preliminary results for question 1, race ultimately has an effect on the receipt of heir properties. Blacks are much more likely to receive an heir property than whites, *ceteris paribus*. The control variables also provide significant results. Lower educated respondents are more likely to live in an inherited property, *ceteris paribus*. Income has an effect on whether you inherited a property. Higher income households are less likely to receive an heir property, *ceteris paribus*. As related to age, each year aged raises the likelihood by approximately 1 percent that you will receive an heir property. This is likely due to the widower effect and that children's parents start dying the older they get. More people in the house decreases the likelihood of receiving an heir property. There is also a much higher likelihood that heir property owners are more likely to be first-time homeowners, controlling for all other variables.

Initial analyses for question 2 suggests there is no difference in wealth building characteristics between those who inherited a home and those who did not, *ceteris paribus*. There is also racial division within the wealth-building characteristic. In addition, an interaction variable highlighting black inheritors suggests no significance as it relates to wealth building. Control variables remain significant and in the same direction as research question 1.

## **Discussion**

The most important finding from our research is the lack of statistical significance in income generated from financial wealth between households that inherit and households that do not inherit residential property, regardless of race. This research is limited in a few ways. First, the researcher will be relying on cross-sectional survey data. Second, there are limits on certain aspects related to the quality of the home in question.

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## **The Longitudinal Association between Sound Financial Management Behaviors and Relationship Quality**

*Jeffrey Dew and Connor Barham, Brigham Young University*

### **Purpose**

Although some studies have found links between sound financial management and relationship outcomes (e.g., Dew and Xiao, 2013; Skogrand, Johnson, Horrocks, & DeFrain, 2011) few of these studies have utilized longitudinal data. Furthermore, not many of these studies have examined potential mechanisms that might link sound financial management and relationship outcomes. The purpose of this study, then, is to assess the longitudinal association between sound financial management behaviors and to test potential mediators of this association. We conduct the analyses using longitudinal dyadic data from participants who live in a large northwestern city.

### **Brief Literature Review**

When it comes to the longitudinal association between sound financial management and relationship outcomes, multiple possibilities exist. It may be that current sound financial management influences future relationship quality and vice-versa. For example, Dew (2007) found an association between couples' consumer debt levels and their future marital conflict (even when that conflict did not include financial conflict). Other studies, however, have also shown that couples' perceptions of their marital stability influence future financial behaviors (e.g., spending down savings, Finke & Pierce, 2006). The alternative is that current levels of sound financial management predict current levels of relationship quality after accounting for past levels of relationship quality, or vice versa.

If it is the case that sound financial management predicts relationship quality more than the other way around, this study will also test mediators of this association. Previous studies offer clues to potential mediating variables. First, it may be that as couples increase their levels of financial prosperity (e.g., greater liquid savings and investments, lower consumer debt) they may increase their relationship quality, or decrease the likelihood of future divorce (Dew, 2007, 2011). Conger and colleagues' family stress theory (Conger, Reuter, Elder, 1999) suggests that feelings of economic pressure (or in our case, feelings of economic stability) might mediate the association between sound financial management behavior and relationship quality (Dew & Xiao, 2013). A study of married couples going through a financial education course suggested that commitment might explain why these couples' relationship quality went up over time (Zimmerman & Roberts, 2012). Finally, it may be that sound financial management on the part of one spouse signals their intent to continue the relationship, thus enhancing the commitment levels within the relationship.

### **Methods**

Our data come from the Flourishing Families data set. The Flourishing Families survey recruited two-parent married and cohabiting families with at least two children from a large northwestern city. The survey collected data from these families yearly over a period of ten years. We use data from the Third and Fourth Waves of the Flourishing Families data set (which we designate Panel 1 and Panel 2 respectively) because these were the first waves that measured participants' reports of sound financial management behavior. Our sample size is slightly over 330 married couples.

We had three measures of relationship quality – relationship satisfaction, relationship conflict, and perceived relationship instability. The relationship satisfaction measure was a scale based on the Quality Marriage Index (Norton, 1983). The conflict measure asked participants how frequently they fought over eight different topics (e.g., household roles/drinking or drug use). The perceived relationship instability scale was based on three questions that asked couples how much they think their marriage might end on the future. Chronbachs alpha for these scales ranged from .67 for the relationship instability scale to .95 for the relationship satisfaction scale.

The sound financial measurement scale was made up of six items. These items asked participants how frequently they used sound financial management behaviors like "reduced [their] personal debt". The Chronbachs alpha for this scale was .76 for the wives and .74 for the husbands. We used total household income and household size as control covariates.

We used longitudinal path models. Path models allowed us to run multiple regression equations at the same time. It also allowed us to incorporate the longitudinal and dyadic nature of the data. We did not use structural equation modeling because we worried that we did not have a large enough sample.

Because very few studies have examined this relationship longitudinally, our study for AFCPE was somewhat exploratory. We tested three models of the longitudinal association between these two variables. Model 1 (Figure 1) tested whether Panel 1 sound financial management predicted Panel 2 relationship quality and vice-versa. Model 2 (Figure 2), had sound financial management predicting relationship quality that was contemporary with its own panel. This model is longitudinal because Panel 2 sound financial management predicted only the variance in Panel 2 relationship quality remaining after accounting for Panel 1 relationship quality. Model 3 (Figure 3) was the same as the second model, except that relationship quality predicted sound financial management behaviors.

Because our results favored the second model (sound financial management predicting relationship quality), the second part of our project tested various mediators of the association between sound financial management behavior and relationship quality. We tested financial prosperity, feelings of economic stability, relationship communication, and relationship commitment as mediators.

## **Findings**

The first part of our findings relate to the three longitudinal models. The model fit for the three models were fairly equal. For example, the TFI for Models 1, 2, and 3 were all .99. The RMSEA was .02, .01, and .03 respectively. The SRMR was .03, .04, and .05 respectively. Thus, model fit statistics did not really differentiate the models.

The regression coefficients in the models did differentiate the models, however. In Model 1, husbands' Panel 1 sound financial management only predicted their Panel 2 reports of relationship satisfaction and wives' Panel 1 sound financial management only predicted their Panel 2 reports of relationship conflict frequency. None of the Panel 1 relationship quality measures predicted Panel 2 sound financial management. In Model 2, sound financial management behaviors predicted relationship quality most of the time (sound financial management behavior predicted different measures of relationship quality 8 of the 12 times it was tested). In Model 3, relationship quality almost never predicted sound financial management behavior (marital quality measures only predicted sound financial management behavior 2 of the 12 it was tested).

The second part of our findings relate to the mediators between sound financial management behaviors and relationship quality. That is, we tested whether adding our mediator variables to Model 2 would reduce the association between sound financial management and relationship quality. The only significant mediation pathways were from sound financial management to feelings of financial stability to relationship quality. Further, when feelings of economic stability were in the model, sound financial management behaviors often became non-significant predictors of relationship quality. The other variables (i.e., financial prosperity, communication, commitment) failed to mediate the association between sound financial management and relationship quality.

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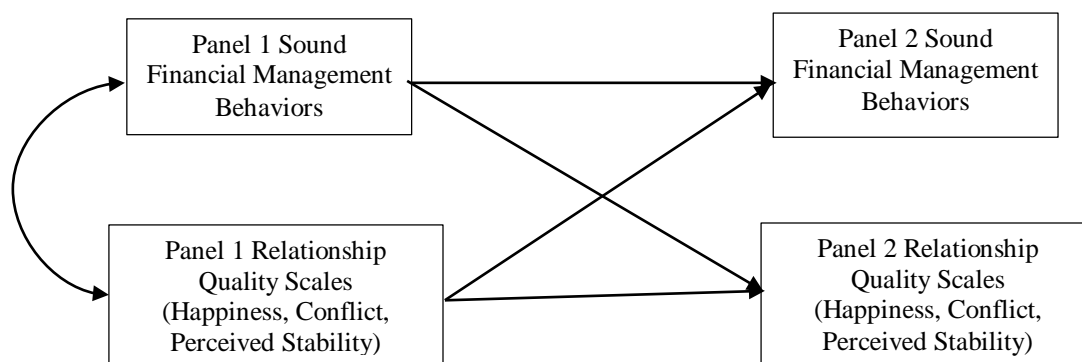
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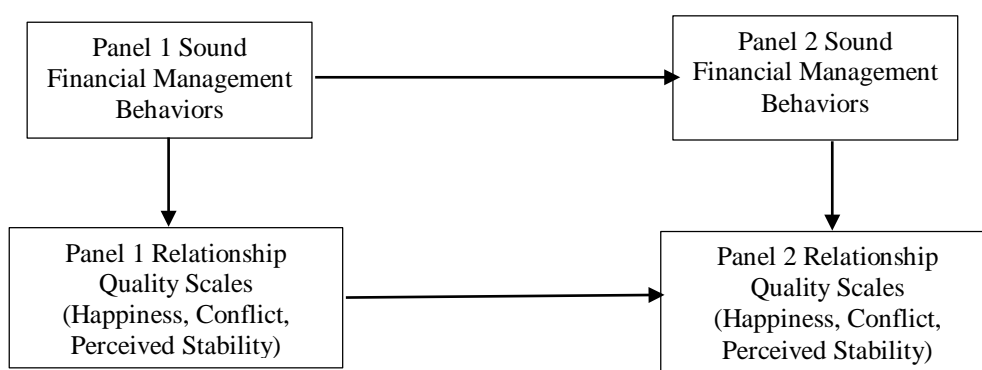
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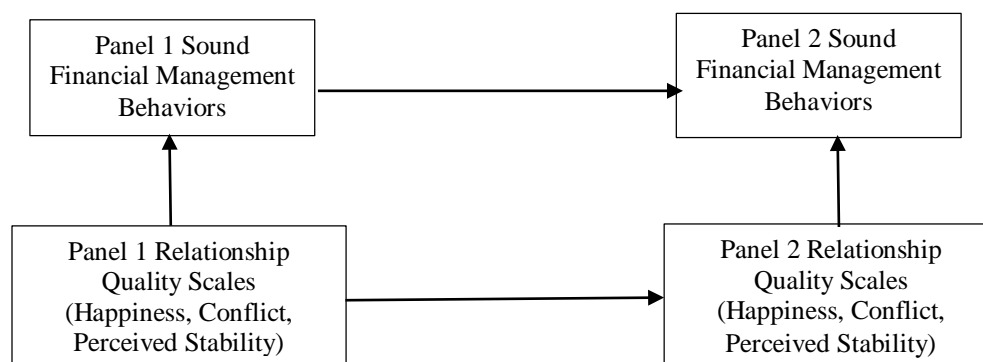
**Figure 1 – Cross lagged model**



**Figure 2 – Longitudinal Model of Sound Financial Management Behaviors Predicting Marital Quality**



**Figure 3 – Longitudinal Model of Marital Quality Predicting Sound Financial Management Behaviors**



**Note.** These are conceptual models only. These models only show one spouse. The analytic models are dyadic.

## Charitable Bequest Attitudes among Minorities, and Implications for Financial Planners

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### Detailed Abstract

Previous research has identified two distinctive characteristics, *inter alia*, of charitable behavior among African-Americans. First, in line with predictions from the economics of religion (Iannaccone, 1994), African-Americans are more likely to be charitable donors to religion (especially exclusively religious charitable donors), but are not more likely to be charitable donors to non-religious causes (James & Sharpe, 2007). The extent to which this tendency also applies to charitable bequest planning is unknown. Second, African-Americans are less likely than otherwise similar others to have charitable estate plans (James, 2009). However, among those who have planning documents, African-Americans are not significantly less likely to include a charitable component (James, 2009). One explanation is that completing estate planning documents may be the key barrier to charitable estate planning, rather than a lack of underlying charitable intent.

This study explores both whether lifetime religious giving tendencies extend to religious estate giving intentions and whether underlying charitable estate giving intentions, rather than documentation, may serve as the key barrier to charitable estate planning. Data from the Panel Study of Income Dynamics indicates that, as compared with others, African-Americans have significantly higher intentions to include a religious charitable estate component in absolute terms, relative to intentions to leave a gift to family, and relative to intentions to leave a gift to other charities. African-Americans also have a higher interest in leaving a gift to non-religious charity in absolute terms, but a lower interest in such gifts when measured relative to interest in leaving a gift to family. These results suggest that the preference for lifetime religious giving extends to estate giving intentions. Further, the results indicate that lack of underlying charitable intent (especially for religious giving) does not explain the relative lack of charitable estate planning, leaving open the possibility that documentation may be the key barrier.

### Data

This paper presents results from the first nationally representative study of attitudes regarding end of life charitable planning with detailed respondent information. Previously published research on U.S. charitable estate planning has been limited to post-mortem transfer data from very large estates subject to taxation (Kopczuk & Slemrod, 2003); small, single- location explorations of probate records (Barthold & Plotnick, 1984); and the presence of a charitable component in the estate plans of those aged 50 and older (James, 2009). These results from the PSID will provide the first glimpse into the charitable estate planning attitudes of those under the age of 50. In addition, these results should shed light on the gap between African Americans' stated charitable intents and actual charitable bequests.

The core data used in the study come from the 2007 PSID, the only wave of the PSID in which these particular charitable bequest questions were asked. The PSID is a well-known, nationally representative, longitudinal study that has been regularly fielded since 1968. The study is conducted at the University of Michigan's Survey Research Center.

There are 8,289 observations in the full sample. Answers such as "don't know" and "don't care to answer" are treated as missing values. These responses account for less than 1% of the answers for a majority of the questions. Answers by someone other than the husband, wife, or head of household, are also treated as missing values. In addition, ratios were set up to show relative importance of the three bequest options. Absolute levels may be relevant to decisions on current consumption versus bequests, but what goes into the actual estate plan depends upon an individual's relative preference over the three bequest options – religion, charity, and family. Relative preferences are measured by a ratio comparing the importance of leaving one type of bequest to total importance of all three bequests. The highest possible numerator value is 4, if the absolute importance of leaving that type of bequest is reported as "very important," while the lowest possible numerator value is 1, if the absolute importance of leaving that type of bequest is reported as "not at all important." The highest possible denominator value is 12, if the absolute importance of all three bequest types is 4, thus adding 4+4+4 to yield a denominator equal to 12. Conversely, the lowest possible denominator value is 3, if the absolute importance of all three bequest types is 1, thus adding 1+1+1 to yield a denominator equal to 3. Hence, if relative importance is the same, the ratio will be the same – for example, if all three bequest types are very important, the ratio will be 4/12 (which reduces to 1/3), and if all three bequest types are not at all important, the ratio will be 1/3. What is more meaningful is if relative

importance is not the same – for example, if bequest to a religious organization is very important, but bequests to family and charity are not important, the ratio will be 4/8 when looking at relative importance of a religious bequest and 2/8 when looking at relative importance of a family or charitable bequest. This tells us that leaving a bequest to a religious organization is relatively more important than leaving a family or charitable bequest, and is thus more likely to end up in that person's Last Will and Testament (if attitude renders action). An Ordinary Least Squares (OLS) estimation technique is then utilized with each of these three ratios as the dependent variable.

The PSID used a Likert scale to rank the importance of bequests to relatives, charity, and religious organizations, in three separate questions; these are the dependent variables. The wording of the questions from the PSID survey (2007) is as follows:

Some people think that leaving an estate or inheritance to their children or other relatives is very important, while others do not. Would you say this is very important, quite important, not important, or not at all important?

What about leaving an estate or inheritance to a church, synagogue, mosque or religious organization? (Would you say this is very important, quite important, not important, or not at all important?)

(What about) leaving an estate or inheritance to a charity? (Would you say this is very important, quite important, not important, or not at all important?)

The questionnaire had 1 to represent "very important," 2 for "quite important," 3 for "not important," and 4 for "not at all important." Reverse coding was used so that 1 is now "not at all important," 2 is "not important," 3 is "quite important," and 4 is "very important"; this way, a positive coefficient will be positively associated with the outcome.

## **Results**

A key finding is the difference between whites and blacks, with blacks being moderately more interested in leaving a charitable and family bequest and much more interested in leaving a religious bequest. When it comes to relative preference among the three bequest options (e.g. what is most likely to end up in the Last Will and Testament if attitude renders action), blacks overwhelmingly choose religion.

Table 1 indicates that when estimating an ordered probit with importance of a charitable, religious, or family bequest as the dependent variable and race, ethnicity, wealth and education as explanatory variables, race, ethnicity, and wealth are significant at conventional levels, while education is not significant at conventional levels.

Hispanics are more likely than non-Hispanics to say a charitable bequest is quite important or very important, all else being equal. Blacks, and other races, are more likely than whites to say a charitable bequest is quite important or very important, all else being equal. As wealth increases, respondents are slightly more likely to say a charitable bequest is not at all important or not important, and slightly less likely to say a charitable bequest is quite important or very important, all else being equal.

Hispanics are more likely than non-Hispanics to say a religious bequest is quite important or very important, all else being equal. Blacks, and other races, are more likely than whites to say a religious bequest is quite important or very important, all else being equal. As wealth increases, respondents are slightly more likely to say a religious bequest is not at all important or not important, and slightly less likely to say a religious bequest is quite important or very important, all else being equal. Those with higher levels of education are less likely than those with lower levels of education to say a religious bequest is quite important or very important, all else being equal. In other words, the higher the level of education, the less important a religious bequest becomes.

Blacks, and other races, are more likely than whites to say a family bequest is very important, all else being equal. As level of education increases, respondents are slightly more likely to say a bequest to relatives is not at all important, not important, or quite important, but slightly less likely to say a bequest to relatives is very important, all else being equal.

Column 2 of Table 2 indicates that among blacks, religious bequests have an increased likelihood of being relatively important compared to charitable and family bequests. The other significant variable, education, has a negative relation; thus, among those with higher levels of education, religious bequests have a decreased likelihood of being

relatively important compared to charitable and family bequests. Column 3 of Table 2 indicates that among blacks, charitable bequests have a decreased likelihood of being relatively important compared to religious and family bequests. Those with higher levels of education are more likely to say a charitable bequest is relatively important compared to religious and family bequests. Among those with higher levels of wealth, charitable bequests have a decreased likelihood of being relatively important compared to religious and family bequests. Column 4 of Table 2 indicates that among other races, and Hispanics, family bequests have a decreased likelihood of being relatively important compared to charitable and religious bequests, and results were significant at conventional levels. Additionally, among those with higher levels of wealth, family bequests have an increased likelihood of being relatively important compared to charitable and religious bequests. Column 5 of Table 2 indicates that among blacks, religious bequests have an increased likelihood of being relatively important compared to family bequests. Among those with higher levels of wealth and education, religious bequests have a decreased likelihood of being relatively important compared to family bequests. Column 7 of Table 2 indicates that among blacks, and those with higher levels of wealth, religious bequests have an increased likelihood of being relatively important compared to charitable bequests. Among those with higher levels of education, religious bequests have a decreased likelihood of being relatively important compared to charitable bequests.

### **Conclusion**

The key finding of this study is that blacks report being relatively more interested in leaving a charitable and family bequest and much more interested in leaving a religious bequest than whites. Lower income, lower education, and being black all are associated with lower levels of charitable giving in general (secular and mixed), but with higher levels of solely religious giving. These results are consistent with theories from the economics of religion that predict that minorities have an increased propensity for religious giving. Past research indicates that minorities, especially African-Americans, donate more than non-minorities to religious groups during their lifetimes (Iannaccone, 1994). Results from this study indicate that this increased propensity among minorities to give to religious groups remains true for religious bequests.

Donations to religious organizations historically have been the largest share of total giving (Brown, 2004). However, the number of adults who consider themselves religiously unaffiliated has been growing across all geographic regions of the United States, while the number who identify as Christian has been declining (Pew Research Center, 2015). Although blacks are the least likely racial group to be religiously unaffiliated at 18%, the numbers are growing (Pew, 2015). The decline in Christian affiliation is most prominent among young adults (Pew, 2015). This has important policy implications for religious organizations. If church membership declines, the number of donations will decline, and the number of churches also may decline. In addition, if African Americans tend to belong to churches with strong barriers to entry, and they continue supporting those churches, then those churches might become the predominant church style. Churches with fewer barriers to entry and more open membership may be the ones to decline, ironic as that may sound.

Another key finding is the contrast between bequest attitudes and actual bequests. As stated above, blacks relatively are more interested in leaving charitable and family bequests and much more interested in leaving a religious bequest. However, previous research using HRS data indicates that, in terms of actual charitable bequests (as opposed to a preference for leaving a charitable bequest, as measured here with PSID data), there's a large gap between whites and blacks, with whites leaving much larger charitable bequests than blacks (James, 2015). If a lack of estate planning documentation such as wills or trusts is the primary reason for the disconnect between attitudes and actual bequests made by African Americans, this demographic could present a large untapped resource for estate planners.

Results from this study indicate that the increased propensity of minorities to give to religious groups in life remains true for religious bequests. Although the self-reported attitude towards giving should be greater than actual giving, as reporting socially approved attitudes is costless, these results provide valuable insights about religious bequest attitudes compared to attitudes toward other charitable bequests and family bequests. Results also indicate that documentation, rather than intent, may be the primary barrier.

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Table 1: Ordered Probit Regression: Marginal Effect of Ethnicity, Race, Wealth, and Education on the Importance of Leaving a Bequest to *Charity*

EXPLANATORY VARIABLE	IMPORTANCE OF BEQUEST TO CHARITY OUTCOME			
	Not at all Imp.	Not Imp.	Quite Imp.	Very Imp.
HISPANIC	-.0468*** (.0134)	-.0182*** (.0053)	.0380*** (.0109)	.0270*** (.0078)
BLACK	-.0925*** (.0074)	-.0361*** (.0033)	.0752*** (.0059)	.0534*** (.0045)
OTHER RACES	-.0798*** (.0163)	-.0311*** (.0064)	.0649*** (.0132)	.0461*** (.0095)
LN (WEALTH)	0.0048*** (0.0008)	0.0019*** (0.0003)	-0.0039*** (0.0006)	-0.0028*** (0.0005)
EDUCATION	-.0020 (.0013)	-.0008 (.0005)	.0016 (.0011)	.0011 (.0008)
IMPORTANCE OF BEQUEST TO RELIGION				
HISPANIC	-.0298* (.0151)	-.0052* (.0027)	.0194* (.0098)	.0157* (.0080)
BLACK	-.1497*** (.0081)	-.0261*** (.0029)	.0972*** (.0053)	.0787*** (.0049)
OTHER RACES	-.0805*** (.0180)	-.0140*** (.0034)	.0522*** (.0117)	.0423*** (.0095)
LN (WEALTH)	0.0029*** (0.0009)	0.0005*** (0.0002)	-0.0019*** (0.0006)	-0.0015*** (0.0005)
EDUCATION	.0052*** (.0015)	.0009*** (.0003)	-.0034*** (.0010)	-.0027*** (.0008)
IMPORTANCE OF BEQUEST TO FAMILY				
HISPANIC	-.0075 (.0049)	-.0150 (.0098)	-.0090 (.0058)	.0316 (.0204)
BLACK	-.0526*** (.0035)	-.1049*** (.0057)	-.0629*** (.0038)	.2204*** (.0109)
OTHER RACES	-.0151*** (.0057)	-.0301*** (.0112)	-.0180*** (.0067)	.0632*** (.0235)
LN (WEALTH)	.0001 (.0003)	.0002 (.0006)	.0001 (.0003)	-.0005 (.0012)
EDUCATION	.0013** (.0005)	.0025** (.0010)	.0015** (.0006)	-.0053** (.0021)

\*\*\* p<.001, \*\* p<.05, \* p<.1; Standard Errors are in parentheses; n = 7,604; PSID survey weights applied

Table 2: Ratios (Ordinary Least Squares)

	<i>Religious Bequest Importance to Total Bequest Importance</i>	<i>Charitable Bequest Importance to Total Bequest Importance</i>	<i>Family Bequest Importance to Total Bequest Importance</i>	<i>Religious Bequest Importance to Family Bequest Importance</i>	<i>Charitable Bequest Importance to Family Bequest Importance</i>	<i>Religious Bequest Importance to Charitable Bequest Importance</i>
<b>Race</b>						
Black	.0096*** (.0018)	-.0060*** (.0019)	-.0037 (.0026)	.0201** (.0092)	-.0220** (.0098)	.0601*** (.0112)
Other	.0053 (.0041)	.0085** (.0042)	-.0138** (.0059)	.0107 (.0208)	.0262 (.0221)	.0007 (.0252)
<b>Ethnicity</b>						
Hispanic	.0001 (.0034)	.0078** (.0035)	-.0078* (.0048)	.0129 (.0170)	.0330* (.0181)	-.0322 (.0206)
<b>Ln Wealth</b>	-0.0003 (0.0002)	-0.0010*** (0.0002)	0.0013*** (0.0003)	-.0024** (.0010)	-.0040*** (.0010)	.0032*** (.0012)
<b>Education</b>	-.0010*** (.0003)	.0015*** (.0003)	-.0005 (.0005)	-.0042*** (.0017)	.0024 (.0018)	-.0094*** (.0020)

\*\*\* p<.001, \*\* p<.05, \* p<.1; Standard Errors are in parentheses; n = 7,500; PSID survey weights applied

## **Family Economic Status during Adolescence and Financial Independence at Emerging Adulthood: Evidence from the 2013 Transition to Adulthood and the 2001 to 2013 PSID**

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### **Abstract**

This study investigates the relationship of financial independence of young adults from age 18 to 27 in 2013 and their family economic status during adolescence. Using a large nationally representative US sample included in the 2001 to 2013 Panel Study of Income Dynamics and its 2013 Transition to Adulthood Supplement, we find if young adults belong to the upper 50% of family income group during adolescence, their financial independence is negatively impacted by their family economic status during adolescence; if young adults belong to the lower 50%, their financial independence is positively impacted by their family economic status during adolescence.

**Key words:** financial independence, young adults, family economic status, adolescence, PSID, TA

### **Background**

This study examined the effect of young adults' family economic status during adolescence on their perceived financial independence as young adults. We conducted the analysis by groups with different family income level during adolescence and with different current college status.

Financial independence is a basic requirement for living an independent life for adults, before making any career achievement. Because parents will not be able to provide financial support for their children forever, financial independence for young adults is especially important. Parents want to see their children live a happy and successful life. Financial independence will be the children's first milestone toward that goal. Achieving financial independence is important for young adults as a prerequisite to realizing their personal value, or self-actualization (Maslow, 1943). Without financial independence, young adults have to rely on either social benefits or parental support. Both will harm the harmony and development of the society.

Though important, there are not many studies on the financial independence of young adults. Noteworthy, Whittington and Peters (1996) provided an economics framework to discuss the financial independence of young adults; Lee and Mortimer (2009) focused on the impact of self-efficacy and family socialization to the financial independence of young adults; Xiao et al. (2014) empirically examined the education attainment effect in the financial independence of young adults.

Empirical research (Whittington & Peters, 1996; Xiao et al., 2014) found family income is negatively associated with financial independence. This study, however, used current family income instead of family income during adolescence. We believe family economic status during adolescence has a great impact to the young adults and should be examined.

Adolescence is a very important phase of life because it is considered as the most significant turning point of development in people's life (Rutter, 1987). Adolescents experience drastic mental, physical and social change (DeLay et al., 2016) and rapidly develop their lifelong behaviors and mentalities which can explain more than half of lifetime income differences (Heckman & Mosso, 2014). Many studies focus on the relationship between adolescent experience and later drug related problem behaviors (Moss et al., 2014), health (Lillard et al., 2015),



financial behavior (Friedline et al., 2011), and a number of attainment-related outcomes (Duncan et al., 2010), etc. To our knowledge, no study relates adolescent experience to financial independence of young adults.

## **Purpose**

Unlike previous research on the financial independence of young adults with respect to their current information (Whittington & Peters, 1996; Xiao et al., 2014) and previous information from the perspective of socialization (Lee & Mortimer, 2009), this study analyze economic factors associated with perceived financial independence of young adults from a long term point of view. This study empirically contributes to the literature of financial independence and the studies of adolescents.

## **Hypotheses**

Whittington and Peters (1996) discussed the choice of young adults to be financially independent from the economic cost and benefit point of view. They defined independence as moving away from parents. In their opinion, one cost of having to live with parents is a young adult's need for privacy, which increases with age. The benefit is the difference of the utility young adults receive by living with parents and the utility they receive in other arrangements. Parents can influence the well-being of young adults by making positive financial transfer to them. If the benefit young adults receive outweighs the cost, they will choose to be dependent. But if not, they will choose to be independent. On the other hand, the cost of allowing children to be dependent is the parents' own need for privacy. The benefit is that they can take care of their children and ensure that their children participate in activities that parents value. If the benefit for parents outweighs the cost, the parents will try to make positive transfer to their children. The ability to make the positive transfer increases with the family income. No ex-ante judgment of this cost-benefit relation can be made because it depends on the utility function of the children and parents in different families. Thus the relationship of family income and financial independence need to be empirically examined (Xiao et al., 2014).

Theoretically, family income during adolescence has positive effect on financial independence of young adults. From the perspective of the economics, intergenerational mobility theory gives a support: Intergenerational mobility is measured by correlation of income of children and income of parents and it measures the effect of a family on the well-being of its children (Becker & Tomes, 1979). The discussion usually starts from the models developed by Becker and Tomes (1979), where they built a comprehensive model in which when family maximizes a utility function over several generations, parents make decision to maximize their own utility, represented by their consumption and the income of their children, based on parents' income, the inherited talent of their children and the market luck of the children. The income of children is raised when they receive more human capital from their parents and is also positively affected by their family reputation and connections, and knowledge, skills, and goals from their family environment. In their model, the income of children also depends on their "luck" in terms of innate talent and their parents' propensity to invest in them. Parents' propensity to invest depends on their children's rate of return which related to their talent. Children is passively accepted these factors.

Since parental income are often positively linked with parental education, schools, capable parents, peers, engaged parenting, etc., which likely affect child development (Heckman & Mosso, 2014), parents with high income are likely to have children with high income (Chetty et al., 2014). Children's income is expected to be positively linked to their financial independence as with more income they are more likely to live on their own. Thus conceptually, higher family income positively contributes to higher financial independence of the children.

From the perspective of sociology, the investment theory and financial socialization theory provide support. In investment theory, if financial independence is considered to be a good outcome, higher family income means parents have more resources to invest in their children, such as purchase materials, experiences, and services for building the human capital to achieve this good outcome (Yeung et al., 2002). Financial socialization theory suggests parents with higher family income are more likely to engage in financial activities and their children learn from financial socialization with parents (Sherraden, 2010, 2013). Wealthier parents also help their children gain more financial knowledge and skills (Stacey, 1987). It is logical to think young adults with more financial knowledge and skills are likely to be more financial independent.

Following this logic, we present our hypothesis: Family economic status during adolescence has significant positive effect on young adults' financial independence.

## **Methodology**

### **Data**

This study uses data of young adults from the Transition to Adulthood (TA) 2013 and the Panel Study of Income Dynamics (PSID) 2001, 2003, 2005, 2007, 2009, 2011 and 2013 waves. By young adults, we mean people aged from 18 to 27 in 2013. Using the Family Identification Mapping System tool from the PSID official website, we matched the young adults in 2013 and their parents or adoptive parents in each wave of PSID data. After the data cleaning process, the total sample size is 1486. More details of the cleaned dataset can be found in the appendices.

### **Variables**

The predictors we use are from the current characteristics of the young adults and the average family economic status when the young adults were at age from 14 to 19 due to data availability.

**Dependent variable:** The dependent variable is perceived financial independence. Financial independence was recoded from the original variable in the name of TA131210 in the TA 2013 survey to exclude missing values. TA131210 was measured based on a Likert-type scale, where 1 and 5 referred to the lowest level and the highest level of financial independence respectively. The scale is constructed from the average of all non-missing responses to the following questions: How much responsibility do you have for earning own living? How much responsibility do you have for paying own rent? How much responsibility do you have for paying own bills? How much responsibility do you have for managing own money? In these questions, 1 represented "Somebody else does this for me all of the time" and 5 represented "I am completely responsible for this all the time".

**Independent variable:** The key independent variable is the family income of the young adult when they were adolescents defined as between the ages of 14 to 19. The variable of family income has different names in different waves of PSID. See Table 1 in the appendices for details. After deflating the total family income by the annual Consumer Price Index (CPI) of the relevant year (2000 = 100), we computed the average family income from the three waves in the 14 to 19 age interval.

### **Control variables**

For control variables, we use age, sex (female=1, male = 0), ethnicity (white =1, else=0), employment status (employed=1, else =0), live with parents, married, self-efficacy, money management ability, and problem

solving ability. These variables can be found in TA 2013. The economic self-efficacy scale was constructed from the following items in the data set, where 1 represents the lowest and 7 the highest: the likelihood of finding a job that pays well, the likelihood of having problems to support family and the likelihood of being laid off from a job. The two last variables were reverse-coded before the scale was constructed.

### **Data Analyses**

Preliminary analyses were conducted in OLS regressions. Since the dependent variable is ordered, following the literature, ordered logit regression method was used. Results of ordered logit regressions are presented. We conducted the analysis in four groups: higher family income vs lower family income; in college vs not in college.

$$\begin{aligned}\text{Financial Independence}_i &= \alpha * \text{Family economic status during adolescence}_i \\ &+ \beta * \text{Current young adults characteristics}_i \\ &+ \mu_i\end{aligned}$$

### **Results**

First we present the descriptive statistics of all samples. The average perceived financial independence is high, at 4.08 out of 5. The average family income and wealth during adolescence have a large variance and wealth data have negative values. The average age of young adults in this study is about 22. Approximately half of the samples are female. White people account for half of the samples. Two thirds of the young adults in this study were employed and 55% of them lived with parents. Around one in ten were married in 2013. See Table 1 for more details.

[Table 1 Descriptive Statistics]

We have more interesting findings when we break down whole samples by the family income levels of young adults and by their in-college status. We used the value of the 50th percentile in terms of the average family income during adolescence as the cutting point and divided the sample into two groups. We present the descriptive statistics by higher and lower family income groups in Table 2. We find in the higher family income group, the average financial independence is in fact lower than the average financial independence in the lower family income group. Age, sex, living with parents show little difference in different groups. In the higher family income group, 70% percent of young adults are white whereas in the lower family income group, 32% percent are white. The money management ability and problem solving ability indices in the lower family income group are higher than in the other group.

[Table 2 Descriptive Statistics by Family Income during Adolescence Group]

We also present the descriptive statistics by groups with different in-college status in Table 3. In the in-college group, the perceived financial independence is lower than in the other group. The in-college group also has higher family economic status indicators. More young adults are female and are white in college. More young adults in the not-in-college group are employed and married. Young adults who are not in college have lower self-efficacy but higher money management and problem solving ability.

[Table 3 Descriptive Statistics by In-College Status]

The ordered logit regression in Model I shows that the relationship between the family income during adolescence and the financial independence is significantly negative, which contradicts with our hypothesis. However, when we added a square term in Model II, the relationship displayed an inverse U shape. Both linear term and square term are significant. It seems that the relationship between the family income during adolescence and the financial independence is positive in the lower range of family income, which corresponds to the theory, and negative in the higher range, which contradicts the expectation. This pattern becomes clearer when we conduct analysis in different family income level groups. Model III and IV are analysis in below median group and above median group. Results show that in the below median group, the relationship displayed an inverse U shape and in the above median group, the relationship is significantly negative. Model V to IX are analysis in different income quantiles. Patterns are similar, in high income quantile groups, the relationships are negative and in low income group, the relationship is inverse U shape.

[Table 4 Ordered Logit Regressions of Financial Independence of Young Adults]

We also conducted analysis by groups of different college status. In both in-college group and not-in-college group, the relationship between the family income during adolescence and the financial independence displays an inverted U shape. The coefficients of the independent variable in the in-college group are larger.

As for other control variables, age, being employed, money management ability and problem solving ability are always significantly positively related to the dependent variable. Female and being married significantly lower the financial independence in most regressions. We do not observe significant effect of race. Self-efficacy is always positively related to financial independence. The results are consistent with previous studies (Lee & Mortimer, 2009; Xiao et al., 2014).

### **Robustness checks**

As for robustness checks, since income and wealth are most commonly used variables to measure socioeconomic status (Xiao, 2016), we use average family wealth without equity and with equity during adolescence in the place of average family income during adolescence in the analyses. Third, we take price level into consideration because the same nominal family income or wealth of young adults from different areas may imply different standards of living and have different impact to the adolescent teenagers. For example, \$5,000 in monthly income in LA can support a very different life than the same income in Texas. Thus we use a physical indicator such as the number of rooms per family unit instead of the nominal family income to measure real economic resources as a robustness check. Results of both OLS and ordered logit regressions of the different models show similar patterns: in most wealthy group, the effect of family wealth or number of rooms per family unit during adolescence has negative effect on the financial independence of the young adults.

### **Discussion**

In this study, we empirically examine the effect of family economic status during adolescence on the financial independence of young adults. Results show if young adults belong to upper 50% in terms of family income during adolescence, their perceived financial independence is negatively impacted by their family economic status during adolescence. If young adults belong to lower 50% in terms of family income during adolescence, their perceived financial independence is positively impacted by their family economic status during adolescence and the relationship is inverted U shape. These findings induce us to believe that family income

during adolescence at first exert a positive effect on the financial independence of young adults. After a peak point, possibly lying between the lower 40% to the median in terms of family income, its effect becomes negative. Before the peak point, with more family income, parents can provide more resources necessary to invest in the human capital of their children. After the peak point, the children have enough resources for development in terms of financial independence and the additional resources from their parents provide incentive to their children to remain dependent.

The result is to some extent contradict to our expectation, probably because the theories mentioned above do not necessarily lead to a concrete connection. The intergenerational mobility theory is more reliable when using lifetime average income of parent generation and children generation or using a more equivalent period in terms of income, like, the parents' income during their fifties and children's income during their fifties. Thus, the argument that people raised in wealthy families have higher financial independence because of the intergenerational mobility theory may not apply specifically to the group of the young adults. In addition, even if the income of rich young adults is higher, their spending can also be higher, which may lead to lower financial independence as young adults.

The investment theory does not consider the efficiency of the investment of parents. Comparable to a production function in economics, the achievement of financial independence can be considered as the outcome, or, the output, and the resources in the investment of children can be considered as the input factor. It is logically to think the law of diminishing marginal productivity holds true when "using" family income during adolescence to "produce" financial independence. It means at a low input level, the contribution of marginal family income during adolescence to financial independence is relatively large; at a high income level, the contribution of marginal family income during adolescence is relatively small and may become negative. Researchers in neuroscience also found evidence that in regions supporting language, reading, executive functions and spatial skills in the brain surface area, for children from lower income families, large differences can be made due to a certain amount of income increment, in comparison, for children from higher income families, only smaller differences can be made due to the same amount of income increment (Noble et al., 2015). Besides, the investment theory considers the benefits brought to the young adults by their family income during adolescence, but it does not consider the statistically unobservable negative effect associated with more family income, such as indulgent parenting or overindulgence which may lead to less independence.

The financial socialization theory predicts young adults from a rich family will have more financial knowledge and skills, it says nothing about whether these young adults will implement the financial knowledge and skills to achieve their independence.

The effect of family income during adolescence is greater for the young adults in college than for the young adults not in college, possibly because young adults who are not in college are more likely to come from the lower 50% group in terms of family income during adolescence. They have adapted to less financial support from the family and thus are less influenced by the family income. Additional testing among the subgroup of not-in-college and not graduated from college shows similar result. The results are robust to different regression methods and different measurements of family economic status during adolescence. As for other control variables, the results are consistent with previous studies (Lee & Mortimer, 2009; Xiao et al., 2014).

The limitation of this study is that though we found family income during adolescence can have significant effect on financial independence as young adults, we do not identify the channel through which family income

during adolescence exerts the effect. Structure equation models may be used in future study to examine how family income during adolescence influences the financial independence of young adults. Young adults are in the transition from teenager to adults and experience great change from mental to physical. Comparative study in the age group from 25 to 35 can provide a robust test, since in this age group life changes to a more steady state. This will be left for future studies.

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**Table 1**  
**Descriptive Statistics of All Samples**

Variable	Obs	Mean	Std. Dev.	Min	Max
<b>Dependent Variable</b>					
Financial independence	1486	4.08	1.07	1	5
<b>Independent Variables</b>					
Average family income during adolescence	1486	66671.33	73959.26	606.27	1272182.00
Average wealth without equity during adolescence	1486	110026.60	354411.30	-163834.50	6656068
Average wealth with equity during adolescence	1486	175161.90	439521.50	-149752.00	8165572
Average number of rooms per family unit during adolescence	1486	1.80	0.74	0	5.5
<b>Control Variables</b>					
Age	1486	22.18	2.71	18	27
Female	1486	0.49	0.50	0	1
White	1486	0.51	0.50	0	1
Employed	1486	0.66	0.47	0	1
Live with parents	1486	0.55	0.50	0	1
Married	1486	0.11	0.32	0	1
Self-efficacy	1485	16.89	3.05	3	21
Money management	1486	5.47	1.29	1	7
Problem solving	1486	5.97	0.93	1	7
Family income	1486	88349.14	147032.40	50.00	3222000.00



Table 2  
Descriptive Statistics by Family Income Level during Adolescence

Variable	Lower 50%						Higher 50%					
	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max		
Dependent Variable												
Financial independence	743	4.11	1.02	1	5	743	4.05	1.11	1	5		
Independent Variables												
Average family income during adolescence	743	27937.34	11959.86	606.27	49217.10	743	105405.30	88315.29	49248.93	1272182.00		
Average wealth without equity during adolescence	743	17869.18	94918.12	-62436.71	1536553	743	202184.10	474727.00	-163834.50	6656068		
Average wealth with equity during adolescence	743	39372.26	114204.30	-62436.71	1536553	743	310951.50	580214.40	-149752.00	8165572		
Average number of rooms per family unit during adolescence	743	1.59	0.73	0	4.67	743	2.01	0.68	0.33	5.44		
Control Variables												
Age	743	22.01	2.71	18	27	743	22.34	2.70	18	27		
Female	743	0.49	0.50	0	1	743	0.50	0.50	0	1		
White	743	0.32	0.47	0	1	743	0.70	0.46	0	1		
Employed	743	0.61	0.49	0	1	743	0.72	0.45	0	1		
Live with parents	743	0.57	0.49	0	1	743	0.52	0.50	0	1		
Married	743	0.10	0.30	0	1	743	0.13	0.33	0	1		
Self-efficacy	742	16.81	3.27	3	21	743	16.97	2.81	7	21		
Money management	743	5.56	1.33	1	7	743	5.38	1.23	1	7		
Problem solving	743	6.03	1.01	1	7	743	5.90	0.83	1	7		
Family income	743	40132.14	54965.49	50.00	1376202.00	743	136566.10	188650.40	5219.00	3222000.00		

**Table 3**  
**Descriptive Statistics by In-College Status**

Variable	Not in College						In College					
	Obs	Mean	Std. Dev.	Min	Max	Obs	Mean	Std. Dev.	Min	Max	Obs	Max
<b>Dependent Variable</b>												
Financial independence	984	4.28	0.96	1	5	502	3.69	1.15	1	5		
<b>Independent Variables</b>												
Average family income during adolescence	984	60066.97	76062.29	606.27	1272182.00	502	79616.94	67884.20	2806.02	722055.10		
Average wealth without equity during adolescence	984	93282.67	357139.20	-104171.60	6656068	502	142847.50	347015.40	-163834.50	3166442		
Average wealth with equity during adolescence	984	148321.80	442451.50	-96573.42	8165572	502	227772.80	429308.90	-149752.00	3727955		
Average number of rooms per family unit during adolescence	984	1.74	0.72	0	5.44	502	1.90	0.75	0.26	4.61		
<b>Control Variables</b>												
Age	984	22.84	2.59	18	27	502	20.88	2.47	18	27		
Female	984	0.47	0.50	0	1	502	0.54	0.50	0	1		
White	984	0.48	0.50	0	1	502	0.57	0.50	0	1		
Employed	984	0.71	0.46	0	1	502	0.58	0.49	0	1		
Live with parents	984	0.50	0.50	0	1	502	0.63	0.48	0	1		
Married	984	0.14	0.34	0	1	502	0.07	0.25	0	1		
Self-efficacy	983	16.79	3.18	3	21	502	17.09	2.76	8	21		
Money management	984	5.52	1.32	1	7	502	5.38	1.21	2	7		
Problem solving	984	5.99	0.98	1	7	502	5.91	0.83	1	7		
Family income	984	78277.29	137984.00	50.00	3089000.00	502	108091.60	161654.00	1400.00	3222000.00		

Table 4  
Ordered Logit Regressions of Financial Independence of Young Adults

VARIABLES	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	Model VIII	Model IX	Model X
	All sample	All sample	Lower 50%	Upper 50%	75%-100%	50%-75%	25%-50%	Top 25%	N/I college	In college
Family income during adolescence in log	-0.248*** (0.071)	3.538*** (0.934)	6.581*** (2.550)	-0.790*** (0.168)	7.237* (3.912)	-0.915 (0.678)	-1.699** (0.723)	-0.698*** (0.263)	2.509** (1.187)	4.285*** (1.580)
Family income during adolescence in log square term		-0.178*** (0.044)	-0.333*** (0.132)		-0.368* (0.211)				-0.115** (0.056)	-0.230*** (0.074)
Age	0.272*** (0.023)	0.274*** (0.023)	0.203*** (0.031)	0.349*** (0.035)	0.189*** (0.045)	0.220*** (0.044)	0.252*** (0.049)	0.456*** (0.052)	0.174*** (0.029)	0.405*** (0.047)
Female	-0.288*** (0.105)	-0.262** (0.106)	-0.129 (0.149)	-0.398*** (0.152)	0.132 (0.214)	-0.401* (0.214)	-0.524** (0.219)	-0.376* (0.219)	-0.195 (0.136)	-0.336* (0.175)
White	-0.148 (0.120)	-0.126 (0.120)	-0.115 (0.168)	-0.073 (0.176)	-0.383 (0.274)	-0.050 (0.220)	-0.230 (0.236)	0.253 (0.281)	-0.152 (0.153)	-0.007 (0.201)
Employed	1.313*** (0.114)	1.298*** (0.114)	0.998*** (0.154)	1.601*** (0.174)	0.965*** (0.218)	1.000*** (0.225)	1.560*** (0.258)	1.629*** (0.243)	1.325*** (0.153)	1.033*** (0.181)
Live with parents	-1.364*** (0.126)	-1.408*** (0.126)	-1.558*** (0.182)	-1.304*** (0.179)	-1.432*** (0.259)	-1.773*** (0.261)	-1.874*** (0.288)	-0.974*** (0.236)	-1.502*** (0.161)	-1.408*** (0.215)
Married	-0.672*** (0.196)	-0.736*** (0.197)	-0.878*** (0.291)	-0.751*** (0.273)	-0.674 (0.469)	-0.969** (0.382)	-1.080*** (0.382)	-0.481 (0.406)	-0.935*** (0.224)	-0.642 (0.435)
Self-efficacy	0.048*** (0.018)	0.048*** (0.018)	0.051** (0.024)	0.049* (0.028)	0.070** (0.033)	0.041 (0.037)	0.041 (0.038)	0.064 (0.044)	0.060*** (0.022)	0.007 (0.034)
Money management	0.163*** (0.042)	0.170*** (0.042)	0.187*** (0.058)	0.152** (0.063)	0.158* (0.081)	0.216** (0.085)	0.124 (0.089)	0.202** (0.093)	0.157*** (0.052)	0.218*** (0.076)
Problem solving	0.255*** (0.060)	0.259*** (0.061)	0.245*** (0.079)	0.2291*** (0.095)	0.325*** (0.100)	0.084 (0.132)	0.367*** (0.139)	0.206 (0.135)	0.261*** (0.071)	0.211* (0.117)
Pseudo R <sup>2</sup>	0.1707	0.1748	0.1519	0.2105	0.1530	0.1626	0.2047	0.2366	0.1536	0.1886
Observations	1,485	1,485	742	743	370	372	372	371	983	502

Coefficients are log odd ratio. Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

For family income during adolescence in Model III to Model X, we first add linear term and square term in the models. If linear term and square term is not significant, we then run the regression without the square term.