



# Proceedings

of The Association for Financial Counseling and Planning Education®

---

Edited by **Vivian J. Mason, Ph.D.**

**D. Elizabeth Kiss, Ph.D.**

2015 Annual Research & Training Symposium  
November 18-20

# Contents

|   |             |
|---|-------------|
| <i>Contents</i> .....   | <i>i</i>    |
| <i>Editor's Note</i> .....  | <i>vi</i>   |
| <i>2015 Symposium Reviewers</i> .....   | <i>vii</i>  |
| <i>2015 AFCPE Board of Directors and Task Force List</i> .....  | <i>viii</i> |
| <i>Posters</i> .....  | <i>1</i>    |
| Addressing the Longevity Challenge: Ensuring Financial Security in Later Life .....   | 1           |
| Jean M. Lown, Utah State University   |             |
| Barriers to employment for mature un- or underemployed workers in rural America: A Phenomenological Study in a Midwestern Community .....   | 3           |
| Angela M. Zell, Erica Tobe, Barbara Ames, Amanda Guinot Talbot, Michigan State University   |             |
| Consumer Financial Education and Subjective Financial Well-Being: Financial Literacy, Behavior, and Capability Variables as Mediators .....   | 4           |
| Jing Jian Xiao, University of Rhode Island, Nilton Porto, University of Rhode Island  |             |
| Emerging Adult Financial Capability .....   | 5           |
| Amanda Guinot Talbot, MA and Barbara D. Ames, PhD., CFLE, Michigan State University   |             |
| Exploring Mexican American Cultural Meanings about Financial Management .....   | 6           |
| Antonio Alba Meraz, M.S. and Sharon M. Danes, PhD, University of Minnesota Extension  |             |
| Financial Considerations in Making the Decision to Divorce or Reconcile .....   | 8           |
| Hannah P. Plauche, Louisiana State University, Frances C. Lawrence, Louisiana State University  |             |
| Financial Stress and Its Impact on College Retention .....  | 10          |
| Kelsie Smathers, University of Idaho and Nancy Deringer, PhD, University of Idaho   |             |
| Health Insurance Literacy: Exploring Demographic Characteristics .....  | 12          |
| Mia B. Russell, University of Maryland; Suzanne Bartholomae, Iowa State University; Bonnie Braun, University of Maryland; Teresa McCoy, University of Maryland  |             |
| Housing Decisions of Millennials: Challenges and Consequences .....   | 13          |
| Yilan Xu, University of Illinois; Barbara O'Neill, Rutgers University; Carrie Johnson, South Dakota State University; Suzanne Bartholomae, Iowa State University; Michael Gutter, University of Florida |             |
| Individual, Parent or Educator? Determinants of Effective Money Management in College Students .....  | 14          |
| Suzanne Bartholomae, Iowa State University; Jonathan J. Fox, Iowa State University; Jodi Letkiewicz, York University; Catherine P. Montalto, The Ohio State University                                  |             |

|  |    |
|--|----|
| Influence of Financial Stressors on College Student Retention.....   | 15 |
| Sonya L. Britt, David Allen Ammerman, Sarah Webb, Scott Jones, Kansas State University   |    |
| Living On My Own-A Financial Education Simulation for Young Adults.....  | 16 |
| Elaine A. Courtney, University of Florida/IFAS-Professor Emeritus, Dr. Michael S. Gutter, University of Florida/IFAS Extension, Ricki McWilliams, University of Florida/IFAS Extension, Katherine Marin, University of Florida/IFAS Extension, Cathy Rogers, University of Florida/IFAS Extension, Taylor Spangler, University of Florida/IFAS Extension, Brittany Stahl, University of Florida/IFAS Extension |    |
| Marital Status, Gender, and Wealth Holdings among Near-Retirees .....  | 18 |
| Yoon G. Lee, Loryn Law, Melanie Anderson, Utah State University  |    |
| Money Mentors: Changing Financial Behaviors One on One.....  | 20 |
| Pam R. Atkinson, Sasha Grabenstetter, Amanda DeRuw, Cayla M. Waters, Kathryn L. Sweedler, University of Illinois Extension   |    |
| Practitioners and Researchers Work Together: Addressing Financial Capability Among Low-Income Families in the Rural South.....   | 21 |
| Leslie Green-Pimentel, Paulette Meikle, Hui Liew, Delta State University   |    |
| Promoting Financial Health: Helping Couples Reconcile Financial Disagreement for Emotional Fitness.....  | 23 |
| Qun Zhang, University of Kentucky  |    |
| Psychosocial Well-Being and Financial Capability.....  | 24 |
| James Kunz, PhD, Associate Professor, McDaniel College, and Christine Callahan, PhD, LCSW-C, Research Assistant Professor, University of Maryland School of Social Work, Financial Social Work Initiative  |    |
| The Expectation of Income Tax Refunds and Its Effects on Household Saving Decisions .....  | 26 |
| Judith Aboagye and Michelle Kruger, University of Georgia  |    |
| The Educational Needs of Families Post-Foreclosure: Evaluation of a Post-Foreclosure Toolkit.....  | 27 |
| Camaya Wallace Bechard, M.S., Erica Tobe, Ph.D., and Barbara Ames, Ph.D., C.F.L.E, Michigan State University   |    |
| Training Needs for Limited Resource Families on Personal Finance Management .....  | 28 |
| Lila B Karki, Ntam Baharanyi, and Uma Karki, Tuskegee University, College of Agriculture, Environment and Nutrition Sciences (CAENS), Cooperative Extension Program  |    |
| Understanding Employee Perceptions of Financial Wellness .....   | 29 |
| Mia B. Russell, University of Maryland Extension   |    |

|  |    |
|--|----|
| <i>Practitioner's Forum</i> .....  | 30 |
| A New Lens for Financial Capability Work .....   | 30 |
| Mary Jo Katras; Patricia Olson; Sharon Powell, University of Minnesota Extension   |    |
| Are We Expecting Too Much From Technology in Financial Education? .....  | 31 |
| Patricia Seaman, MBA, AFC®, National Endowment for Financial Education (NEFE)  |    |
| Best Practices for Conducting Web Conferences, Writing Blog Posts, and Using Social Media to Increase the Capacity of Financial Counseling and Education Professionals ...   | 32 |
| Martie Gillen, University of Florida, Jerry Buchko, Military Families Learning Network, Personal Finance, Barbara O'Neill, Rutgers University, Molly Herndon, University of Florida, Michael Gutter, University of Florida |    |
| Bridging Research and Practice: Financial Fraud - Shattering the Illusion of Invulnerability .....   | 34 |
| Patsy Collins, Sam Houston State University, Paul F Goebel, University of North Texas  |    |
| Building Bridges – Creating Ripples: Envisioning Your Next Big Thing .....   | 35 |
| Joyce Cohen and Jennifer Hogan, Purple Heart Homes, USA  |    |
| Client Motivation and Behavioral Change: Applications of Appreciative Inquiry, Solutions-Focused Brief Coaching, and Positive Psychology .....   | 36 |
| Lance Palmer, Ph.D., Joseph W. Goetz, Ph.D., University of Georgia   |    |
| Coulda Woulda Shoulda: A Financial Decision Making Activity for Emerging Adults..  | 37 |
| Sharon Powell; Joyce Serido; Jaleesa Wright; Veronica Deenanath, University of Minnesota Extension   |    |
| Effective Adult Education in a Financial Education World .....   | 38 |
| Ginger Phillips, Executive Director, American Council on Consumer Interests, Deborah Haynes, Montana State University  |    |
| Financial Capability@Work: Using the Workplace as a Platform for Financial Education .....   | 40 |
| Inger Giuffrida, Financial Education and Asset Building Consultant; Susan Sarver, Associate Director, FINRA Investor Education Foundation; Laura Scherler, Director, Income Capacity Building, United Way Worldwide        |    |
| How to Promote Effective In-School Student Loan Counseling: An Evidence-Based Approach .....   | 42 |
| Carla Fletcher, TG   |    |
| Incorporation of Coaching Elements Based on the Type of Financial Counseling .....   | 43 |
| Lucy Delgadillo, Cindy Stokes, Alena Johnson, Utah State University  |    |
| Leveraging Open-Source Resources to Extend Personal Finance Education Using Personalized Lesson Plans (PLPs) .....   | 45 |
| Andrew Furth, Curriculum Developer at Next Gen Personal Finance  |    |

|   |    |
|---|----|
| Motivating Participation: Do Incentives Engage and Retain Participants in Financial Educations Workshops, Counseling, or Coaching? .....  | 47 |
| Inger Giuffrida, Financial Education and Asset Building Consultant; Susan Sarver, Associate Director, FINRA Investor Education Foundation; Laura Scherler, Director, Income Strategies, United Way Worldwide      |    |
| Partnering to Promote Financial Capability: Your Money, Your Goals .....  | 49 |
| Rita W. Green, Ed.D, AFC®, Financial Management State Specialist, Mississippi State University–Extension Service, Susan Cosgrove, MBA, AFC®, Area Extension Agent, Mississippi State University–Extension Service |    |
| Research to Practice: The Social Change Model of Financial Literacy Leadership Development .....  | 50 |
| Christina Gibson, The University of Texas at Tyler, Paul F Goebel, University of North Texas  |    |
| Teaching Index Mutual Funds to Persons Who Wish to Begin Investing, Revisited.....  | 51 |
| Jim Murphy, Marine & Family Programs, Marine Corps Community Services, Headquarters and Service Battalion, Headquarters, U.S. Marine Corps  |    |
| The Grasshopper and the Ants: A Value Driven, Goal-Oriented Approach to Financial Coaching .....  | 53 |
| Carlos A. Colón, AFC®, mpowered, a nonprofit organization   |    |
| When I’m 65: Educating and Engaging Communities about Retirement Realities.....   | 54 |
| Don Blandin, President and CEO of the Investor Protection Institute   |    |
| <i>Research Papers</i> .....  | 55 |
| Does It Matter Who Makes More? Exploring How Income Disparity Impacts Types of Relationship Arguments.....  | 55 |
| Melanie Mendiola, M.B.A, Julia Mull, M. B. A., Kristy L. Archuleta, Ph.D., and Bradley T. Klontz, Psy.D., Kansas State University   |    |
| Empowering Information Intermediaries: Impact Evaluation of Financial Education for Library Professionals.....  | 67 |
| Barbara O'Neill, PhD, Rutgers University  |    |
| Financial Advisor Characteristics and Quality of Advice: Fiduciary and Suitability Standards of Care .....  | 77 |
| Joseph E. Goetz, Ph.D., Swarn Chatterjee, Ph.D., and Brenda Cude, Ph.D., University of Georgia  |    |
| Findings from a Student Loan Debt Repayment Counseling Program Pilot.....   | 78 |
| Victoria Jacobson, Jeanne Ortega, Mark Tranel, University of Missouri-St. Louis   |    |
| Financial Sophistication and its Impact on the Credit Card Debt Puzzle .....  | 82 |
| Laura C. Ricaldi, Utah Valley University; Sandra Huston, Texas Tech University  |    |
| Parenthood and Financial Satisfaction of Military Families.....   | 95 |

Alyssa Francis and Jing Jian Xiao, University of Rhode Island

Risky Higher Education Decisions and Family Dynamics: What Role for Parents? ..... 99

Jonathan G. Kimmes and Stuart J. Heckman, Kansas State University

The Effect of Certification on Investment Decisions ..... 108

Michael A. Guillemette, Ph.D., CFP® and Jesse B. Jurgenson, University of Missouri

*Student Paper*..... 109

Financial Education for Prisoners: Program Development and Implementation in a Work Release Facility ..... 109

Katherine (Kate) S. Mielitz, AFC®), Kansas State University

Financial Literacy in America's Schools: A Proposal to Examine Curriculum Differences at the High School Level..... 113

Vance J. Larsen, Purdue University

Financial Socialization and Related Financial Behaviors Among College Students ..... 121

Kenneth John White Jr., The Ohio State University

## Editor's Note

Welcome to the 2015 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 the 2015 Research and Training Symposium represents the expertise and commitment of our members to building the bridge from research to practice in financial counseling, planning, and education across the lifespan in a variety of venues.

We would like to thank all who submitted and reviewed papers, practitioner forums and posters for the 2015 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 Jacksonville, Florida, November 18-20, 2015.

We would especially like to thank Katie Tornow, AFCPE® Operations Officer, who patiently and graciously answered our many questions during the preparation of the *Proceedings*. It has been a privilege, as well as an educational experience, to edit and format the *Proceedings* for this year's AFCPE® Symposium. The opportunity to read each of the submissions prior to the conference has been invigorating. We look forward to attending as many of the presentations as possible. The commitment of the AFCPE® membership is reflected in their submission of quality research and presentations for this year's conference. The 2015 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".

Please consider submitting your work for publication in the 2016 AFCPE® *Proceedings* and for presentation at the symposium in Louisville, KY, November 16-18, 2016. Please visit the AFCPE® website ([www.afcpe.org](http://www.afcpe.org)) for symposium details and submission guidelines.

AFCPE Symposium: Learn \* Grow \* Share

Vivian Mason, Ph.D.  
University of Missouri Extension  
[masonv@missouri.edu](mailto:masonv@missouri.edu)

Elizabeth Kiss, Ph.D.  
Kansas State University  
[dekiss4@ksu.edu](mailto:dekiss4@ksu.edu)

## **2015 Symposium Reviewers**

---

Carol Allison

NaRita Anderson

Shirley Anderson-Porisch

Jessica Barattini

Ashley Bales

Allison Blake

Joseph Botta

Dorothy Brandon

Carol Buchli

Selena Campbell

Forrest Carper

Danielle Champagne

Carolos Colon

Natalie Daniels

Beth Darius

Gwendolyn Galloway

Paul Goebel

Sasha Grabenstetter

Rosemary Heins

Joy Hopper

Jesse Jurgenson

Katrin Kark

Lanette Kelly

Stacy Livingstone-Hoyte

Brenda Long

Salina McBride

Dana McCammon

Bonita Manson

Katherine Mielitz

Jim Murphy

Chelsea Neal

Barbara O'Neill

Graziella Panetta

Patricia Pope

Wendy Rice

Karen Richel

Lauren Robinson

Andrea Rupp

Richard Saap

Cherie Stueve

Lyssa Thaden

Linda Thede

Carl Windom

Doniel Wolfe

Jing Xiao

Erica Zeiger



## **2015 AFCPE Board of Directors and Task Force List**

---

### ***Board of Directors***

Michael Gutter, **President**  
Jinhee Kim, **President Elect**  
Barry Wilkinson, **Past-President**  
Brenda Vaughn, **Secretary**  
Leslie Green-Pimentel, **Treasurer**  
Mary Bell Carlson  
Jerry Buchko  
Todd Christensen  
Dora Mays  
Rob Westrick

### ***Symposium Task Force***

**Program Chair:** Mark Stanford  
**Co-Chair:** Michael Dunn  
**Practitioners' Forum:** Amy Bayliff and Victoria Chadderton  
**Research Paper and Student Paper:** Rachel Grimes  
**Posters:** Sasha Grabenstetter and Kristy Tubbs

### ***Other Task Forces***

#### ***Awards Task Force***

**Chair:** Laura Wittig  
**Members:** Todd Christensen and Rachael DeLeon

#### ***Career Task Force***

**Chair:** Ryan Law  
**Members:** Susan Bross, Mary Bell Carlson, Jon Cook, Kim Davis, Ben Mercado, Susan Schroeder and Thomas Duffany

#### ***Finance Task Force***

**Chair:** Dawn Abbott  
**Members:** Deb Wood, Lisa Gamble, Leslie Green-Pimentel, James Murphy and Katie Tornow

#### ***Investment Task Force***

**Chair:** Leslie Green-Pimentel  
**Members:** Steve Shagrin, James Murphy, Rebecca Wiggins and Katie Tornow

#### ***Member Services Task Force***

**Chair:** Kelly Willett  
**Members:** Gale Johnson, Kent Thompson, Juanita McKeown

#### ***Newsletter Task Force***

**Chair:** Andi Wrenn  
**Members:** Jerry Buchko, Jill Ladouceur, Jennifer Lear and Lisa McLain-Sharp

#### ***Nomination Task Force***

**Chair:** Barry Wilkinson  
**Task Force Members:** Maryann Barry, Jerry Buchko

***Post-Certification Task Force***

**Chair:** William Moores

**Task Force Members:** Rachel Grimes,  
Mark Stanford, Sylvia Watford, Carol  
Allison, Sylvia Watford, Todd Christensen,  
Kim Davis and Kathryn Strine

***Symposium Program***

**Chair:** Mark Stanford

***Symposium Proceedings***

**Task Force Chair (Editors):** Vivian  
Mason and Elizabeth Kiss

# Posters

## Addressing the Longevity Challenge: Ensuring Financial Security in Later Life

*Jean M. Lown<sup>1</sup>, Utah State University*

**Key words:** annuities, investing, long term care, retirement, social security

“Life’s biggest danger isn’t dying, it’s living” too long (Kotlikoff, Moeller, & Solman, 2015, p. 13). Strategies to make resources last through retirement include Social Security planning, annuities, longevity insurance, reverse mortgages, and research-based withdrawal strategies. Financial practitioners need to provide an integrated perspective for clients based on the latest information and resources. The classic 4% withdrawal guideline is being challenged with new approaches. Estimating longevity is the first step in retirement withdrawal planning. While financial security for retirees can be addressed by saving more and working longer (Munnell et al. 2014), prudent withdrawal plans are critical. Cognitive decline in the elderly (Gamble et al. 2015) complicates the challenges.

Social Security claiming begins with making informed decisions in a very complex system. About 40 percent of retirees claim benefits at the earliest possible age of 62 (Kotlikoff, et al. 2015), thus locking in the lowest benefit for life. It is critical for married couples and divorced persons to explore all options. The complexity of the options is surprising and requires careful research; one must not rely on Social Security staff to advise on this critical decision (Kotlikoff, et al. 2015). “When you delay Social Security you get an 8 percent raise every year” to age 70.

Economists have long maintained that immediate annuities provide a simple answer to the longevity challenge, yet these insurance products that provide life-long benefits, are eschewed by most retirees, a conundrum labeled the “annuity puzzle.” How immediate annuities are “framed” or presented is critical to how consumers perceive this product. Longevity annuities that are purchase at retirement but delay payouts to age 75-85 are a way to cope with increasing longevity. Reverse mortgages offer a way to tap home equity yet are complex and costly. The regulations governing reverse mortgage are changing rapidly. Educators need to keep abreast of these changes.

An estimated 8.36 million Americans need long-term care in a given year; the cost of a year in nursing home averages \$87,600 (Finefrock, Grandisher, & Nitz, 2015). There are various ways to pay for care: long-term care insurance, variable and fixed annuity products, variable and universal life insurance, “hybrid” LTC policies as well as reverse mortgages and paying out of assets. Finefrock et al. (2015) provide a table comparing the features of LTC products. Despite the risks of needing care, LTCI “is optimal for only about 20-30 percent of single individuals” (Friedberg, Hou, Sun, & Webb, 2014). The researchers concluded that “long-term care is a more likely, but less expensive, event, fewer people may benefit from insurance than previously estimated.”

Working longer is the main advice from the Center for Retirement Research at Boston College, but it isn’t always feasible and the consequences of losing a job in later life are far more severe than for younger workers. Educators need to help people understand the implications of living to 90 or beyond, not just in terms of cost but in terms of whether they will be able to manage their finances. Doviak (2015) explains how to apply behavioral finance strategies in practice to help clients avoid common mistakes.

The 4% withdrawal guideline suggested by Bengen (1994) are being challenged in the search for sustainable withdrawal strategies for longer lifespans and lower investment returns. Using historical data, Bengen calculated that 4% adjusted yearly for inflation was the maximum safe withdrawal rate for a 50/50 stock/bond portfolio and a 30 year time horizon. Blanchett et al. (2014) contribute to understanding asset allocation and investing ‘glide paths.’ To ensure steady income that won’t be outlived, Pfau (2015) compared the benefits of a single premium immediate annuity, laddered bonds, and a mix of laddered bonds and deferred income annuity. The conventional wisdom is to

---

<sup>1</sup>Jean M. Lown, Ph.D. 2905 Old Main Hill, USU, Logan, UT 84322-2905, 435-797-1569, jean.lown@usu.edu.

invest more conservatively as retirement approaches yet Kitces and Pfau (2015) promote the benefits of a rising equity glide path during retirement. Financial educators need to understand the latest financial planning research.

# **Barriers to employment for mature un- or underemployed workers in rural America: A Phenomenological Study in a Midwestern Community**

*Angela M. Zell<sup>2</sup>, Erica Tobe, Barbara Ames, Amanda Guinot Talbot, Michigan State University*

**Key words:** barriers, rural, underemployment, unemployment

Rural communities rely on local employers for continuous employment to provide for their families. In the last decade, the U.S. has witnessed the closure of 42,000 factories dramatically influencing the financial stability of households (Lee, 2011). In 2006, a Midwestern rural community lost a major manufacturing employer resulting in the loss of 2,700 jobs, in a town of approximately 8,000 (City-Data.com, 2012). Many of these newly unemployed were mature workers - too young to retire but old enough to find job change difficult. This phenomenological study provides an in-depth exploration and is informed by two foundational human development theoretical approaches: life course theory and conflict theory.

Qualitative data were collected through one time, semi-structured interviews with six mature rural un- or underemployed workers. The interviews have been analyzed to assess the barriers to full employment after job loss in this community where a major manufacturing company closed. A phenomenological approach was used to guide the interviews. Mature workers (40 years of age or older), were asked to complete a demographic questionnaire prior to the interview. Questions focused on describing the job loss experience, understanding the barriers to employment, and identifying resources to aid mature workers. Interviews were digitally recorded with the participant's informed consent. Data were collected in April of 2011, in this university approved research study.

Family economic restructuring became evident as families were forced to evaluate and potentially relocate in search of work, while others experienced a change in gender roles. Barriers to new employment included: appropriate education and technological skills to qualify for a limited number of jobs; effective public and personal transportation options; and health concerns related to individuals suffering from pain, injury or debilitating work related limitations from years of repetitive physical labor standing on factory floors. Emotional health concerns included depression with limited support for mental health challenges. Financial concerns caused stress and families experienced conflict. Living on less meant lifestyle changes, some used retirement accounts to sustain themselves, while others faced foreclosure or bankruptcy which had implications for their future financial security that can burden families for generations.

Implications for practice include the need for further education for rural mature workers in their social and economic development. Mature adults facing un-or underemployment could benefit from comprehensive mental health services, often not available through traditional workforce development programming. Practitioners can focus on financial education to reduce the likelihood of using savings and retirement funds to pay for daily expenses. Helping people accept and live within a "new normal" will help secure a better financial future. Support to better understand the unique caveats related to foreclosure prevention programming, unemployment assistance, educational attainment and other governmental programs can aid in their future economic stability. Reducing the barriers to re-employment will provide for a more positive transition back into the workforce for un- or underemployed mature workers in a Midwestern Community.

## **References**

- City-Data.com. (2012). Retrieved February 3, 2015, from City-Data.com website: <http://www.city-data.com>.
- Lee, D. (2011, July 10). Retraining alone doesn't do the job. *Los Angeles Times*, Economy.

---

<sup>2</sup>Angela M. Zell, MPH, Michigan State University College of Human Medicine, 965 Fee Road, A209 East Fee Hall East Lansing, MI 48824; 517-353-1642; [zell@msu.edu](mailto:zell@msu.edu).

# **Consumer Financial Education and Subjective Financial Well-Being: Financial Literacy, Behavior, and Capability Variables as Mediators**

*Jing Jian Xiao<sup>3</sup>, University of Rhode Island, Nilton Porto, University of Rhode Island*

**Key words:** financial behavior, financial capability, financial education, financial literacy, financial satisfaction, financial well-being

## **Abstract**

Previous research has examined effectiveness of financial education on financial literacy and financial behavior under an assumption that financial literacy and financial behavior would contribute to financial well-being. However, little research directly examined associations between financial education and financial well-being. To fill out this research gap, this study examined associations between financial education and subjective financial well-being and explored the question whether financial education is directly or indirectly associated with subjective financial well-being through mediating factors. Mediating factors refer to financial literacy, financial behavior, and financial capability variables. Using data from the 2012 National Financial Capability Study, the results suggest that financial education may affect subjective financial well-being through financial literacy, behavior, and capability variables. The extents of associations of mediating factors with financial satisfaction vary. The findings have implications for financial counselors and planners to take advantages of multiple benefits of financial education in content acquisition, confidence in knowledge and ability, and action taking when they communicate with their clients.

---

<sup>3</sup>Jing Jian Xiao, Ph.D., Professor, Department of Human Development and Family Studies, University of Rhode Island, Kingston, RI 02881; Phone: 401-874-2547; Email: xiao@uri.edu.

## Emerging Adult Financial Capability

Amanda Guinot Talbot<sup>4</sup>, MA and Barbara D. Ames, PhD., CFLE, Michigan State University,  
Department of Human Development and Family Studies

**Key words:** emerging adults, financial capability, financial literacy, structural equation modeling

The preponderance of studies investigating youth financial literacy has revealed the majority of students are failing (Eitel & Martin, 2009; Garth, 2009). In addition, they are disproportionately failing related to debt and investing, key areas in which a lack of knowledge will affect future success, health, and well-being (Avard, English, Manton, & Walker, 2005; Chen & Volpe, 1998). This study was an examination of emerging adult college students' financial capability (knowledge, attitudes, behaviors) in the areas of credit/debt (C/D) and savings/investing (S/I). Students from a large Midwestern university formed the sample for the study. The completed quantitative measure was the 156 question Emerging Adult Financial Capability Survey (EAFCS). The survey was administrated in a pre-and post-test design to students enrolled in a general elective personal financial course across six semesters (fall, spring, summer a and b). A total of 855 completed pre-and post-test sets were used for analysis. Structural equation modeling (SEM) was used to analyze the proposed research questions and hypotheses. Previous to running the full models, the data were cleaned and organized, then exploratory factor analysis (EFA), item response theory (IRT), confirmatory factor analysis (CFA), and tests of measurement invariance were run. Significant results include: higher scores at time one (C/D and S/I) related to lower overall change across time, C/D and S/I attitudes had significant direct relationships with knowledge and behaviors and change within these domains, and attitudes (C/D and S/I) mediated the relationship between knowledge and behavior across several factors. These results help to provide a better understanding of emerging adults' financial capability, practices, and functioning within the areas of debt management and savings and investing practices. The aim is to help educators, researchers, and counselors better understand these issues in an effort to better serve, promote, and support collegiate financial education. Further results, study limitations, and directions for future research are presented.

### References

- Avard, S., English, D., Manton, E., & Walker, J. (2005). The financial knowledge of college freshmen. *College Student Journal*, 39(2), 321.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107.
- Eitel, S. J., & Martin, J. (2009). First-Generation Female College Students' Financial Literacy: Real and Perceived Barriers to Degree Completion. *College Student Journal*, 43(2), 616–630.
- Garth, W. (2009, October 29). Financial Illiteracy: An Epidemic That Demands A Collective Post-Economic Crisis Cure. *Sun Reporter*, p. P8,P8A. San Francisco, Calif., United States.

---

<sup>4</sup>Amanda Guinot Talbot, MA, Michigan State University, Department of Human Development and Family Studies  
552 W. Circle Drive 7 Human Ecology Building East Lansing, MI 48824, Phone: (517) 355-7680, Email:  
[guinotam@msu.edu](mailto:guinotam@msu.edu)

# Exploring Mexican American Cultural Meanings about Financial Management

*Antonio Alba Meraz<sup>5</sup>, M.S. and Sharon M. Danes, PhD, University of Minnesota Extension*

**Key words:** culture, family finances, meaning of money, Mexican American

## Introduction/Literature Review

Culture is more complex than race or ethnicity (Chan & Lee, 2004). Culture implies interpersonal, interactive processes reflecting behavior through family roles and values, communication patterns, affective styles, and decision-making (Hill, 2006). Culturally responsive financial education is critical because financial socialization is grounded in family interactions that influence attitude development, knowledge transfer, and financial capability development (Gudmunson & Danes, 2011). Yet much financial education is culturally neutral resulting in less effective impacts when used with cultures other than the mainstream one. To motivate behavior change, it is crucial for education to reflect the audience's cultural beliefs and understandings (Alba Meraz, Petersen, Marczak, Brown & Rajasekar, 2013). If cultural context is not considered in financial education, counseling, or coaching and behavior change is the goal, effectiveness is slighted.

## Purpose & Justification

This study addresses how Midwest Mexican Americans (MAs) define wellbeing and financial management responsibilities. Understandings of family, household, resources, cultural beliefs, and decision processes were included. Cultural underpinnings in financial education is crucial for effective learning, skill improving, and gaining resource access.

## Methods/Research

The study was guided by Deacon and Firebaugh's (1988) Family Resource Management theory. An Extension Educator team developed interview questions and protocol. Snowball sampling was used. Fifteen interviews were conducted by a Mexican American in Spanish. Respondents were the primary household financial manager. Pattern matching data analysis was performed.

## Results/Discussions

Documentation status and transnationalism were very influential in making financial decisions. There are different needs for those with and without documentation. All families sent money back to family in Mexico. Doing so was not seen as an obligation but part of core responsibilities of family. Money is just one currency for MAs. Money is secondary in priority to relationship currency reflected in their desire for harmony and loyalty with family and friends. Well-being is about having health and employment, not success and power. Well-being included physical health, mental, emotional and spiritual health. MA's income is often unstable and insecure and most often is a some mix of formal employment and non-formal income. Literature describes MAs as present-time oriented. However, from respondents' words supported by Deacon and Firebaugh's theoretical supposition, this orientation is due to daily struggles to meet basic needs with low incomes. Five financial decision making patterns were discovered: (a) both spouses worked and wife managed the money (20%), (b) both spouses worked and husband managed the money (13%), (c) husband worked and wife managed the money (27%), (d) husband worked and managed money (20%), and (e) husband worked and both spouses managed the money (20%).

## Conclusions/Implications

---

<sup>5</sup> Antonio Alba Meraz, Greater Mankato Business Development Center, 1961 Premier Drive, Suite 110, Mankato, MN 56001-5903, O-507-389-6764, F-507-389-6787, albam001@umn.edu.



Findings demonstrated that this unique family-focused, collectivist culture with issues of documentation status and transnationalism requires curriculum adaptations in conventional financial education curricula. Education for this audience needs to address low literacy levels, the language difference, documentation status, relevancy and flexibility in curriculum content and educational timing.

## References

- Alba Meraz, A., Petersen, C. M., Marczak, M. S., Brown, A., & Rajasekar, N. (2013). Understanding long-term benefits of a Latino financial literacy education program. *Journal of Extension*, 51(6), 1-9. Retrieved from <http://www.joe.org/joe/2013december/a3.php>
- Chan, S., & Lee, E. (2004). Families with Asian roots. In E. W. Lynch and M. J. Hanson (Eds.), *Developing cross-cultural competence: A guide for working with children with their families* (pp. 219-298). Baltimore, MD: Paul H. Brookes.
- Deacon, R., & Firebaugh, F. (1988). *Family Resource Management: Principles and applications*. Boston, MA: Allyn & Bacon.
- Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, 32, 644-667. Doi: 10.1007/s10834-001-9275-y
- Hill, D. L. (2006). Sense of belonging as connectedness, American Indian worldview, and mental health. *Archives of Psychiatric Nursing*, 20(5), 210-216. Doi:10.1016/j.apnu.2006.04.003

## Financial Considerations in Making the Decision to Divorce or Reconcile

*Hannah P. Plauche<sup>6</sup>, Louisiana State University, Frances C. Lawrence<sup>7</sup>, Louisiana State University  
Loren D. Marks<sup>8</sup>, Brigham Young University*

**Key words:** divorce, family finance, marital reconciliation, qualitative research

Several studies have indicated a relationship between finances and the quality of marital relationships (Archuleta, Britt, & Grable, 2011; Dew & Dankin, 2011; Papp, Cummings, & Goeke-Morey, 2009). The purpose of the current study was to explore how finances for the couples in the study factored into the decision to reconcile their marriages after filing for divorce. Participants were asked to discuss how the resources available to them (specifically finances), the meanings they associated with their experiences, and the processes they used influenced their reconciliation decisions.

Marriage and divorce related literature is very diverse and has been studied extensively. According to Amato (2010), over 2,000 results appear when searching the keyword *divorce* from the years 2000-2010; however, little has been studied on marital reconciliation. As the potential negative effects for both adults and children have been well studied, understanding the factors that influence this difficult decision becomes an important social issue.

A qualitative model was used for the current study. Seven couples ( $N = 14$ ) who filed a petition for divorce in a Southern state between the years 2000-2010, but reconciled their marriages before the divorce proceedings were finalized, participated in a semi-structured, open-ended interview. Husbands and wives were interviewed separately, then together in an additional interview. Participants were specifically asked if finances factored into the decision-making process. The digitally recorded interviews were transcribed, coded, and analyzed using grounded theory techniques.

The topic of finances did not emerge as a major theme in the overall study. When specifically asked if finances were a support or deterrent in the decision to separate and/or reconcile, the participants overwhelmingly responded “no.” Only one couple expressed that finances were a factor in their decision to reconcile: the wife stating that they were in the process of building a home and would have lost a significant amount of money to proceed with divorce and the husband stating he realized he would not be able to afford child support payments if they divorced. Another participant’s original answer was that finances were not a factor in her decisions; however, she later responded, “We went through a lot of years where we didn’t have money. And he didn’t work as much as he does now. And I was more of the breadwinner... I want my fair share.” The issues that were factors in the decision making process for the couples included: support systems, outlook and attitude regarding marriage, and the importance of hard work in marriage.

Perhaps what speaks more to the importance of the findings is what the couples did *not* say. The reports that finances were not a dominant factor in the decision-making process to all but one of the couples is an important finding. This finding is inconsistent with the literature that suggests barriers to divorce such as staying together for the children and finances playing a huge part in the decision to separate (Amato & Hohmann-Marriott, 2007; Archuleta, Britt, & Grable, 2011). The findings of the current study suggest that there are deeper issues that keep couples from ending their marriages than the pragmatic reasons noted in the majority of the research.

---

<sup>6</sup>Hannah P. Plauche, Adjunct Faculty, E. J. Ourso College of Business, Department of Finance, Business Education Complex, Louisiana State University, Baton Rouge, LA 70803, Phone: 225-247-0480, Email: [hplauc3@lsu.edu](mailto:hplauc3@lsu.edu).

<sup>7</sup>Frances C. Lawrence, Gerald Cire and Lena Grand Williams Alumni Professor, E. J. Ourso College of Business, Department of Finance, Business Education Complex Room 2902, Baton Rouge, LA 70803, Phone: 225- 578-1726, Email: [flawrence@lsu.edu](mailto:flawrence@lsu.edu).

<sup>8</sup>Lauren D. Marks, Professor, School of Family Life, Brigham Young University, Provo, UT, 84602, Email: [loren\\_marks@byu.edu](mailto:loren_marks@byu.edu).

## References

- Amato, P. (2010). Research on divorce: Continuing trends and new development. *Journal of Marriage and Family*, 72, 650-666.
- Amato, P. R., & Hohmann-Marriot, B. (2007). A comparison of high and low distress marriages that end in divorce. *Journal of Marriage and Family*, 69, 621-638.
- Archuleta, K. L., Britt, S. L., Tonn, T. J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports*, 108, 563-576.
- Dew, J., & Dakin, J. (2011). Financial disagreements and marital conflict tactics. *The Journal of Financial Therapy*, 2(1), 23-42.
- Papp, L. M., Cummings, E. M., & Goeke-Morey, M. C. (2009). For richer, for poorer: Money as a topic of marital conflict in the home. *Family Relations*, 58, 91-103.

## Financial Stress and Its Impact on College Retention

*Kelsie Smathers, University of Idaho and Nancy Deringer<sup>9</sup>, PhD, University of Idaho*

**Key words:** retention, stress, student loan debt

### Abstract

The literature shows that student loan and credit card debt are concerns in the United States (Reed & Cochrane, 2013; Chen, 2014). Financial stress affects college students in many areas including academic performance (American Student Assistance, 2013) and overall health (Walsemann, Gee, & Gentile, 2014). The decision to take on debt is affected by a person's attitude toward debt (Norvilitis, Merwin, Osberg, Roehling, Young, & Kamas, 2006), financial knowledge (de Bassa Scheresberg, 2013), and parental influence (Jorgensen & Salva, 2010). A student's decision to persist to a degree is impacted by basic demographic characteristics (Robb, Moody, & Abdel-Ghany, 2012; Wohlgemuth et al. 2007; Chen, & St. John, 2011) as well as financial burdens (Robb, Moody, & Abdel-Ghany, 2012). Based on the literature reviewed, this study aims to determine whether financial stress, specifically from student loan and credit card debt, impacts a student's decision to take a break from college, drop out, or transfer to another institution.

Data were collected from 347 undergraduate students at the University of Idaho in the fall of 2014 using The Ohio State University's National Student Financial Wellness Survey. Several questions were asked regarding stress and finances. When asked if they feel stressed about their personal finances in general 78% of participants responded with "agree" and "strongly agree" to feeling stressed. Over 38% of participants reported the stress from accruing student loans caused them "large amounts" or "extreme amounts" of stress. Only 10.9% of participants reported the stress from accruing credit card debt caused them "large amounts" or "extreme amounts" of stress. About 44% of participants reported the stress from the total amount of money owed caused them "large amounts" or "extreme amounts" of stress.

For initial data analyses, Pearson's Chi-square ( $X^2$ ) tests were performed and significance was found at the  $p < .01$  level. Students reported that these high levels of stress impacted their college decisions regarding taking a break from college or transferring to a different institution. Nine point five percent of students reported stress from accruing student loans caused them to take a break, and 9.3% reported stress caused them to transfer. Eleven point two percent of students reported that stress from the total amount of money they owed caused them to take a break, and 10.2% reported that stress caused them to transfer institutions. These may initially seem like small percentages but one should be concerned that debt is causing so much stress that students are willing to make potentially life altering changes in an attempt to decrease that stress. This also may suggest that students with more debt have more difficulty persisting to a degree as found in previous research (Robb, Moody, & Abdel-Ghany, 2012).

University admission offices and policy makers should be interested to see how financial stress impacts a student's college decisions. They should be concerned that this stress is causing students to temporarily or permanently leave the institution, and strive to find ways to help students avoid or cope with that stress. One way to do this would be to require a personal finance class as a core academic requirement for all students. Becoming educated about finances and loan options would hopefully empower students to feel confident in their decision making and reduce the amount of stress they feel. This could lead to fewer drop outs, less time taking breaks and thus more speedy completion, with fewer students transferring for financial reasons. Overall this could result in more successful, content college students as well as possible higher retention rates for university admissions.

It is important to note the limitations of this study. The sample is from undergraduate students at the University of Idaho so results may not be applicable to all students and universities across the United States. The survey is

---

<sup>9</sup>Nancy Deringer, PhD, Associate Professor, University of Idaho – School of Family and Consumer Sciences, 875 Perimeter Dr. MS 3183, Moscow, ID 83844-3183, Phone: 208-885-7264, Fax: 208-885-5751, [deringer@uidaho.edu](mailto:deringer@uidaho.edu).

designed as a self-reporting survey thus relying on the participants to have knowledge of their finances and be willing to honestly share that information.

The analyses performed on the data set and reported in this article are the start to a master's thesis. They are indicative of the available information and thus need follow up analyses to produce a full picture of the impact of financial stress on students at the University of Idaho. This research builds on the current literature in an attempt to understand the relationship between financial stress in college students and retention rates.

## References

- American Student Assistance. (2013). Life Delayed: The Impact of Student Debt on the Daily Lives of Young Americans.
- Chen, R., & St. John, E. (2011). State Financial Policies and College Student Persistence: A National Study. *The Journal of Higher Education*, 82(5), 630-660.
- Chen, T. (2014, December 1). American Household Credit Card Debt Statistics: 2014. Retrieved March 4, 2015, from <http://www.nerdwallet.com/blog/credit-card-data/average-credit-card-debt-household/>
- de Bassa Scheresberg, C. (2013). Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications. *Numeracy: Advancing Education in Quantitative Literacy*, 6(2), 1-21.
- Jorgensen, B., & Salva, J. (2010). Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations: Interdisciplinary Journal of Applied Family Studies*, 59, 465-478.
- Norvilitis, J., Merwin, M., Osberg, T., Roehling, P., Young, P., & Kamas, M. (2006). Personality Factors, Money Attitudes, Financial Knowledge, and Credit-Card Debt in College Students. *Journal of Applied Social Psychology*, 36(6), 1395-1413.
- Reed, M., & Cochrane, D. (2014). Student Debt and the Class of 2013. *The Project on Student Debt*.
- Robb, C., Moody, B., & Abdel-Ghany, M. (2012). College Student Persistence to Degree: The Burden of Debt. *College Student Retention*, 13(4), 431-456.
- Walsemann, K., Gee, G., & Gentile, D. (2014). Sick of Our Loans: Student Borrowing and the Mental Health of Young Adults in the United States. *Social Science & Medicine*, 124(2015), 85-93.
- Wohlgemuth, D., Whalen, D., Sullivan, J., Nading, C., Shelley, M., & Wang, Y. (2007). Financial, Academic, and Environmental Influences on the Retention and Graduation of Students. *College Student Retention*, 8(4), 457-475.

## Health Insurance Literacy: Exploring Demographic Characteristics

Mia B. Russell<sup>10</sup>, University of Maryland; Suzanne Bartholomae, Iowa State University; Bonnie Braun, University of Maryland; Teresa McCoy, University of Maryland

**Key words:** adult education, affordable care act, health insurance, health insurance literacy, uninsured

Americans' health insurance literacy has become a critical issue with the passage of the Patient Protection and Affordable Care Act (ACA) of 2010. Although the ACA provides greater consumer protection, researchers, policy makers, and practitioners advocate for improved health insurance education (Hanoch & Rice, 2011; Frank & Lamiraud, 2009). According to several studies, consumers also want to better understand 1) health insurance terminology, 2) costs associated with health insurance plans and 3) details of their health insurance benefits (Kim et al, 2013; Quincy, 2012). A related issue is the rising cost of health care costs and the pivotal component it plays in a family's budget. In 2013, a family of four, on average, spent between 21 to 25% of their household budget on healthcare expenses (Gould, Wething, Sabadish, & Finio, 2013). Given the changes to the health insurance brought about by the ACA and the need for greater consumer understanding of health insurance and managing associated expenses, the issue of health insurance literacy is of great importance. Furthermore, there are several benefits of health insurance coverage; health insurance literacy is a way to help strengthen the well-being of American families.

This poster shares research on consumer characteristics and state factors that contribute to health insurance literacy. The poster shares data (N=623) from the *Smart Choice Health Insurance*®, a health insurance literacy program delivered between September 2013 and May 2014 in seven states. Using analyses of variance (ANOVA) and Ordinary Least Square (OLS) regression analysis, the poster shares findings on the influence of individual socio-demographic characteristics (e.g., age, gender, race, education, income, insurance status) and state characteristics (state support of ACA, state insured rate) on health insurance literacy. The findings of the current investigation showed younger, males, low income, lower educated consumers and consumers who reside in a state that does not support the ACA reported lower health insurance literacy. This finding highlights the importance of individual consumer characteristics, as well as the context and environment of educational programming. The results of the study provide support for different associations between individual socio-demographic characteristics and health insurance literacy, as well as some evidence about the importance of where one lives and one's environment at the time of the education.

Limited research exists on health insurance literacy, this study extends the literature on programming and policy issues related to health insurance literacy. *Smart Choice* was designed to help consumers navigate the complexities of health insurance and make informed decisions about health insurance plans that best fit their needs, wants, and financial situation. Consumers who become educated about health insurance would have the health insurance literacy necessary to understand and act upon health plan information consistent with their health and financial needs and the confidence to do so. Identifying socio-demographic and state factors helps to inform us about who can benefit from an educational program, and ways to adapt and tailor educational opportunities.

### References

- Frank, R. G., & Lamiraud, K. (2009). Choice, price competition and complexity in markets for health insurance. *Journal of Economic Behavior and Organization*, 71(2), 550–562.
- Economic Policy Institute. (2013, July). What families need to get by: The 2013 Update of EPI's Family Budget Calculator. (Issue Brief #368). Washington, DC: Gould, E., Wething, H., Sabadish, N., & Finio, N.
- Hanoch, Y., & Rice, T. (2011). The economics of choice: Lessons from the US health-care market. *Health Expectations*, 14(1), 105-112. DOI: 10.1111/j.1369-7625.2010.00646.x

---

<sup>10</sup>Mia B. Russell, MBA, Extension 3300 N. Ridge Road, Suite 240; Ellicott City, MD 21043; Office: (410)313-2707; Email: mbr@umd.edu; Fax: (410) 313-2712.

## Housing Decisions of Millennials: Challenges and Consequences

Yilan Xu<sup>11</sup>, University of Illinois; Barbara O'Neill, Rutgers University; Carrie Johnson, South Dakota State University; Suzanne Bartholomae, Iowa State University; Michael Gutter, University of Florida

**Key words:** Great Recession, homeownership, housing choice, life cycle, marriage, millennials

This poster reports highlights of an extensive literature review conducted by a multi-state organization of land-grant university researchers (NC 2172) to collect baseline data to inform research on the housing decisions of the millennial generation (i.e., persons born during the 1980s through the early 2000s). The research being presented selects highlights of the literature review, which provide insights about millennials and the housing decision-making process, recent U.S. homeownership trends, challenges in transitioning from renting to homeownership, and life cycle decisions related to homeownership.

Between the 1970s and mid-1990s, the homeownership rate in the United States was steady around 65%, followed by a soar up to 69% in late 2006 and a slide back to 65% in 2013 (Gabriel & Rosenthal, 2015). Despite recent turmoil in the housing market, 75% of young people still have a long-term goal of achieving the American Dream of owning a home (The Demand Institute, 2014). More than 85% of millennials still believed owning makes more sense than renting after the Great Recession, according to Fannie Mae's National Housing Survey in the first quarter of 2012 (Belsky, 2013). However, 62% of millennials are doubtful of the financial benefits provided by home ownership (e.g., home equity and wealth building) and one-third of them question their ability to be a successful home owner (MacArthur Foundation, 2014).

In this literature review, we examined both internal and external factors that affect housing demand of the millennial generation. External factors include mortgage accessibility, which was compromised by the Great Recession. Internal factors include student loan debt and family life cycle decisions. Key findings are as follows:

- Mortgage accessibility is a key constraint to homeownership for millennials. The Great Recession had greater adverse effects on the younger generations than on other age cohorts, further hindering millennials' homeownership attainment. Due to their relatively low income and limited credit access, millennials face restrictive liquidity constraints as a result of Great Recession.
- High student loan debt among millennials impedes their transition from renters to homeowners. First, their student loan debt burden may disqualify them for mortgages due to low credit scores and high debt ratios. Second, debt aversion may discourage student loan holders from taking on additional debt for homeownership. Student loan holders are likely to delay homeownership rather than give up homeownership.
- Family events, such as marriage, divorce, and childbearing, are strongly related to housing decisions. For example, marriage can accelerate the transition to homeownership and enhance marital stability because of the greater commitment made by a home investment. Marriage dissolution can lead to moves in and out of homeownership, individuals who divorce are more likely to move out of single-family housing and become renters.

The literature review summarized in this poster curates a wide variety of studies about current housing trends and decision-making as it relates to millennials. This up-to-date information, drawn from academic research, will enable financial planning practitioners to understand the challenges and consequences of homeownership for millennials and formulate strategies to help this age cohort with their personal financial planning.

### References

- Belsky, E. S. (2013). *The dream lives on: The future of homeownership in America* (Report No. W13-1). Retrieved from Joint Center for Housing Studies: Harvard University
- The Demand Institute (2014). *Millennials and their homes: Still seeking the American dream*. New York: NY: The Demand Institute.

---

<sup>11</sup>Yilan Xu, Assistant Professor, 1301 W. Gregory Dr., 309 Mumford Hall, Urbana, IL 61801. Email: [yilanxu@illinois.edu](mailto:yilanxu@illinois.edu)

## Individual, Parent or Educator? Determinants of Effective Money Management in College Students

Suzanne Bartholomae<sup>12</sup>, Iowa State University; Jonathan J. Fox, Iowa State University; Jodi Letkiewicz, York University; Catherine P. Montalto, The Ohio State University

**Key words:** college students, financial education, financial socialization, money management, parenting

How young adults develop money management skills – which includes budgeting, planning for spending, and monitoring financial obligations – is not well understood. Previous studies have found individual (e.g., gender, ethnicity) and family characteristics (e.g., family income, parent financial behaviors, parenting) to be associated with the money management skills of young adults. For example, female college students have been identified as better money managers than males (Hayhoe et al., 2000; Henry et al., 2001) whereas White college students have been identified as better money managers than Black college students (Grable & Joo, 2006). This poster examines the contribution of individual, parent, and educator variables as determinants of effective money management skills.

This poster uses data from the 2010 Ohio Student Financial Wellness Study (SFWS), a web-based survey examining the financial decisions, attitudes and perceptions of undergraduate students. The sample (n=5,585) is based on responses from students from 19 educational public/private four-year and two-year colleges/universities. Using hierarchical multiple regression models, money management skills were regressed on individual variables (aptitude, planfulness, impulsivity, rank in school, gender, race/ethnicity), parent variables (financial parenting, purposeful financial socialization), and educator variables (financial education in high school, college, or both, financial counseling, consulting with various financial professionals). The variables were entered in three blocks to determine the added contribution each set made to predicting effective money management.

Each block of variables was significant in the hierarchical multiple regression models ( $p < .001$ ). Individual variables accounted for 4.4% of the variation in effective money management skills; parent variables explained an additional 5.6%, and educator variables accounted for 1.0% of the variance. The model as a whole explained 11.1% of the variance in effective money management. *Financial Parenting* ( $\beta = .25$ ), *Aptitude* ( $\beta = .11$ ), *Planfulness* ( $\beta = .11$ ), and *Meeting with a Financial Professional* ( $\beta = .08$ ) were associated with students being skilled money managers. Males were more effective money managers than females. Sophomores and juniors were more effective money managers relative to first year students. Students identifying as ‘other’ for race/ethnicity were less effective money managers compared to White students. Financial socialization activities (e.g., received an allowance as a child or worked for pay in high school) was associated with being a less effective money manager. Taking financial education courses in high school and college was shown to improve money management skills, though to a lesser degree.

The findings confirm previous evidence showing the strong influence of individual characteristics (Letkiewicz & Fox, 2014). Similar to previous studies, financial parenting had the strongest influence on financial outcomes, relative to other factors (Shim et al., 2010), suggesting the importance of educational interventions that include parents. Students who met with a financial professional (e.g., banker, insurance agent) had a greater likelihood of being an effective money manager, suggesting further investigation into these types of relationships. The ability to effectively manage money is associated with a variety of outcomes, this study furthers our understanding of developing these essential skills and provides strategies for financial educators and counselors.

### References

- Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences in spending habits and credit use of college students. *Journal of Consumer Affairs*, 34(1), 113-133.
- Kim, J., & Chatterjee, S. (2013). Childhood financial socialization and young adults' financial management. *Journal of Financial Counseling and Planning Volume*, 24(1), 62.

---

<sup>12</sup>Human Development and Family Studies. 58 Le Baron Hall, Ames, Iowa, 50011, USA. Phone: 515-294-9528. Fax: 515-294-1908. Email: [suzanneb@iastate.edu](mailto:suzanneb@iastate.edu).



## **Influence of Financial Stressors on College Student Retention**

*Sonya L. Britt<sup>13</sup>, David Allen Ammerman, Sarah Webb, Scott Jones, Kansas State University*

This study sought to determine how financial factors, in addition to other costs, influence students' decision to continue with their college education. Undergraduates enrolled in at least six credit hours during spring 2014 of a large public university in the Midwest were sent an online survey related to financial attitudes, behaviors, and status. Demographic data were obtained with permission of the university's IRB and linked with the survey data in spring 2014 and again in spring 2015. A total of 16,675 e-mails were successfully sent and 2,454 students completed all of the questions used in the analysis. All respondents were eligible to receive a small gift and were entered for a drawing for larger prizes.

Approximately 22% of students who completed the survey were either dismissed from or left the university voluntarily before completing their degree. Approximately 63% of the sample were female, 85% were white, and about 83% reported that they held in-state status. Approximately 15% of sample respondents were college freshmen, 25% were sophomores, 22% juniors, and 38% were college seniors. The average age of students was 21.08 years ( $SD = 3.09$ , range = 17-56). The average student was enrolled in 13.94 credit hours during the spring 2014 semester and had a 3.13 cumulative GPA. Nineteen percent of the sample belonged to a Greek house.

Average monthly income was \$441, average savings account balance was \$2,719, average credit card balance was \$548 for those who have credit cards, and average student loan balance was approximately \$12,400. Students reported an average financial stress score of 6 on a scale of 1 to 10. About 44% of students reported seeking financial help either in person or online.

A binary logistic regression model was used to predict classification into two possible outcomes where 1 = respondent discontinued college for any reason and 0 = respondent graduated or is actively continuing college on at least a half time basis. The regression model was statistically significant and correctly predicted 84% of the cases where students discontinued their education.

Financial factors associated with an increased likelihood of discontinuing college included high self-reported student loan debt, high financial stress, and feeling that needs were being met. Interestingly, high levels of university-reported student loan debt was negatively associated with the odds of discontinuing college. Consistent with prior studies, non-financial factors associated with the odds of discontinuing college included grade level, academic major, residency status, GPA, and hours of enrollment. Seniors were more likely to discontinue their studies than juniors or underclassmen. Students pursuing majors in the colleges of agriculture, architecture, and engineering were less likely to discontinue their studies relative to students from the college of arts and sciences. In-state residency status, higher GPA, and higher hours of enrollment were associated with a reduced likelihood of discontinuing college.

An unexpected finding of this study is that students who pursued in-person financial help were more likely to leave college as compared to students who did not seek help. On average, students who sought financial help were older, were enrolled in fewer hours during the spring 2014 semester, and had higher student loan balances. Help-seekers also reported experiencing a higher number of personal and family stressors within the 12 months preceding the survey. Help-seekers had higher incomes than non-help-seekers, but also had a higher number of instances where they were not able to pay their financial obligations. These findings may be an indication of the students' perceived pressure to work during college to support their needs rather than being better-off financially.

In conclusion, students may be seeking financial help too late. Financial counselors should not be discouraged by the results. Rather, encouraging or requiring early intervention may help in efforts to retain students. Special attention should be paid to students with high student loan debt.

---

<sup>13</sup>Sonya L. Britt, 1324 Lovers Lane, 317 Justin Hall, Manhattan, KS 66506, 785-532-3541, [sbritt@k-state.edu](mailto:sbritt@k-state.edu)

## Living On My Own-A Financial Education Simulation for Young Adults

*Elaine A. Courtney<sup>14</sup>, University of Florida/IFAS-Professor Emeritus, Dr. Michael S. Gutter, University of Florida/IFAS Extension, Ricki McWilliams, University of Florida/IFAS Extension, Katherine Marin, University of Florida/IFAS Extension, Cathy Rogers, University of Florida/IFAS Extension, Taylor Spangler, University of Florida/IFAS Extension, Brittany Stahl, University of Florida/IFAS Extension*

**Key words:** financial education, youth, financial literacy, life skills

### Objective/Purpose

1. Describe the development and methodology of a newly revised financial education curriculum, which includes a real-life simulation for young adults.
2. Student participants will increase their awareness of and develop skills needed for using financial institutions (banks, credit unions) and making wise consumer decisions.
3. Create a forum for other practitioners to learn ways to use the Living On My Own curriculum.

Financial education for young people is vital to their future financial success and an essential life skill. In turn, this promotes community well-being and financial stability. In many states, established Financial Literacy standards are a mandate in public schools. The state of Florida has instituted a series of education standards for financial education. This project encompasses the Florida Department of Education goal: to ensure Florida's students graduate high school ready for success in college, career and life.

The University of Florida Extension has developed a hands-on, real-life simulation/reality fair (Living On My Own). This simulation gives participants the chance to experience the future in a fun, exciting and realistic way. Living On My Own incorporates lessons learned from experiential learning research with the goal to help youth process information and increases understanding through direct experience. Experiential learning simulations are designed to provide needed financial information, but more importantly to be a catalyst for behavior change.

(<https://www.ncuf.coop/how-we-help/real-solutions/experiential/learning.cmsx>)

Living On My Own (LOMO) materials include a facilitator guide, promotional materials, preparation lessons, simulation materials and evaluation instruments. Simulation materials include station and participant information and materials, and volunteer guides. LOMO is designed to be delivered in various settings, ranging from three to six or more hours of instruction and authentic, real-life experiences through designed simulations.

During the simulation, students assume they are 25 years old, are sole/primary support for household and are given an occupation based on their personality/preferences survey. They must navigate their way through twelve LOMO stations during the simulation, making purchasing decisions at each. Participants practice:

- ✓ Making financial decisions
- ✓ Keeping a transaction record
- ✓ Writing checks
- ✓ Using "debit cards" and "credit cards"
- ✓ Experiencing unexpected costs
- ✓ Learning about how credit scores impact the cost of lending and purchasing
- ✓ Making student loan payments

---

<sup>14</sup>Elaine A. Courtney, University of Florida/IFAS-Professor Emeritus, [ecourtne@ufl.edu](mailto:ecourtne@ufl.edu) 5263 Four Lakes Dr. Crestview FL 32539, 850-585-8944.

Lessons are taught prior to the simulation and ensures student success. Following the simulation, students complete their “Finish Line” worksheet and participate in group discussion led by the project manager, volunteers, and/or extension agent. Written pre and post surveys and other materials are available to help students reflect upon and analyze their simulation experience.

The LOMO curriculum was tested in 2015 with results from 107 youth and 40 Extension 4-H faculty. Life skills learned include: occupation selection, calculating paycheck deductions, managing a financial account (writing checks, making deposits, opening accounts, maintaining a transaction register, using debit cards), and evaluating options to make purchasing decisions. For complete evaluation results, please contact author.

## Marital Status, Gender, and Wealth Holdings among Near-Retirees

*Yoon G. Lee<sup>15</sup>, Loryn Law, Melanie Anderson, Utah State University*

**Key words:** financial education, gender, marital status, near-retirees, wealth

Most individuals can live comfortably on 40-60 percent of their current income at retirement (Nolo, n. d.). Unfortunately, about a third of Americans are not saving for retirement (da Costa, 2014). Further, about 26 percent of Americans age 50 to 54 and 14 percent of Americans age 65 or older have no savings (Kennedy, 2014). Compared to singles, married couples have more options to use their employee benefits to maximize gains (Brandon, 2014). For example, spouses of retirees are eligible for up to 50 percent of their retired spouses' Social Security benefits. Married individuals may also be eligible to claim survivor's spousal benefits (Brandon, 2014). Additionally, compared to singles, married couples can contribute more to their retirement accounts, including 401ks and IRAs (Brandon, 2014).

Using data from the 2010 Rand Health and Retirement Study (HRS) data file, the purpose of this study was to understand how marriage is associated with the wealth holdings of those approaching retirement. This study explored how marriage is associated with the total net worth of individuals nearing retirement by comparing the net worth of married individuals to that of non-married individuals. In addition, we investigated whether this relationship remained significant when analyses were conducted separately by gender. The total study sample included individuals nearing retirement (age 55-64) (N=4,080). F-tests and chi-square tests were conducted to examine differences in the levels of wealth holdings and asset ownership among married and unmarried individuals nearing retirement. Ordinary Least Squares (OLS) regression analyses were performed to identify the association of marriage with net worth and factors affecting levels of net worth among near-retirees age 55-64.

The descriptive results show that 21.4 percent of the unmarried sample (n = 1,148) reported having a negative net worth, whereas 8.2 percent of the married sample (n = 2,932) reported no or negative net worth. On average, unmarried women (n = 827) reported an average of \$32,137 in their retirement accounts, whereas unmarried men reported an average of \$30,660. In terms of gender differences in wealth holdings, on average, near-retiree unmarried women reported \$1,583 in bonds, whereas near-retiree unmarried men reported \$3,417. Also, on average, unmarried women had \$12,471 in stocks, whereas unmarried men held \$24,117. In addition, the average annual income for unmarried women was \$33,337 while the average income for unmarried men was \$44,628.

As expected, the OLS results reveal that compared to being married, being unmarried is negatively associated with the level of net worth among individuals approaching retirement. In addition, the OLS results show that, all else being equal, being female, higher income, fewer family members, higher education, better health, and being white significantly predict higher levels of net worth among those nearing retirement. However, the findings indicate that, all else being equal, gender was not a significant predictor of higher levels of net worth among unmarried individuals nearing retirement.

Our study shows that those who marry and remain married enjoy higher net worth in retirement than those who are divorced, widowed, or never marry. However, this significant difference in net worth between marrieds and non-marrieds exists only among women. The findings of this study could have important implications for family life educators, and marriage counselors and therapists helping clients understand the role of marriage in the accumulation of wealth. Further, financial educators and planners can help married individuals plan their assets to fill the financial gaps that divorce can cause. Financial counselors can be especially sensitive of the circumstances of unmarried female clients as they provide guidance in anticipation of retirement, particularly among baby boomers. Finally, financial planners and educators can promote public awareness (including among policymakers) of pending shortages of safety net resources as greater numbers of female baby boomers approach retirement.

These findings are important for a number of reasons. First, a rapidly increasing number of baby boomers are nearing retirement could necessitate significant adaptation in the ways that families and governments navigate the years of

---

<sup>15</sup>Yoon Lee, Department of Family, Consumer, and Human Development, Utah State University, 2905 Old Main Hill, Logan, UT 84322, Phone: 435-797-1555, Fax: 435-797-3845, e-mail: yoon.lee@usu.edu

retirement. Further, because alternative family structures (e.g., single-mother households, never marrieds) are the norm, increasing numbers of women are becoming vulnerable to challenges associated with having limited supplemental income. Accordingly, single female baby boomers nearing retirement need to be especially cautious with the use of their financial resources and with their retirement planning.

## References

- Brandon, E. (2014). How Marital Status Affects Retirement Benefits. Retrieved from <http://money.usnews.com/money/retirement/articles/2014/03/10/how-marital-status-affects-retirement-benefits>
- da Costa, P. (2014). 36% of Americans Not Saving for Retirement. Retrieved from <http://www.foxbusiness.com/personal-finance/2014/08/18/36-percent-americans-not-saving-for-retirement/>
- Kennedy, B. (2014). Shocking number of Americans have no retirement savings. Retrieved from <http://www.cbsnews.com/news/shocking-number-of-americans-have-no-retirement-savings/>
- Nolo (N.D.). How Much Money Will You Need When You Retire? (2014). Retrieved from <http://www.nolo.com/legal-encyclopedia/retirement-money-how-much-need-29908.html>

## Money Mentors: Changing Financial Behaviors One on One

*Pam R. Atkinson<sup>16</sup>, Sasha Grabenstetter, Amanda DeRew, Cayla M. Waters, Kathryn L. Sweedler,  
University of Illinois Extension*

**Key words:** coaching, financial well-being, goal-setting, mentoring, money management, volunteer-based

Money Mentors is a volunteer program that matches volunteers with people who ask for assistance with basic money management. Since its inception in fall of 2013, University of Illinois Extension Educators trained 82 volunteers in ten trainings. Many people strive to improve their financial situation but lack the information and motivation to practice healthy financial habits. The mentoring process includes building rapport, ascertaining the mentee's goals and behavioral changes needed, constructing an action plan, and meeting periodically to measure progress. Mentors provide financial skills through education, and encouragement while tracking progress and accountability through regular meetings. Being paired with a Money Mentor is like having a personal trainer for your finances.

The Money Mentors training program consists of 30 hours of training, utilizing a "flipped classroom" style, plus 12 hours of continuing education annually. Initial training consists of online-based training (financial content) with six, three-hour in-person sessions. In-person training features games and role plays using financial content knowledge plus coaching and communications skills. The training helps create a mentor that is knowledgeable in financial skills, skilled in listening, empathetic to a mentee's value system, and one who can evaluate the best methods to use to facilitate behavioral change. Currently, each mentor is working with at least one mentee.

The target audience is anyone with a need to improve their financial well-being or who has questions about how to meet their financial goals. There are no income requirements or ceilings. The program is not designed for those in financial crisis who need immediate financial aid; we make referrals to other area agencies that can provide such assistance. To date, we have some mentees who meet a few times with a mentor and we also have people who continue to meet for over a year.

From information provided by mentees and their mentors, we have reports of significant changes in a mentee's financial behaviors. For example, changes in healthy financial behaviors include:

- reducing expenses by returning rent-to-own bed and avoiding high interest rates,
- making the hard decision NOT to take a cash advance loan when feeling pressured,
- using an employer-sponsored retirement plan to save for retirement,
- and saving money for the first month of rent to move out of homelessness.

More in-depth evaluation is currently being done through group interviews of mentees and mentors. As of August 2015, 99 people have been paired with a mentor, and 29 have successfully completed their goals. In some counties, there is a waiting list of mentees as our outreach continues to grow.

Since the inception of Money Mentors in Illinois, we have developed a curriculum, successfully recruited and matched mentors and mentees, and started tracking impact data. Additionally, we are developing strategies to keep program members engaged and confident about the process. Mentors also contribute volunteer hours to community outreach projects. Through August 2015, mentors provided 1,423 hours of volunteer time worth \$35,205 (by standard calculating methods).

This educational project was supported in part by a grant from the University of Illinois' Office of Public Engagement.

---

<sup>16</sup>Pam Atkinson, University of Illinois Extension, 1615 Commerce Parkway Bloomington, IL 61704, Phone: (309-663-8306); Fax: (309) 663-8270 Email: pratkins@illinois.edu.

## **Practitioners and Researchers Work Together: Addressing Financial Capability Among Low-Income Families in the Rural South**

*Leslie Green-Pimentel<sup>17</sup>, Paulette Meikle, Hui Liew, Delta State University*

**Key words:** financial capability, project evaluation,

The Mississippi Delta is characterized by persistent poverty, low education, and unemployment. Encouraging financial capability and asset building among low-income families is a pathway for breaking cycles of intergenerational poverty (Sherraden, 1991). Fostering financial capability in persistently poor rural communities requires multifaceted efforts and is complex as progress is the result of 1) economic infrastructure, 2) institutional mechanisms, 3) efforts of community based organizations (CBOs), and 4) individual barriers such as financial illiteracy and gaps in financial capability (Beverly, et al., 2008). As such, unique challenges can be faced by CBO staff and participants like access, convenience, and cost (Sherraden, Curley, & Grinstein-Weiss, 2003). Staff may face difficulty meeting outcomes, creating partnerships, and establishing an evaluation that is integrated into the program (Fox, Bartholomae, & Lee, 2005). Practitioners and researchers in the Mississippi Delta face these complexities.

Practitioners at a CBO in the Mississippi Delta created and implemented the Developing Personal Wealth project (DPW), a financial capability project designed to help participants: become more financially literate by participating in a financial literacy training program, open a checking and/or savings account, develop and implement a spending plan, and pay bills on time. The project faced unexpected challenges and researchers completed a formal evaluation to aid practitioners in the completion of the project. The method of evaluation used was formative, summative, and ongoing.

The objectives of this poster are 1) better understand contributors to the successes and challenges of meeting DPW goals. 2) Better understand the goals and financial behaviors of project participants. 3) Demonstrate benefits of reciprocity between practitioners and researchers when they combine expertise to identify challenges and solutions to ensure project success.

Data addressing the first objective were obtained from project and evaluation reports and were assessed using content analysis. Data addressing the second objective were obtained from follow up surveys administered to residents in the service area at the conclusion of the project; these were quantitatively analyzed using SPSS. The data revealed a primary contributor to the success of the project was the completion of the ongoing, formative and summative evaluation. The ongoing component was instructive in that it provided sound findings which led to funder support of programmatic changes to advance project success (i.e. adjusting qualifications for participation and modifying the educational program). Additional contributors included continual revision of the marketing plan to ensure a broad reach of residents; and establishing key networks and buy in with local community leaders. Project challenges were two-fold, (a) institutional challenges such as a curriculum being too advanced for participant education levels; (b) individual challenges such as transportation and childcare issues; and a history of distrust between low-income minority participants and mainstream financial institutions. Financial goals of residents included: becoming financially stable, building a savings, and purchasing a home. Benefits of reciprocity between practitioners and researchers included: expertise in realistic approaches to interacting and working with residents and community leaders; expertise in evaluation procedures; reliable findings when petitioning necessary project changes to funders; a more robust project compared to those not utilizing evaluation procedures.

The findings suggest the formal evaluation played an important role in the project successes that were realized. Serving persistently poor rural communities presents some unique challenges. As practitioners and researchers work together, these challenges may be reduced or at least more easily navigated for project success. However, some challenges may always exist such as that of insufficient transportation and childcare among participants.

---

<sup>17</sup>Leslie Green-Pimentel, Assistant Professor, Delta State University, 1003 W. Sunflower Rd Box 3264, Cleveland, MS 38733; phone: 662-846-4080; fax: 662-846-4067; Email: lgreenpimentel@deltastate.edu.

## References

- Beverly, S., Sherraden, M., Zhan, M., Shanks, T. R.W., Nam, Y., & Cramer, R. (2008, March). Determinants of Asset Building. Report prepared for and funded by the U.S. Department of Health and Human Services. Retrieved from <http://aspe.hhs.gov/hsp/07/PoorFinances/index.shtml>
- Fox, J., Bartholomae, S., & Lee, J. (2005, Summer). Building the Case for Financial Education. *The Journal of Consumer Affairs* 39(1), 195-214
- Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. Armonk, NY: M. E. Sharpe, Inc.
- Sherraden, M., Curley, J., & Grinstein-Weiss, M. (2003, November). Wealth Creation and Rural America. Paper presented at Wealth Creation and Rural America: Extending the Dream of Economic Success, Washington, DC.



## Promoting Financial Health: Helping Couples Reconcile Financial Disagreement for Emotional Fitness

Qun Zhang<sup>18</sup>, University of Kentucky

**Key words:** conflict settling strategies, financial disagreement, financial health, married couples

Financial counseling has absorbed psychotherapy for clients' holistic financial and financial related behavioral and emotional fitness (a.k.a., financial health). Given the fragility of the balance among all dimensions in this concept and the unique contribution each component offers to a healthy financial life, it is important to examine how sub-facets in financial health are interrelated for elevated effectiveness of therapeutic financial coaching. This study focuses on the behavioral and emotional spheres in financial health among married couples, and examines how couples' financial conflict settling strategies (behavioral) influence self-perceived financial anxiety (emotional). Implications for practitioners and directions for future studies are provided.

Data were drawn from Wave 3 of the National Survey of Families and Households. Full responses from married primary respondents and partial responses from spouses were used, leading to a sample size of 2,122. The dependent variable of primary respondents' self-reported financial stress and the independent variables of financial disagreement and frequencies of utilizing each strategy to tackle financial dispute (i.e., *keep opinions to self*, *discuss disagreements calmly*, *argue heatedly*, and *hitting or throwing things at each other*) from both the primary respondents and spouses were measured on Likert-point scales.

47.8% of financially distressed respondents had either (proactively) used or encountered (their spouses') avoidance, argument, or hitting when money conflict occurred. Peaceful money talks predicted lower financial stress only when both the husband and wife engaged in friendly dialogues. Concealing opinions and heated quarrels, employed by either party or both, were two destructive forms that exacerbated financial anxiety. Interestingly, self-reported financial distress did not incrementally aggravate with increased frequencies of hitting or throwing things (adopted by either marital party or both).

This study is indicative of the relation between behavioral and emotional aspects in financial health. Specifically, the results that financial distress may be heightened with increased use of negative coping strategies suggest that emotional wellness may be undermined by behavioral malfunctioning, which eventually could threaten financial health.

Practically, counselors' knowledge of couples' interactive patterns in addressing money conflict enables an early diagnosis of clients' behavioral deficiency hindering the achievement of financial goals. This gives practitioners the opportunity to individualize and optimize interventions for clients' behavioral correction by adding relationship therapy to conventional financial advising—working on building a “trustworthy and self-revealing couple alliance” may be a good start. Such therapeutic financial assistance may be highly needed in financial actions that require couples' strong emotional persistence and joint efforts in overcoming financial vulnerability, for example, arduous credit rebuilding, stressful debt consolidation, or any recovery stages succeeding financial disasters. Couple clients, therefore, may become more emotionally and financially empowered by following recommended behavioral rules in financial dyadic relationships. How behavioral and emotional domains combined influence financial health and to what extent may be the next research topic. A reliable instrument operationalizing financial health is imperative for future studies and practices. Pilot studies or experiments in clinical counseling settings may be necessary to offset the limitation of using secondary data.

---

<sup>18</sup>Qun Zhang, 160 Funkhouser Dr., Rm. 315, Lexington, KY, 40506-0054, 859-608-0817, qun.zhang@uky.edu.

## Psychosocial Well-Being and Financial Capability

*James Kunz<sup>19</sup>, PhD, Associate Professor, McDaniel College, and Christine Callahan, PhD, LCSW-C, Research Assistant Professor, University of Maryland School of Social Work, Financial Social Work Initiative*

**Key words:** financial capability, psychosocial wellbeing

### Background

A growing body of research has been aimed at understanding and improving financial capability, defined by Johnson and Sherraden (2007) as the *ability to act* (knowledge, skills, confidence, and motivation) combined with the *opportunity to act* (access to beneficial financial services and products). While it is known that financial capability is associated with socio-economic status and other demographics (FINRA Investor Education Foundation, 2013), very little is known about the connection between financial capability and psychosocial well-being.

### Purpose & Hypotheses

This poster reports findings from a research project, funded by the FINRA Investor Education Foundation, to explore the relationship financial capability and psychosocial well-being. In particular, we examine the relationship between two measures of financial capability and subjective well-being, which is a component of psychosocial well-being. We hypothesize that lower levels of subjective well-being are associated with diminished financial capability.

### Methodology

*Data Sources & sample characteristics:* We use data obtained in 2012 by administering the National Financial Capability Survey, which was designed by FINRA to measure financial capability and status, to RAND's American Life Panel (ALP), a nationally representative sample of adults 18+ who have agreed to participate in occasional online surveys. We merged this data with earlier waves of the ALP that contains information about the psychosocial well-being of the respondents. Our sample consists of 1,758 individuals who were administered both waves.

*Variables & Analysis:* To measure subjective well-being, we use Diener's Satisfaction with Life Scale, a five-item scale which yields a score of 5 to 35. Following earlier work, we distinguish between those who were dissatisfied or extremely satisfied (scores of 5 through 14), those who were satisfied or extremely satisfied (scores of 26 through 35), and those who were neither (scores of 15 through 25) (Diener, Emmons, Larsen, & Griffin, 1985). We examine two measures of financial capability: (1) whether respondents agreed that they were good at dealing with day-to-day financial matters; and (2) whether they had ever tried to figure out how much they needed for retirement (asked of those not yet retired). We use chi-square analysis to compare the association between our measure of subjective well-being and each of our two measures of financial capability.

### Results and Discussion

Subjective well-being was negatively associated with both measures of financial capability. Overall, 75% of sample respondents agreed that they were good at dealing with day-to-day financial matters. However, 60% of those who were dissatisfied with life agreed with this statement, 70% of who were neither dissatisfied or satisfied agreed, and 83% of those who were satisfied with life agreed that they were good at dealing with day-to-day financial matters ( $p < .001$ ). Life satisfaction was also associated with having figured out how much was needed for retirement. Overall, 44% of sample respondents had made this calculation: 33% of those who were dissatisfied, 39% of those who were neither satisfied or dissatisfied, and 52% of those who were satisfied with life ( $p < .001$ ). Our results suggest that interventions aimed at improving financial capability need to take into account the psychosocial well-being of individuals and families that are the target of these interventions.

---

<sup>19</sup>James Kunz, Ph.D., Associate Professor, McDaniel College, 2 College Hill, Westminster, MD 21157, jkunz@mcDaniel.edu.

## References

- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71-75. doi:10.1207/s15327752jpa4901\_13
- FINRA Investor Education Foundation. (2013). *Financial capability in the United States: Report of findings from the 2012 National Financial Capability Study*. Washington, DC: Author.
- Johnson, E., & Sherraden, M.S. (2007). From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare*, 34(3), 119-145.

# The Expectation of Income Tax Refunds and Its Effects on Household Saving Decisions

Judith Aboagye<sup>20</sup> and Michelle Kruege, University of Georgia

**Key words:** consumption, expectation, goals, income, saving, tax refund

The income tax refund represents an important financial resource for working poor families. This is because most families with young children receive a credit that is equivalent to about a third of their annual income through a combination of refundable tax credits such as the Earned Income Tax Credit (EITC) and the child tax credit (CTC). While the overall purpose of the EITC is to increase disposable incomes, a number of outreach and education efforts have focused on encouraging the use of tax refunds as an opportunity for asset development. However, research shows that most low-to moderate-income households typically spend their refunds on current consumption than on social mobility (Bertrand & Morse, 2009; Smeeding, Ross Philips, & O'Connor, 2000).

Previous studies primarily suggest that liquidity constraints may provide some possible explanations as to why the majority of the tax refund is spent rather than saved. This study examined the differences in tax refund saving behavior between households who typically expect to receive a tax refund and households who do not expect a refund as well as the effects of the difference between the expected and actual refund amount on how much is saved. We hypothesize that when the refund is expected it could be treated as current income rather than transitory income and thus more likely to be used for consumption smoothing rather than saving as will be expected of windfalls. Each of the 150 survey respondents was randomly assigned to a \$223, \$523, or \$1023 range of increase and decrease in their expected refund amount and respondents were asked to indicate how much of the tax refund they would save in both situations. We employed ANOVA models to test for the differences between the means of the three amount groups for a gain or loss situation, and multiple regression models to analyze the relationship between the expectation of a tax refund and intended saving amount.

The key findings imply that positive differences between actual and expected tax refunds leads to increased stated savings, and clients that currently have a savings goal are significantly more likely to save part of their refunds than those clients that do not have a savings goal. Also, there was a significant negative relationship between number of dependents and intended saving amount which was consistent with previous research. The ANOVA results show a significantly increasing trend in the gain category between the groups which implies that the intended saving amount increases significantly as the difference between the expected and actual refund amounts increases. However, the changes in the intended saving amounts as the difference between the expected and actual refund amount increases in a loss situation is not shown to be significant.

Financial counselors can use this information in two effective ways. First, lower rather than raise expectations for refunds, making it more likely that actual tax refunds will exceed expected refunds. Second, prior to starting or completing the tax return, ask the clients what their goals are and what goals they would like to save for. Both of these actions will increase the likelihood and amounts that clients will save at tax time. Counselors can also seek to make savings easy by presenting clients, ahead of time, with information about U.S. Savings Bonds, or other long-term savings vehicles suitable for goals.

## References

- Bertrand, M., & Morse, A. (2009). What do high-interest borrowers do with their tax rebate?  
*The American Economic Review*, 99(2), 418-423.

---

<sup>20</sup>Judith Aboagye, 205 Dawson Hall 305 Sanford Drive, University of Georgia, Athens, GA 30602, E-mail: aboagyej@uga.edu.

## **The Educational Needs of Families Post-Foreclosure: Evaluation of a Post-Foreclosure Toolkit**

*Camaya Wallace Bechard<sup>21</sup>, M.S., Erica Tobe, Ph.D., and Barbara Ames, Ph.D., C.F.L.E  
Michigan State University, Department of Human Development and Family Studies*

**Key words:** content analysis, post-foreclosure, toolkit

The mortgage crisis of 2007-2009 was significant in its length and breadth within the United States (Goodman & Mance, 2011; Hout & Levanon, 2011). In particular, the state of Michigan experienced very high unemployment and underemployment rates, which created significant levels of housing instability within the state. While research has focused on foreclosure counseling, there has been limited research on the educational needs of households after counseling services have ended.

This research project utilizes qualitative data from a collaborative study with the department of Human Development and Family Studies and University Extension at Michigan State University. The study focused on the experiences and educational needs of homeowners after foreclosure. The findings from the qualitative study revealed that homeowners stage in the foreclosure process was important in understanding how they described their educational and financial needs. This finding became a salient factor in designing the post-foreclosure toolkit.

The primary goal of this project is to match the perceived needs in the qualitative data and the resulting content in the “Starting Over After Foreclosure” online toolkit. The post-foreclosure toolkit consists of eight distinct units: (a) getting a fresh start after foreclosure, (b) reimagining your future: what direction do you want to go, (c) assessing your financial situation, (d) rebuilding your financial situation and credit history, (e) finding a place to call home, (f) knowing your rights and responsibilities, (g) getting prepared, getting organized, (h) returning to homeownership (Starting Over After Foreclosure, 2014). These units were designed to meet the needs of families as they navigate the financial rebuilding process.

The analysis used a qualitative content analysis approach and established two main coding categories: (1) the homeowners’ experience after foreclosure and (2) the need for continuous education after counseling services end. The preliminary analyses revealed that the toolkit content reflects the key findings from the qualitative study, thus potentially increasing its efficacy. This poster will demonstrate how the findings were incorporated into the toolkit

### **References**

- Goodman, C. J., & Mance, S. M. (2011). Employment loss and the 2007-09 recession: an overview. *Monthly Labor Review*, 3-12. Retrieved from <http://www.bls.gov/mlr/2011/04/art1full.pdf>
- Hout, M., Levanon, A., & Cumberworth, E. (2011). Job loss and unemployment. In D. B. Grusky, B. Western, C. Wimer. (Eds.), *The Great Recession* (59-81). New York, NY: Russell Sage Foundation.
- Michigan State University Extension. (2014). *Starting over after foreclosure*. Retrieved from <http://msue.anr.msu.edu/program/mimoneyhealth/startingover>

---

<sup>21</sup>Camaya Wallace Bechard, Michigan State University, Department of Human Development and Family Studies, 552 W. Circle Drive, Room 10 Human Ecology, East Lansing, MI 48824; [walla337@msu.edu](mailto:walla337@msu.edu).

## Training Needs for Limited Resource Families on Personal Finance Management

*Lila B Karki<sup>22</sup>, Ntam Baharanyi, and Uma Karki, Tuskegee University, College of Agriculture, Environment and Nutrition Sciences (CAENS), Cooperative Extension Program*

**Key words:** financial counseling, financial education training, limited resource farmers and families

There is an acute need for personal finance management education (PFME) and outreach specifically for limited resource family/farmer (LRF) in Alabama. According to the USDA, “a LRF is a person with a total household income at or below the national poverty level for a family of four or less than 50% of county median household income in each of the previous two years.” A great proportion of them have either very limited to no knowledge of PFME and that has forced them to live with economic hardships characterized by high interest-debt, payday loans, and no savings for emergencies and retirement, etc. With this conceptual framework, the major objectives of the study were: 1) To study the savings habits of the LRF and 2) To assess their training needs for PFME. The study developed a structured survey questionnaire; the majority of those used were either closed or open-ended. It was introduced in five locations (Eufaula, Union Springs, Tuskegee, Selma, and Epes) in Alabama, where 59 respondents participated.

A descriptive analysis was carried out using SPSS. It was found that 93% of the respondents have a bank account. As a result, 75% of the respondents have been putting aside some money in savings, whereas 22% did not have a savings habit. The amount of saving /month ranged from <\$50/ to >\$500.00 respectively by 31% and 10% of the respondents respectively. The trend of people saving seemed increasing gradually as 19% of the respondents started saving within less than a year compared to 5%, 3%, and 5% respondents who have started saving since 2, 3, and 4 years respectively.

Though the savings amount for emergencies seemed to be far below the recommended amount by FDIC and other financial institutions, 52% of the respondents have at least \$500.00 in savings for rainy days. Conversely, it was found that 48% of the respondents did not have any savings for emergency situations. Among the major reasons for saving were: rainy days/emergencies, retirement, and dream home/car/vacation reported by 41%, 22%, and 14% respondents respectively. Similarly, 5% of the respondents specifically saved for their children’s education. Conversely, 42% of the respondents far exceeded their spending beyond their earnings.

Concerning the savings plan, the savers adopted various ways to save a portion of their income. Of the total, 59% of the respondents expected to pay off all mortgages before their retirement. Likewise 66% planned to avoid payday loans. However, 34% of the respondents still needed detailed information on how they could reduce and should manage their payday loans. Thus, all these findings substantiated that LRF needed training for personal finance management education that builds, enhances, and strengthens their money management skills to make the most out of their limited monetary resources.

In response to training needs, 66% of the respondents mentioned that they have not had any financial education training so far. Of which, 63% would like to receive at the maximum level possible. Interestingly, 80% of the respondents were found willing to educate their family members, friends, relatives, and neighbors about money management. Conversely, 8% of the respondents did not show any willingness to make anybody aware, neither family members, nor friends, relatives, nor neighbors about money management.

The findings confirmed a great need for such training to improve their financial situation from economic hardship and a dependency to a financially secure future. Some of the requested training programs by the respondents were about controlling spending, tracking expenses, paying yourself first, credit management, managing risk, investment, and a savings plan. To make this happen, systematic planning, education, and counseling are all required to help the LRF make informed decisions regarding money management.

**Acknowledgement:** *The study was supported by America Saves/Consumer Federation of America*

---

<sup>22</sup>Lila B. Karki, 200 Mary Starke Harper Hall, Tuskegee, AL 36088, Phone: 334-727-8860, Fax: 334-724-4289  
Email: [lkarki@mytu.tuskegee.edu](mailto:lkarki@mytu.tuskegee.edu).

# Understanding Employee Perceptions of Financial Wellness

Mia B. Russell<sup>23</sup>, University of Maryland Extension

**Key words:** employees, financial wellness, workplace wellness programs

Wellness is a comprehensive and complex concept that helps individuals make informed choices that promote a more satisfying lifestyle (Swarbrick, 2006). The role and responsibility organizations have in creating and generating wellness at work, among employees, has received increased awareness (Harter, Schmidt, Asplund, Killham, & Agrawal, 2010; Rath, 2011; Swarbrick, 2011).

Workplace wellness has been defined as an organized, employer-sponsored program that supports and increases the quality of life of employees, and often their family members, while increasing the organizations' bottom line (Berry, Mirabito, & Baun, 2010). The literature shows positive relationships between wellness programs and organizational outcomes (Van De Voorde, Paauwe, & Van Veldhoven, 2012). Programs that promote employee wellness have been shown to encourage and promote positive organizational outcomes (Berry et al., 2010; Harter et al., 2010). Through the integrated lens of human needs theory and the dimensions of wellness framework, this study was designed to understand how employees derive the meaning of wellness; by understanding these relationships and employee perspectives, organizations can help employees achieve and maintain wellness.

This poster shares research on perceptions of wellness among employees (n=22) from urban, suburban, and rural areas of Maryland. Participants were diverse in gender, race and age. These focus groups were held onsite at the employers' primary business location, in a private or semi-private area. The employers represented three distinct industries as per the 2012 North American Industry Classification System (NAICS).

Most participants suggested that wellness was a highly individualized concept although many similarities existed among and between the individuals. Common, yet interesting and varying, themes of financial wellness emerged based on the employee rank and gender. Financial wellness was discussed in terms of achieving financial goals and objectives among many of the participants. An expected finding of the study was the association with financial wellness and retirement. Participants that were retirement eligible discussed financial wellness more frequently than younger participants.

Employee perceptions can be used to inform and advance employee wellness policies and programs that employers may seek to offer. Understanding these relationships and implementing policies and programs that create a more satisfied, engaged and productive workforce is an organizational competitive advantage (Rath, 2011).

## References

- Berry L.L., Mirabito A.M., & Baun W.B. (2010). What's the hard return on employee wellness programs? *Harvard Business Review*, 88(12).
- Harter, J. K., Schmidt, F. L., Asplund, J. W., Killham, E. a., & Agrawal, S. (2010). Causal Impact of Employee Work Perceptions on the Bottom Line of Organizations. *Perspectives on Psychological Science*, 5, 378–389. doi:10.1177/1745691610374589
- Rath, T. (2011). Gallup : Wellbeing Is the Next Employee Engagement. *Td*, 65, p12–12. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=57264795>
- Swarbrick, M. (2006). A wellness approach. *Psychiatric Rehabilitation Journal*, 29(4), 311–314. doi:10.2975/29.2006.311.314
- Swarbrick, M., D'Antonio, D., & Nemec, P. B. (2011). Promoting staff wellness. *Psychiatric Rehabilitation Journal*, 34(4), 334–336. doi:10.2975/34.4.2011.334.336
- Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee Well-being and the HRM-Organizational Performance Relationship: A Review of Quantitative Studies. *International Journal of Management Reviews*, 14, 391–407. doi:10.1111/j.1468-2370.2011.00322.x

---

<sup>23</sup>Mia B. Russell, University of Maryland Extension 3300 N. Ridge Road, Suite 240 Ellicott City, MD 21043; Office: (410) 313-2707; Email: mbr@umd.edu.

# Practitioner's Forum

## A New Lens for Financial Capability Work

*Mary Jo Katras<sup>24</sup>; Patricia Olson; Sharon Powell, University of Minnesota Extension*

**Key words:** financial capability, public health, spectrum of prevention

**Target Audience:** financial professionals who work in the field of financial capability.

### Objectives/Purpose

To provide financial professionals the opportunity to discuss how a public health approach can help financial capability programming have the greatest impact. This session will include tools and strategies to help participants implement a public health approach into their work.

### Description

The spectrum of prevention is an instrument developed by the Prevention Institute that provides a framework to identify multiple levels where initiatives may work in order to have collective impact and effective results. By tailoring the initiative to the appropriate level, this framework can help financial professionals have the greatest impact for individuals, families, and communities they serve. This framework helps financial professionals better plan and conduct their programming and research by targeting which levels to address, and in what manner. The topic was explored through discussion of the following questions:

1. What is a public health approach/spectrum of prevention approach?
2. What does a public health approach to personal finance look like?
3. Does a public health approach play a role in existing research or education in the area of financial capability? What does our field currently do in regards to a public health model?
4. How would a public health lens improve our field? How can we integrate this approach into our work?
5. How would we apply the Spectrum of Prevention to Personal Finance?

---

<sup>24</sup>Mary Jo Katras, PhD, Program Leader, University of Minnesota Extension Center for Family Development, 444 Coffey Hall, 1420 Eckles Avenue, St. Paul, MN 55108, [mkatras@umn.edu](mailto:mkatras@umn.edu), Office: 612-625-3532, Cell: 612-203-6403.



## Are We Expecting Too Much From Technology in Financial Education?

*Patricia Seaman<sup>25</sup>, MBA, AFC®*, National Endowment for Financial Education (NEFE)

**Key words:** financial education, games, gamification, technology

### Target Audience

- Primarily practitioners, educators, instructors and counselors, as they have boots-on-the-ground opportunities to use technology with their clients and learners.
- Financial education providers, who have opportunities to embed technology into their offerings, or their offerings into technology.
- The results of the literature review on gaming technology and evaluation of program effectiveness may interest researchers as well.

### Objectives/Purpose

The main outcomes will include arming AFCPE participants with foundational abilities to scrutinize games they might be considering using in their education and counseling practices, to determine what games that are under consideration might be able to do, and to be aware of best practices for games they might be thinking about developing. Participants also will learn what researchers have learned about games, what “motivational affordances” are, key constructs of successful games and a few fun facts about games and gamers.

### Description

This session takes an evidence-based look at how and why technology tools (using gamification as a case study) work in the field of financial education. It responds to, and encourages discussion of, the ubiquitous solutions offered up to more effectively promote financial capability, such as, “If it’s for Millennials, it has to be technology-based and technology-delivered,” and “Games are a fun way to impart financial literacy.”

The main topics include:

- The many interpretations of “technology”: what exactly does someone mean when they say “technology” in financial education; can we get to a clearer definition instead of using it as a broad descriptor.
- What do we expect from technology: it’s a novel approach that has a better chance of succeeding than comparable non-technological methods; it conveys that its source is on the leading edge, hip, up-to-date; it’s customized, instantaneous, at our fingertips, and linked to the Internet of Things.
- Case study of games: what can they actually do (both positives and negatives); who is developing/using games, what are they learning and how are they measuring effectiveness; what needs to be in place for a game to work externally (financial investment in development) and internally (clear goals with actionable steps, difficult challenges that push the player to the edge of his or her ability).
- The role of technology in the financial education process: the myth of the silver bullet.
- Best practices for educators considering and using games.

The content is based on NEFE’s year-long exploration of the role of technology in shaping the financial capability of consumers, including a literature review, an exclusive Harris/Nielsen poll of how Americans use technology to reach behavioral goals, and research and interviews with experts in a wide variety of fields. We will look to the audience to contribute their real-world experience in developing, using and evaluating technology solutions to benefit from peer experiences and expect a lively discussion.

---

<sup>25</sup>Patricia Seaman, senior director, National Endowment for Financial Education (NEFE), 1331 17<sup>th</sup> St., Suite 1200, Denver, CO 80202, Phone: 303-224-3538, Fax: 303-220-0838, Email: [pas@nefe.org](mailto:pas@nefe.org).

## **Best Practices for Conducting Web Conferences, Writing Blog Posts, and Using Social Media to Increase the Capacity of Financial Counseling and Education Professionals**

*Martie Gillen<sup>26</sup>, University of Florida, Jerry Buchko, Military Families Learning Network, Personal Finance, Barbara O'Neill, Rutgers University, Molly Herndon, University of Florida, Michael Gutter, University of Florida*

**Key Words:** blogs, financial counseling, military, social media, web conferences

### **Target Audience**

Educators, advocates, financial planners, financial counselors, and those who are in the helping professions working with clients.

### **Objective/Purpose**

The purpose of this practitioner forum is to provide attendees with best practices for conducting web conferences, writing blog posts, and using social media such as Twitter and Facebook to increase the capacity of financial counseling and education professionals.

### **Description**

The Military Families Learning Network (MFLN), launched in 2012, is an active online teaching community comprised of Cooperative Extension faculty and military family service professionals from the U.S. Department of Defense (DoD), branch services, and non-governmental organizations. This federal government grant-funded program is a collaborative effort of eXtension, Cooperative Extension, the DoD, and the National Institute for Food and Agriculture (NIFA) of the U.S. Department of Agriculture (USDA).

The Military Families Learning Network Personal Finance (MFLNPF) concentration area builds the financial management capability and educational background of financial counselors and educators, with special emphasis on the learning needs of military Personal Financial Management Program (PFMP) staff. Timely research-based information is presented through multiple methods including monthly web conferences (webinars), a blog, social media (Facebook and Twitter) posts, animated videos, and questions asked via the eXtension Ask an expert platform and answered via email replies by the MFLNPF team.

The monthly web conferences offer credentialed participants the opportunity to earn continuing education unit (CEU) credit at no cost, which allows them to keep their financial education and counseling professional designations in good standing. Since 2012, the MFLNPF Concentration Area has provided certificates for almost 7,500 CEUs to about 5,000 personal finance web conference participants through the delivery of 39 online web conferences on a wide variety of personal finance topics. More importantly, it has built the capacity of financial practitioners to serve those who defend our country. By offering quality educational programming online, the MFLNPF team accommodates the needs of PFMP staff that may be located on military installations anywhere in the world. These individuals are typically civilians employed by the military to provide financial education and counseling to active duty military, their family members, and military service retirees.

The topics and content of MFLNPF web conferences are derived from suggestions made by web conference participants on post-conference online evaluations. Each MFLNPF web conference is evaluated by participants utilizing an anonymous survey. Consistently, a very high percentage of respondents have found the content of MFLNPF web conferences to be directly relevant to their work. Respondents have reported increases in their knowledge of subject matter presented and intentions to apply knowledge gained to their jobs. They have also

---

<sup>26</sup>Martie Gillen, Ph.d., MBA, Family, Youth and Community Sciences, 3025A McCarty D, Gainesville, FL 32614, Phone: 352-392-0404; Email: [mgillen@ufl.edu](mailto:mgillen@ufl.edu)

indicated they are better prepared to teach clients about subject areas covered in MFLNPF programming. The team will share best practices and lessons learned.

## **Bridging Research and Practice: Financial Fraud - Shattering the Illusion of Invulnerability**

*Patsy Collins<sup>27</sup>, Sam Houston State University, Paul F Goebel, University of North Texas*

**Key words:** education, financial, fraud, prevention, victim

**Target audience:** financial educators , financial counselors, financial practitioners

### **Objectives/Purpose**

1. Understand the scope of fraudulent activities and the behavioral economics of why people fall victim to scams, schemes, and swindles.
2. Recognize the common traits of investment fraud victims.
3. Identify 2 key strategies for people of all ages to reduce their risk of falling victim to financial fraud.

### **Description**

Financial fraud has been in existence in our country since colonial days. Armstrong and Armstrong (1991) document many deceptive health cures and snake oil ploys began shortly after the Pilgrims landed on Plymouth Rock! Research into the financial impact of fraudulent activities is problematical since the majority of known fraud victims will often decline to admit their own victimization. A research review conducted by the Financial Fraud Research Center estimates that financial fraud, generally, costs Americans over \$50 billion a year. This number does not include the money allocated for prevention or the social and emotional costs fraud imposes on our society. This discussion serves as a bridge between recent financial fraud-related research findings and program initiatives that you can provide to help your clients avoid or respond to financial fraud.

---

<sup>27</sup>Patsy Collins, SHSU Student Money Management Center, Estill Building Suite 228, Box 2538, Huntsville, TX, 77341, (936) 294-2601 office, (936) 294-2275 fax.

## **Building Bridges – Creating Ripples: Envisioning Your Next Big Thing**

*Joyce Cohen<sup>28</sup> and Jennifer Hogan<sup>29</sup>, Purple Heart Homes, USA*

**Key words:** development, mentor, motivation, planner, teamwork, veterans

### **Target Audience**

Participants who create, implement or work in programs related to all phases of financial education, financial literacy and road to home ownership. Professionals who serve diverse populations in broad environments. Staff charged with program development or implementation. This program appeals to broad ability/educational levels. Knowledge of trends and internal challenges will be helpful to see the opportunities they may represent.

### **Objectives/Purpose**

Describe a recognized problem and steps taken toward resolution over a three- year implementation plan. Provide update using an innovative chart to highlight project plan, successes, challenges, and next steps. Introduce a method to determine attendees' next big idea and a tool to outline basic process. Divide into small work teams to brainstorm initial steps and outline action plan. Share several ideas and create an internal call to action.

### **Description**

The first ¼ of the program highlights *Boots to Backyards™* current progress. This five phase comprehensive mentor program was designed to educate and motivate service-connected disabled Veterans of all ages toward financial stability and long-term successful home ownership. Five phases encompass issues facing disabled Veterans along with action and measurement tools to track success and assist mentor partners to engage and motivate this population.

The next ½ of the program identifies lessons learned and translates planning strategy to participants' organizations. Attendees focus on a real problem their organization is facing. They'll utilize a template that will be provided to outline necessary steps toward problem resolution from concept to reality.

The last ½ of the workshop, working in small teams if desired, participants will have the opportunity to unleash new ideas and initial strategies so that problems can be translated into workable solutions.

---

<sup>28</sup> Joyce Cohen, 10 Spruce Hill Road, Huntington, CT 06484, Purple Heart Homes, USA.

<sup>29</sup> Jennifer Hogan, 425 Harbor Trace, Sanford, NC 27332, Purple Heart Homes, USA.

# **Client Motivation and Behavioral Change: Applications of Appreciative Inquiry, Solutions-Focused Brief Coaching, and Positive Psychology**

*Lance Palmer, Ph.D.<sup>30</sup>, Joseph W. Goetz, Ph.D., University of Georgia*

**Key words:** appreciative inquiry, positive psychology, solutions focused coaching

The process of discovery is a powerful tool that can create intrinsic motivation for behavior change. Effective planners and counselors all engage with clients to find out why they are seeking assistance. Structured models for client communication and engagement can greatly enhance client motivation and better align recommendations with the client's goals. Solutions Focused Coaching (SFC) and Appreciative Inquiry (AI) are two change oriented models that financial planners can use to structure their client communication and engagement processes.

While developed independently of one another, both SFC and AI are complimentary to a larger body of literature known as Positive Psychology. AI is "the study of what gives life to human systems when they function at their best... This approach to personal change and organization change is based on the assumption that questions and dialogue about strengths, successes, values, hopes, and dreams are themselves transformational" (Whitney & Trosten-Bloom, 2010). SFC is a future-focused, goal-directed approach based upon principles of focusing on strengths, exceptions to problems, future goals, and short duration sessions (de Shazer, 2007). SFC is derived from Solutions-Focused Brief Therapy. Both SFC and AI are most appropriate for non-clinical populations.

## **Target Audience**

Applications of AI, SFBC, and Positive Psychology are appropriate for financial counselors, planners, and educators when working with individuals in extended / ongoing engagements. The techniques and tools are also highly effective when working with individuals during short, one-time engagements wherein the counselor or educators is seeking to foster the client's internal motivation for change. Results presented will be from a field study that took approximately 10 minutes to deliver to the clients. As such there is not a minimum or maximum amount of time needed and the process can be followed throughout client engagements.

## **Objectives/Purpose**

Many times counselors take on a coaching role. While coaching in general is future-oriented and goals-based it is not necessarily SFC nor may it follow the evidence-based processes of AI. The presentation will include a history and introduction to AI, SFC, and the larger field of Positive Psychology. The presentation will focus on the specific processes and communication strategies employed by these evidence-based models for behavior change.

Specific attention will be given to the "why" and "how" these communication processes and strategies work with clients. Participants will leave the presentation with specific tools that they can use when working with individuals and groups seeking financial behavior change. Participants will also understand the value of following structured, evidence-based communication process when working with clients or presenting information to groups.

## **Description**

The presentation will include a history and introduction to Appreciative Inquiry, Solutions-Focused Brief Coaching, and the larger field of Positive Psychology. The presentation will focus on the specific processes and communication strategies employed by these evidence-based models to facilitate behavior change. Specific attention will be given to the "why" and "how" these communication processes and strategies work with clients. Participants will leave the presentation with specific communication and intervention tools that they can use when working with individuals and groups seeking financial behavior change. Participants will also understand the value of following structured, evidence-based communication processes when working with clients or presenting information to groups. Results from a field study using Solution-Focused Brief Coaching in a group setting will also be shared with participants.

---

<sup>30</sup>Lance Palmer, Department of Financial Planning, Housing and Consumer Economics, 205 Dawson Hall, Athens, GA 30602-2622, Email: [lpalmer@uga.edu](mailto:lpalmer@uga.edu), Phone: 706-424-9011.

## **Coulda Woulda Shoulda: A Financial Decision Making Activity for Emerging Adults**

*Sharon Powell<sup>31</sup>; Joyce Serido; Jaleesa Wright; Veronica Deenanath, University of Minnesota Extension*

**Key words:** decision making; emerging adults; financial capability; simulation

**Target audience:** emerging adults

### **Objectives/Purpose**

The purpose of this activity is to promote decision making around goals that will lead to personal happiness. The purpose of the Practitioners' Forum is to share CWS with other educators and to describe the process used to develop and pilot the activity.

### **Description**

*Coulda, Woulda, Shoulda* (CWS) is a simulation activity designed to allow young consumers to consider how their values influence their motivation in relation to financial decision making. The connections between financial decision making and values often remain implicit for consumers. This activity allows participants to experience the role that values and motivation play in financial decision making by applying those concepts to a case study and then thinking about the concepts in relation to their own lives. Our hypothesis is that by offering the participants a chance to examine the relationship between these concepts, they will become more intentional about their own financial decisions.

CWS is designed to last fifty minutes and be mobile enough that facilitators can use it in a variety of settings. The activity begins with facilitators asking participants to reflect upon their personal components of happiness. After participants individually consider that question, they are assigned to groups to work together on a case study. There are six possible case studies each describing the financial and life scenario of a young adult. The groups are then given a budget form and are asked to create a budget based upon what they know from the case study.

After completing their budget, the groups are given "twist of fate" cards. These cards represent typical life events that affect personal finance either positively or negatively (examples include: car breaks down; receive birthday money; get sick and lose two weeks' pay). The cards are randomly distributed to each group, one at a time. After receiving the card, the groups are asked to adjust their budget based upon the information in the "twist of fate" cards. The process is repeated multiple times (i.e., groups receive a card and rebalance their budget as appropriate). The CWS conclusion involves reflection through large group discussion that encourages participants to consider their own situation in reference to the case study and simulation. The discussion questions are designed to take implicit values and knowledge and help to make them more explicit in hopes that participants will begin to develop strategies to effectively create their own "recipe for happiness."

---

<sup>31</sup>Sharon Powell, PhD, Assistant Extension Professor, Family Resilience, Robert J. Jones Urban Research and Outreach-Engagement Center, 2001 Plymouth Avenue, N, Suite 185, Minneapolis, MN 55411, 651-334-9307, [spowell@umn.edu](mailto:spowell@umn.edu).

# Effective Adult Education in a Financial Education World

Ginger Phillips<sup>32</sup>, Executive Director, American Council on Consumer Interests  
Deborah Haynes, Montana State University

**Key words:** andragogy, adult learning, program design, financial literacy, learning motivators

## Target Audience

The primary audience includes practitioners who are working directly with clients in formal or informal education settings, as well as those who are preparing materials for educators. The information presented will also be useful to academics.

## Objectives/Purpose

The goal of this session is to familiarize financial educators with best practices in adult education as applied to financial education practice. At the end of this session, participants will be able to:

- Explain at least one way that current research on financial literacy provides insight into their own program(s);
- Describe how at least three of the six elements of Knowles' theory of *andragogy* (which provides insight into what motivates adults to learn) are evident in participants' current financial education program(s);
- Analyze their own financial education programs (or academic setting) according to Bloom's Taxonomy to match the goal of the education experience with the educational experience;
- List learning styles and describe one way that their current program might employ a different learning style with students; and most importantly,
- Construct at least three possible new approaches that could be employed in their current programs or perhaps a new program to achieve a new or previously unrealized goal.

## Description

Why motivates adults to learn? When they do seek learning, how can good, research-based adult education practices contribute to helping participants improve their own financial literacy programs? Participants will receive handouts on a Taxonomy of Personal Financial Education, a revised Bloom's Taxonomy, Andragogy, Learning Styles, and setting measurable education goals. The session will include a brief presentation on pertinent recent research findings in financial literacy and an outline of taxonomy of content to be included in a personal financial education program. Group discussion will focus on how to apply some of these ideas in a learning program. In other words, the group will use the current information as a basis for devising new approaches. The session will conclude with a brief time for each participant to write three possible new approaches they could use in their own programs.

## References

- Bloom, Benjamin S. & David R. Krathwohl. (1956). *Taxonomy of educational objectives: The classification of educational goals*, by a committee of college and university examiners. Handbook 1: Cognitive domain. New York, Longmans. *Academic Reference*.
- Bloom's Taxonomy. (n.d.). In Wikipedia. Retrieved May 28, 2014, from [http://epltt.coe.uga.edu/index.php?title=Bloom%27s\\_Taxonomy](http://epltt.coe.uga.edu/index.php?title=Bloom%27s_Taxonomy) *This is probably the easier to use practical reference.*
- Institute for Learning Styles Research. Retrieved May 28, 2014, from <http://www.learningstyles.org/styles/index.html>. *Very easy to use reference for learning styles.*
- Anderson, L., & Krathwohl, D. (Ed.). (2000). *A taxonomy for teaching, learning and assessment: A revision of Bloom's Taxonomy*. Abridged edition. New York: Pearson.

---

<sup>32</sup>Ginger Phillips, Executive Director, American Council on Consumer Interests and President, Arden Solutions Association Management, PO Box 655, Tarpon Springs FL 34688 [gphillips@ArdenSolutions.com](mailto:gphillips@ArdenSolutions.com) 727.940.2658.



Knowles, M. S. (1984). *The adult learner: A neglected species* (3rd ed.). Houston: Gulf Publishing Co., Book Division. *Academic reference, but very readable and useful for people teaching adults.* Tyler, R. W. (1970). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press. *How to write measurable educational objectives.* Wiggins, G., & McTighe, J. (2011). *The understanding by design guide to creating high-quality units*. Alexandria, VA: ASCD.

## **Financial Capability@Work: Using the Workplace as a Platform for Financial Education**

*Inger Giuffrida<sup>33</sup>, Financial Education and Asset Building Consultant; Susan Sarver, Associate Director, FINRA Investor Education Foundation; Laura Scherler, Director, Income Capacity Building, United Way Worldwide*

**Key words:** employer, employee, financial capability, financial wellness, financial capability integration, income advance loans, resource coordinator, United Way, workplace, workplace financial education

### **Target Audience**

The target audience is individuals and organizations that want to explore ways to integrate financial capability services in the workplace, including nonprofit organizations, credit unions, and employers.

### **Objective/Purpose**

The purpose of this session is to provide participants with information and tools to help them consider ways to integrate financial capability programming (workshops, training, counseling, coaching, and related resources and opportunities) into a wide range of workplaces. By the end of the session, participants will:

- Understand how to achieve success in providing workplace financial education and related services
- Identify the steps and partnerships required to implement and evaluate a successful workplace financial capability program
- Understand the employer's business case for adopting a workplace financial capability initiative

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

During the past six years, local United Ways and other community-based organizations have worked in partnership with employers to design and implement financial capability initiatives that are producing tangible results for low- and middle-income employees across the country. These workplace programs, supported by the FINRA Foundation and United Way Worldwide through the *Financial Education in Your Community* grant program, have documented numerous innovations and successful practices through program evaluation efforts.

Findings from these evaluative efforts will form the basis for a participatory session, which will provide insights on integrating financial education, counseling, and coaching in the workplace to benefit both employees and employers. The session will also highlight the opportunity to provide other resources and opportunities in the workplace, including income advance loans, free tax preparation, and the services of a resource coordinator. From the perspective of employees, workplace financial capability programs are convenient, because common barriers to participation in other financial education programs (including lack of child care, time, and transportation) are not a factor. The workplace is also where participants earn income and make significant financial decisions, so financial education workshops are relevant and easily coupled with other products and services that help employees apply learning. The most successful programs are able to seamlessly integrate these services into the workplace culture as an extension of employee benefits. The strategy also makes use of pre-existing relationships and communication methods—those established between the employer and its employees—so that potential participants are easily and reliably reached. Employers experience improved relationships with employees, a decrease in requests for pay advances or retirement plan loans, increased retirement plan participation and contribution rates, and increased employee retention.

---

<sup>33</sup>Inger Giuffrida, 3333 24<sup>th</sup> Avenue, NE, Norman, OK 73071 Phone: (405) 819-7039 Email: [inger.giuffrida@gmail.com](mailto:inger.giuffrida@gmail.com).

During this session, the FINRA Foundation and United Way Worldwide will also showcase the *Financial Capability@Work Design and Implementation Guide*. This session will help participants consider, design, and implement workplace financial capability initiatives tailored to meet the needs of their own local communities.

# **How to Promote Effective In-School Student Loan Counseling: An Evidence-Based Approach**

*Carla Fletcher<sup>34</sup>, TG*

**Key words:** financial literacy, higher education, loan counseling

## **Target audience**

TG has conducted a series of studies over the past two years looking at the effectiveness of student loan counseling. The audience for these studies is intended to be practitioners and policymakers.

## **Objectives/Purpose**

The studies inform practitioners about the effectiveness of the Department of Education's online student loan counseling tools and counseling methods that some higher education institutions are using to supplement those online tools. We hope that policymakers come away with a better sense of the state of student loan counseling and support resources and/or regulation changes to help schools improve and strengthen their processes.

## **Description**

TG's study series currently includes four papers:

Informed or Overwhelmed? A Legislative History of Student Loan Counseling with a Literature Review on the Efficacy of Loan Counseling (February 2015)

A Time to Every Purpose: Understanding and Improving the Borrower Experience with Online Student Loan Entrance Counseling (April 2015)

From Passive to Proactive: Understanding and Improving the Borrower Experience with Online Student Loan Exit Counseling (February 2015)

Above and Beyond: What Eight Colleges Are Doing to Improve Student Loan Counseling (September 2015)

Federal student loan counseling law and regulations have evolved to become increasingly prescriptive in the number of topics required, while allowing (or even promoting) new technological methods of conveying the information to borrowers. Based on TG's review of the research literature, these new technologies had received limited assessment of their efficacy.

Seeing an opportunity to improve the community's understanding of this critical piece of the student loan puzzle, TG conducted user testing of the ED loan counseling tools, observing and interviewing 74 student borrowers as they went through the loan counseling tool. Borrowers became disengaged with the tool; found it text heavy and bulky; believed that the material was often irrelevant; and felt tasked with exercises, like projecting future income, for which they were unprepared. Consequently, little information was retained and borrowers reverted to a passive attitude concerning their debt that was far from the intended condition of awareness and self-advocacy.

Although the tools are free and scalable, and meet all legal requirements, borrowers find the amount of information overwhelming and have difficulty maintaining attention. Most financial aid staff would prefer to give borrowers a personalized, in-depth counseling session, but lack the means. TG conducted a qualitative study of institutions that have worked within their budgets and available resources to create innovative programs and processes to improve student loan counseling and financial education for their student borrowers.

---

<sup>34</sup>Carla Fletcher, P.O. Box 83100, Round Rock, TX 78683-3100, P. 512-219-4637, F. 512-219-4850, [carla.fletcher@tgslc.org](mailto:carla.fletcher@tgslc.org).

# Incorporation of Coaching Elements Based on the Type of Financial Counseling

Lucy Delgadillo<sup>35</sup>, Cindy Stokes, Alena Johnson, Utah State University

**Key words:** coaching communication skills, counseling communication skills.

**Target Audience:** Financial Counselors, Educators, Planners, and Coaches.

## Purpose

To help Financial Counselors and Educators increase their effectiveness in discerning when to use counseling and/or coaching skills. To this purpose this forum seeks to present discriminant elements in counseling and in coaching (Table 1). This forum will provide hands-on practical exercises to apply the concepts presented.

## Descriptions of Content and Method

The growth of coaching in the family finance field is not a random act (Delgadillo, 2015). Coaching has been reported as one intervention that has produced high rates of return in the corporate world (Corporate Leadership Council, 2013). But before we all get excited, coaching is not panacea. There are circumstances in which coaching cannot or should not be used. One approach to guide this conundrum is to look at current types of counseling as well as the types of coaching.

Table 1. Discriminant elements in counseling vs. coaching

| <i>Short term remedial COUNSELING</i>   | <i>Performance and developmental COACHING</i>   |
|---|---|
| Counseling relationship starts with a client statement of need                      | Coaching relationship initiated and defined by client statement of want   |
| Correction  | Connection  |
| Look at causal factors of the problem. Problem talk                                 | Look at interaction of factors to develop capabilities. Solution language.  |
| Directive   | Non-directive   |
| Active listening  | Perceptive reflections  |
| 30/70 Competencies focus on “doing skills”  | 70/30 Competencies focus on “being skills”  |
| Counselor is the expert in technical knowledge and process                          | Coach is the expert in the coaching process, but coachee determined the content of the coaching relationship because s/he is the expert in her/his own life |
| Immediate behavior action at resolving a crisis                                     | Encourages long term behavior change and sustainability   |
| Clients take counselor’s solutions  | Client craft own solutions  |
| It is more prescriptive in nature   | It is more realization and self-reflection  |
| Maintain a duality of roles: observer and participant                               | Major role of observer and accountability partner   |
| Engage in solving urgent, present problems  | Deals with less-urgent, more future oriented goals  |
| Use counter-force principles to deal with resistance                                | Use Counter-balance principles to foster change-talk  |
| Diagnostic process. Make recommendations based on diagnosis and technical knowledge | Discovery process through assessments. Provides insights not recommendations  |
| Focus, direct, target oriented  | Holistic approach   |
| Can use confrontation skills  | Use engagement skills only  |

Pulvino and Pulvino (2010) describe three main types of counseling: remedial counseling, preventive counseling and productive counseling. Remedial counseling can be viewed from two perspectives based on the urgency and severity of the financial situation. Short term remedial counseling, like foreclosure counseling, dictates that counselors take an active role in negotiating on behalf of the defaulting client (contacting agencies, calling creditors, acting as an intermediary in loss mitigation programs). Once immediate needs are taken care of, a switch from an

<sup>35</sup>Lucy M. Delgadillo, Utah State University, Phone: (435)797-7204; email: lucy.delgadillo@usu.edu.

active role of counselors to a more passive one provides opportunities for coaching tools to be used in the counseling sessions. Preventive counseling has two distinct aspects. One is the psychological aspect and the other is the financial aspect. Productive counseling fosters an attitude that the client is responsible and capable of controlling the future in a positive, purposeful way.

An understanding of the three types of financial counseling as well as an adaptation of the tripartite model of coaching in the work place, may provide guidance in how to triage clients requesting services and how to integrate the coaching and counseling approach. Witherspoon and White (2003) describe a meta-typology of coaching that delineate three categories of coaching: skills coaching, performance coaching, and developmental coaching. As Grant (2005) noted, these typologies are not discrete and separate from each other. Table 2 is a model of services that will be used in the financial clinic where the authors work. Financial coaching is the ideal approach when interacting with clients to reach financial goals and build financial capability because it facilitates a better understanding and congruence between the internal and external finances.

**Table 2. Proposed Model to Guide Incorporation of Coaching elements based on the Type of Counseling**

| <b>Short-term remedial counseling</b>          | <b>Long-term remedial counseling</b>                                     | <b>Preventive / Productive counseling</b>   |
|--|--|---|
| -Counseling for financial crisis intervention. | -Skills coaching, solution focused coaching, and goal-oriented coaching. | -Fostering complete congruence between internal and external finances with personal goals and values. |
| -Coaching may be inappropriate.                | -Targeted-coaching to outcomes may be appropriate.                       | -Elements of performance and developmental coaching may be easily incorporated.                       |

## References

- Corporate Leadership Council. (2003). Maximizing returns on professional executive coaching. Washington, DC: Corporate Leadership Council.
- Delgadillo, L. (2015). Coaching and counseling communication skills. *Family and Consumer Sciences Research Journal*, 43(3), 259-268. doi: 10.1111/fcsr.12101.
- Grant, A. M. (2005). What is evidence-based executive, workplace and life coaching? In A. M. Grant, M. Cavanagh & T. Kemp (Eds.), *Evidence-based Coaching 1: Theory, Research and Practice from the Behavioral Sciences* (pp. 1-12). Bowen Hills Qld: Australian Academic Press.
- Pulvino, Ch., & Pulvino, C. (2010). *Financial counseling: a strategic approach* (3<sup>rd</sup> edition). Sarasota, FL: Instructional Enterprises.
- Witherspoon, R., & White, R. (2003). Essential ways that coaching can help executives. *Journal of Excellence*, 8, 7-14.

# **Leveraging Open-Source Resources to Extend Personal Finance Education Using Personalized Lesson Plans (PLPs)**

*Andrew Furth<sup>36</sup>, Curriculum Developer at Next Gen Personal Finance*

**Key words:** financial literacy, online education, open-source resources, personalized learning plans

## **Target Audience**

This practitioner's forum will be specifically tailored for financial educators and counselors, to use with the individuals they serve.

## **Objective/Purpose**

1. Participants will learn the power of available online resources to supplement face-to-face time with both students and clients
2. Participants will be able to identify freely available resources to cover a variety of personal finance topics
3. Participants will be able to construct a menu of support options to empower their clients/students to continue their personal finance education beyond face-to-face interactions

## **Description**

In many settings, from counseling to education, there are limited opportunities to interface directly with the audience. Counselors or educators may only have an hour-long meeting or lecture to communicate in-person, and it can be extremely difficult to reconnect with clients or students and assess true learning.

The rise of open-source resources presents a powerful tool to address this issue. "Open-source" refers to resources that are, "made freely available and may be redistributed and customized." In practice, this refers to a wide array of resources (including articles, videos, activities, interactive simulations, etc.) available to anyone to enhance knowledge and skills, without additional cost.

This forum is designed to describe the ways financial counselors and educators can leverage open-source resources to reinforce strategies and concepts covered during face-to-face interactions, in a self-directed and self-paced environment. The method by which practitioners can administer open-source content is through a personalized learning plan (PLP).

The PLP allows short- and long-term goal achievement through collaboration between the practitioner (counselor/educator) and his/her audience (client/student). At the end of a session or lecture, the counselor/educator meets with the client/student and develop a PLP: material to cover and tasks to accomplish, *which go beyond the scope of the session or class*. It provides the client/student with enhanced support via a clear set of tasks to accomplish, and allows the counselor/educator to easily monitor progress.

For example, if the topic of the session or lecture was investing in a diversified portfolio, a PLP could include playing the [Balloon Test](#) (to better understand one's risk profile), watching a video on the [Power of Diversification](#) and calculating actual returns of different asset allocations in an [activity](#).

If the topic were developing a personalized budget, a PLP could include content that enhances knowledge of specific budgeting aspects. This could include content to enhance knowledge on [how health affects your finances](#), [commuting costs](#), and [saving money in one's food budget](#). These specified topics are difficult to cover in depth during in-person interactions, but vitally important to sustaining a reasonable budget.

---

<sup>36</sup>Andrew Furth, Next Gen Personal Finance, 532 Emerson St. Palo Alto, CA 94301; Phone: 301.580.1536; Email: [andrew@nextgenpersonalfinance.org](mailto:andrew@nextgenpersonalfinance.org)

The full workshop of PowerPoint slides will include step-by-step construction of a PLP, describe the process (from collaboration to implementation to follow-up), and provide examples of potential PLP resources in a variety of topics (including investing, budgeting, credit cards and credit scores, savings, etc.).



## **Motivating Participation: Do Incentives Engage and Retain Participants in Financial Educations Workshops, Counseling, or Coaching?**

*Inger Giuffrida<sup>37</sup>, Financial Education and Asset Building Consultant; Susan Sarver, Associate Director, FINRA Investor Education Foundation; Laura Scherler, Director, Income Strategies, United Way Worldwide*

**Key words:** external motivators, extrinsic motivation strategies, extrinsic motivators, financial capability, financial capability services, financial coaching, financial capability, incentives, motivating participation

### **Target Audience**

The target audience for the session is financial educators, counselors, coaches, and organizations that design and provide financial capability programs including nonprofits, credit unions, and employers offering financial education in the workplace to a wide variety of participants.

### **Objective/Purpose**

The purpose of this session is to provide a framework for understanding extrinsic motivators for engaging in, staying with, and completing a broad range of financial capability services including training, counseling, coaching, and related services. By the end of the session, participants will be able to:

- Differentiate among six strategies for incenting participation in and completion of financial capability services
- Determine when, with which target audiences, and how to use extrinsic motivators, including the advantages and disadvantages of each strategy
- Describe the current use of extrinsic motivation strategies in the field, including emerging best practices, in the provision of financial capability services

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

Financial capability service providers have been experimenting with a wide range of strategies to motivate participation in and completion of financial education and related services, including offering meals at workshops, rewards for achieving financial coaching benchmarks, and access to products and services like second-chance accounts and credit-builder loans.

This interactive session will share emerging best practice from the field in the use of extrinsic motivators to increase participation in and completion of financial capability services, including a framework for understanding these strategies, how they work, and when they seem to work most effectively.

Strategies designed to enroll, retain, and graduate people from financial capability services are often described collectively as incentives. However, a white paper based on the experiences of practitioners in the FINRA Foundation and United Way Worldwide *Financial Education in Your Community* grant program describes six distinct extrinsic motivation strategies, including those that: 1) remove barriers for participants; 2) reward participants for enrolling, continuing, or completing services; 3) provide recognition for participation and accomplishments; 4) compensate participants for the investment of their time; 5) link access to other desirable products and services to program completion; and 6) gamify participation.

---

<sup>37</sup>Inger Giuffrida, 3333 24<sup>th</sup> Avenue, NE, Norman, OK 73071 Phone: (405) 819-7039 Email: [inger.giuffrida@gmail.com](mailto:inger.giuffrida@gmail.com).

While use of these strategies does not replace the development and implementation of financial education content and services that address the wants and needs of specific target audiences, extrinsic motivators can play an important role in program design. The session will showcase trends in motivating participation, differentiate among the strategies used, highlight the advantages and disadvantages to each approach, and explore the question of whether charging participants a fee for services increases perceived value and participation among clients and partners.

## **Partnering to Promote Financial Capability: Your Money, Your Goals**

*Rita W. Green<sup>38</sup>, Ed.D, AFC®, Financial Management State Specialist, Mississippi State University–Extension Service, Susan Cosgrove, MBA, AFC®, Area Extension Agent, Mississippi State University–Extension Service*

**Key words:** financial capability, partnerships

### **Target Audience**

This session is designed for practitioners like Extension educators, case managers, and volunteers who work with diverse adult learners in informal financial education settings, including the workplace.

### **Objective/Purpose**

Practitioners attending this session will learn how to access and use a variety of basic financial capability resources by participating in activities that are included in the *Your Money, Your Goals* toolkit, developed by the Consumer Financial Protection Bureau, for social service case managers, legal aid workers, volunteers, and employers. *Your Money, Your Goals* is a comprehensive guide to empowered financial decision-making that covers topics like budgeting daily expenses, managing debt, and avoiding financial tricks and traps. The toolkit is an answer to a demand for resources to train other professionals in an effort to establish partnerships to improve the financial capability of low to moderate wealth consumers.

Mississippi State University Extension Service, one of 20 pilot sites selected to participate in NIFA's launch of the toolkit, trained 25 social workers with *Your Money, Your Goals*. The purpose of this session is to demonstrate the tools and activities included in this toolkit, using case studies and consumer scenarios.

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

Activities and resources used to teach basic financial capability skills to low/moderate wealth adults will be demonstrated and shared with participants. Financial capability tools like a bill calendar, cash flow budget, cash flow calendar, and a checklist to compare financial services are among the activities to be shared.

---

<sup>38</sup>Dr. Rita W. Green, Mississippi State University, P.O. Box 9745, Mississippi State, MS 39762; Phone: 662-325-1801; Fax: 662-325-8188; Email: [rita.green@msstate.edu](mailto:rita.green@msstate.edu).

## **Research to Practice: The Social Change Model of Financial Literacy Leadership Development**

*Christina Gibson<sup>39</sup>, The University of Texas at Tyler, Paul F Goebel, University of North Texas*

**Key words:** change, development, education, financial, leadership

**Target audience:** financial practitioners, financial educators, financial counselors

### **Objectives/Purpose**

1. Identify the seven critical and fundamental of the Social Change Model that can help young people build their financial literacy leadership capacity.
2. Understand steps that any parent or AFCPE member can take to create a support system for college-age students that prevent personal growth stagnation from occurring.

### **Description**

The Social Change Model of Leadership Development is applicable to any person of any age developing values to guide their personal financial behaviors and decisions. The model's seven critical values can be applied to any financial counseling, planning, or education setting. Drawing upon the social change model concepts, two collegiate financial literacy programs have worked together to create a new series of learning opportunities that are helping young people gain a better understanding of financial and social issues. These educators will share their experiences of applying the model's seven critical values to financial literacy counseling and education outreach efforts. Application of this research-based discussion can be replicated by any AFCPE member in any counseling setting.

---

<sup>39</sup>Christina Gibson, The University of Texas at Arlington, Student Money Management, 3900 University Boulevard, Tyler, TX 75799, (903) 565-5978 office.

## Teaching Index Mutual Funds to Persons Who Wish to Begin Investing, Revisited

*Jim Murphy<sup>40</sup>, Marine & Family Programs, Marine Corps Community Services, Headquarters and Service Battalion, Headquarters, U.S. Marine Corps*

**Key words:** actively managed mutual funds, business cycle, index mutual funds, rate of return, risk

### Target Audience

This presentation is intended for financial counselors and teachers whose clients and students tend to be adverse to risk in investments but who are hoping to find a prudent, circumspect approach to investments and investing.

### Objectives/Purpose

This presentation is a significantly updated and simplified follow-on to a presentation made at the 2009 AFCPE Conference titled “Teaching Mutual Funds to Persons Who Wish to Begin Investing.” “Index” was not in the 2009 title. The presenter has six more years’ experience in teaching investments to persons who have almost no knowledge of any aspect of the world of stocks, bonds, and mutual funds, or the myriad other aspects of investing to achieve near, intermediate and long range financial goals. The presenter has distilled a 6-hour class to approximately 2-hours without omitting information that is key to clients’ understanding the essential risks in investments as well as the possibility of achieving acceptable returns. The purpose of this session is to highlight the presenter’s current approach to teaching this subject.

### Description of Content and Method

In the six years since this presentation was originally given, the presenter has successively refined the content to demonstrate that an investor can achieve relative “safety” in his or her investments IF they understand, at a minimum, the eleven concepts and one activity listed below.

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 the rates of return in stock, bond, and balanced mutual funds.
3. The composition of stock & bond indexes, to include large, medium, and small capitalization corporations.
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 during contractions and expansions.
6. Time value of money (TVM) and compound interest (but differentiating from and illustrating how an annualized rate of return is different from a rate of interest);.
7. Historical rates of return for the S&P 500 Index (50, 40, 30, 20, and 10 year returns).
8. Investor time horizons and investor risk tolerance.
9. Then, 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.
10. The relationship of long time horizons to the rhythm of the business cycles to the impact of growth in GDP to the historically rising prices of stocks in the major indexes (admittedly, a little esoteric, but powerful to the young person who grasps it).
11. Taxes paid on the capital gains in taxable stock, bonds, and bank interest accounts and on retirement accounts (six graphics to highlight the evolution of capital gains taxes and the emergence and types of retirement accounts and their related tax structures)(this series is helpful to clients understanding deferred taxes on contributions to traditional retirement accounts and the subsequent “ordinary income tax rates” on withdrawals from traditional accounts, and conversely, current year taxes on contributions to Roth accounts, but “no taxes” on withdrawals of Roth accounts).
12. How to purchase and manage index mutual funds (briefly).

---

<sup>40</sup>Jim Murphy; Marine & Family Services; H&S Battalion, Headquarters, U.S. Marine Corps; Henderson Hall; 1555 Southgate Road, Arlington, VA 22214-5000. Phone: 703-614-6950; email: [james.murphy2@usmc.mil](mailto:james.murphy2@usmc.mil).

The topics will be familiar to most persons in the audience. The value is to follow the logic trail from one topic to the next. This is a fast-paced, train-the-trainers presentation during which the presenter will describe blocks of slides focused on each of the major points. The presenter provides copies of the slides and a DVD with the original slides and their speaker's notes. The DVD has many other resources, as well.

## **The Grasshopper and the Ants: A Value Driven, Goal-Oriented Approach to Financial Coaching**

*Carlos A. Colón<sup>41</sup>, AFC®, mpowered, a nonprofit organization*

**Key words:** empower, client led, financial coaching, goal-oriented, value driven

### **Target Audience**

Financial coaches, educators, advocates, counselors, case managers, and other professionals: conference attendees involved with helping individuals and families achieve financial success, or attendees involved in learning strategies to achieve financial success.

### **Objective/Purpose**

Our goal is to identify social contradictions and discrepancies which we attempt to overcome in our efforts to achieve financial success; Propose an approach to financial coaching that is client lead, goal oriented and supports self-defined success and stability; Identify tools and strategies that help transform abstract imperatives, like budgeting and saving, into concrete intentional tools for the achievement of personal goals; Emphasize the 'personal' facet of personal finances; Identify personal finance paradigms and their influence on our financial behavior and broader social structures.

### **Description**

In this session, we explore Aesop's fable for insights into our nation's approach to personal finance, and strategies for financial coaching that help individuals and families resolve discrepancies, overcome barriers for engagement and support the pursuit of self-defined financial success and stability. The session will combine an initial exposition, followed by participant-group discussions, and finalize with closing remarks incorporating the ideas generated by the group. A summary essay incorporating the ideas generated will be emailed to participants.

As children, stories and scripture often represent our first exposure to financial principles. They begin to shape our relationship with money, our beliefs, and self-talk. From Aesop's fable, we might infer the importance of saving. Yet most people will identify saving as a want: "I want to save, but..." is the refrain. Many of *mpowered's* clients, regardless of income, live paycheck-to-paycheck. Our nation's personal saving rate remains close to 4%. If we identify with the ants, why do we behave like the grasshopper?

As with Aesop's fable, subjectivity fuels the moral variability that allows behaviors like saving and budgeting to remain as abstract imperatives. Culture adds further layers of complexity, and rather than engaging in behaviors that circumvent crisis, we often wait for the crisis to occur and respond by taking on two or three jobs. We seem to read Aesop and see the ants' work ethic, not their saving. When you step on an anthill, the ants respond. They scramble and work harder. During the recent recession this strategy did not work for many families. There simply weren't enough jobs.

The challenge for financial coaches and educators is to engage and elicit awareness of these discrepancies in a manner that allows individuals to resolve their ambivalence in support of their goals. With this in mind, this session seeks to engage participants to examine, in practical terms, how we go about providing relevant information and best practices, empower our clients, support the attainment of self-defined financial well-being, and avoid imposing our own values.

---

<sup>41</sup>Carlos A. Colón, AFC®, *mpowered*, 2009 Wadsworth Blvd, Suite 100, Lakewood, CO, 80214; Phone: (303) 233-2773; Email: [carlos@mpoweredcolorado.org](mailto:carlos@mpoweredcolorado.org)

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

*Don Blandin<sup>42</sup>, President and CEO of the Investor Protection Institute*

**Key words:** engagement, financial, investor, protection, retirement

### Target Audience

The engagement program will be targeted to grassroots organizations in local communities as well as professionals in financial planning, military fleet support services and all areas of financial and investor education.

### Objectives/Purpose

The *When I'm 65* engagement program will utilize screenings of the documentary to stimulate discussions and online activity to encourage active learning about planning ahead for retirement. The multi-year engagement plan involves PBS stations across the country partnering with financial education specialists and retirement lifestyle experts to promote and conduct community-based workshops and educational events. We will address topics such as: how longer life expectancies are changing what people are planning to do when they “retire”; how the choice for some Baby Boomers may be either to work or move so that their financial resources will last across 20 or more years of retirement; housing and support services; and bipartisan support of retirement policy changes.

### Description

For the Practitioners' Forum, the Investor Protection Institute will present the *When I'm 65* program, featuring a public television documentary and five-year engagement program, which explores new multi-generational approaches to retirement, changing attitudes toward work, debt, housing, financial fraud and the financial choices that Americans of all ages need to make to plan for a financially secure future. The session will focus on the engagement program's toolkit and how local grassroots organizations, public television stations and professionals can work together to educate their communities about financial realities such as living and working longer, retirement planning, and financial fraud. The toolkit includes access to a set of videos, discussion guides, checklists, social media tools, brochures with QR codes, PowerPoint presentations, a retirement calculator, and questions and answers suitable for broad use.

The *When I'm 65* documentary and engagement program will be promoted extensively through social media, press outreach, partners, and at national conferences. We intend to engage groups who can bring together trusted networks, including educators, regulators, financial planners, and life coaches, to disseminate the tools and information. Where appropriate, the toolkit will be expanded and/or customized to meet specific needs, such as custom tools to address state and local regulatory issues, faith-based adaptations, or materials that address a new fraud being perpetrated in the marketplace.

The *When I'm 65* documentary will air numerous times in key markets across the PBS system. It will utilize a multi-generational approach to examine how each generational cohort is looking at and planning for retirement, using case studies, engaging animations, and lively expert interviews. Among the expert interviewees are Ken Dychtwald, author of *Age Wave* and expert on the maturing population; Teresa Ghilarducci, retirement security expert from *The New School*; Marianne Kilkenny, creator of *Women for Living in Community*; and Knight Kiplinger, editor in chief of *Kiplinger's Personal Finance* magazine.

The *When I'm 65* program is a partnership among the Investor Protection Institute, an independent nonprofit organization that advances investor protection by conducting and supporting unbiased research and groundbreaking education, the Investor Protection Trust, a grant-making organization devoted to investor education, and Detroit Public Television, a PBS member station.

---

<sup>42</sup> Don Blandin, President and CEO, Investor Protection Institute, 1020 19<sup>th</sup> Street, NW, Ste. 890, Washington, DC, 20036-6123, Tel: 202-775-2112, [www.iInvest.org](http://www.iInvest.org).



# Research Papers

## Does It Matter Who Makes More? Exploring How Income Disparity Impacts Types of Relationship Arguments

*Melanie Mendiola, M.B.A, Julia Mull, M. B. A., Kristy L. Archuleta<sup>43</sup>, Ph.D.,  
Bradley T. Klontz, Psy.D., Kansas State University*

### Abstract

Qualitative data from a sample of women who completed an online survey was explored to understand how types of arguments differ based on whether a woman makes more, makes less, or makes the same as her partner/spouse. Findings suggest that regardless of income disparity group, women perceive that money is the most argued about topic in their relationship although they may argue differently than other groups based on a competing power and control dynamic that emerged from the data. Financial professionals should be prepared that money is a hot topic for any couple.

**Key words:** couples, income disparity, marital arguments, money arguments, women, women earning more

### Introduction

Couple relationship disagreements have been a relatively popular topic for researchers to study in the past 10 years. Research has suggested that arguments about children and parenting, money related topics, and household issues (Papp, Cummings, & Goeke-Morey, 2009) tend to be the most frequently fought about topics within a couple relationship. With more women now in the workforce than there were 20 years ago and more women making more than their spouses, we wondered how differences in income affected the types of arguments women identified as being the topic fought about most frequently. More specifically, this study set out to qualitatively explore how income disparity within a relationship impacts the types of relationship arguments among women. To explore more in-depth, four sub-questions were identified to understand how making more, making less, or making the same as one's significant other influences types of relationship arguments:

Sub-question 1: How does making more than one's partner influence what women perceive to be the most argued about topic in their couple relationship?

Sub-question 2: How does making less than one's partner influence what women perceive to be the most argued about topic in their couple relationship?

Sub-question 3: How does making the same as one's partner influence what women perceive to be the most argued about topic in their couple relationship?

Sub-question 4: How do women perceive topics of money arguments differently across income disparity groups?

### Literature Review

#### *Marital Arguments*

Marital arguments are not new phenomena of study. Over the years, marital arguments have been associated with psychological, physiological, and family health problems (Fincham, 2003). Arguments can breed anger, depression, and negative behaviors toward the spouse, which have been found to be associated with spouses' psychological well-being (Du Rocher, Schudlich, Papp, & Cummings, 2004). While the list of topics couples argue about most is exhaustive, the leading three themes center upon: children and parenting, money related topics, and household issues (Papp et al., 2009).

---

<sup>43</sup>Kristy L. Archuleta, Kansas State University, 316 Justin, Manhattan, KS 66506, Email: [kristy@k-state.edu](mailto:kristy@k-state.edu)

Research related to women who make more than their partners is sparse. Prior research related to income disparity has indicated that men tend to report lower levels of marital happiness when their wives were the main breadwinners in the family (Wilcox & Dew, 2008, Schaninger & Buss, 1986). On average, they did not have issues with their wives working unless their wives were either working more hours or earning more. Breaking the traditional norms of men making more can create power differentials as the person who has the highest earnings is often the person who has financial decision-making power in the relationship (Carter, 1988). With an increasing number of female breadwinners, it is not clear how women perceive marital arguments especially in relation to whether she makes more, less, or the same as her partner. Because little is known about marital arguments in regards to disparity groups, this literature review overviews the topics that research has found couples tend to argue about the most: money, parenting, and the household.

### *Money Arguments*

In the financial planning and counseling literature, money arguments have been found to not only be one of the most frequently fought about topics, but also financial issues are argued about most intensely. Some research has indicated that money is not the most argued about, but money arguments are different than other types of arguments, as they tend to be more intense and less likely to be resolved (Papp et al., 2009). Other research has indicated that money related factors do impact relationship satisfaction. For example, financial behaviors and financial satisfaction have been linked with marital satisfaction (Archuleta, Britt, Tonn, & Grable, 2011; Britt, Grable, Nelson Goff, & White, 2008). How a couple engages in conflict, whether they share in similar goals and values related to money, marital debt, and satisfaction with financial status have also been found to be associated with perceived relationship satisfaction (Archuleta, Grable, & Britt, 2013; Copur & Eker, 2014; Dew, 2009). Increasing consumer debt in particular has been shown to cause a decrease in marital satisfaction which is further aggravated by less time together because of longer working hours to pay debt, arguments over money, and resentment over money unfairness (Dew, 2009). Despite, the current research on money arguments, little research has been directed towards understanding how arguments looks differently based on income disparity groups.

### *Parenting Arguments*

A number of researchers have studied questions regarding how parenting impacts the committed relationship with mixed results. The degree of female marital satisfaction has been positively linked to the level of paternal involvement in parenting (Pedro, Ribeiro, & Shelton, 2012). Interparental conflict was more evident in families with married parents, female children, pre-teen to early teenage children, were of European- American descent, middle-income, and parental education was greater than high school (Krishnakumar & Buehler, 2000). Having even one grown child who is experiencing problems was associated with parental unhappiness while having more than one successful grown child showed significance in parental happiness levels (Fingerman, Cheng, Birditt, & Zarit, 2012).

### *Household Arguments*

Previous studies of dual-income couples suggested that marital satisfaction reported by both spouses was significantly driven by perceptions of fairness in the division of labor, both at home and in the workplace, and each person's feeling of empowerment in terms of agenda-setting (Wilkie, Ferree, & Ratcliff, 1998). Work with couples have affected positive change when both partners, particularly the more powerful one, realized and implemented power equalizing strategies within the relationship (Knudson-Martin, 2013). Successful long-term married African-American couples reported that the most important issues to manage were allotting time together, supporting needs within the extended family, leaning on each other through the difficult times, accepting one another at face value, and becoming a cohesive unit (Marks, Hopkins, Chaney, Monroe, Nesteruk, & Sasser, 2008). Much of the research indicated that couples who viewed the marriage as a cohesive unit and those that felt that they were equal partners were much more satisfied within the marriage.

## **Methods & Analysis**

The purpose of the research study was to explore the topic women report arguing about most in their intimate partner relationships based on whether they make more, less, or the same as their partner. Participants were recruited through the use of a variety of social media outlets inviting women to participate in a survey on money and relationships. At the end of the survey, participants were invited to email the researcher indicating that they took the survey for the chance to win one of several \$100 gift cards. As such, the respondents' personal information could not be linked in any way to their survey responses, maintaining participant anonymity. As part of the survey, one

open-ended question was asked of respondents: “Name the one thing that you and your partner/spouse argue about most.” This question was the focus of analysis for the current study. Participants were able to fill in the blank with no character/word limit.

To investigate the overarching research question, a multiple-case study design approach was taken. Although the invitation to participate in the survey was targeted to females, males also were in the overall sample. Therefore, a sample of only females who reported being in a committed relationship were extracted from the data. Then, based on perceived income, female respondents were categorized into one of three cases (hereinafter referred to as groups): (a) women who reported making more than their partner/spouse; (b) women who reported making less than their partner/spouse; and (c) women who reported making the same as their partner/spouse.

Data was analyzed using content analysis techniques to code and create latent categories, subcategories, and themes. Many responses consisted of one word (e.g., spending, children, schedules), while other responses were more detailed. To further substantiate categories of arguments that emerged from the data, observation counts were conducted in addition to content analyses techniques of coding, categorizing, convergence and divergence. When respondents listed more than one topic, responses were coded into two different categories.

To increase reliability and validity of the analysis process, researcher triangulation was implemented. One of the team of researchers coded each item line by line and then two other team members verified the coding. This process was conducted for each group. The research team met on a regular basis to discuss the development of categories and emergent themes.

## **Results**

The final sample consisted of 768 women who identified being married (72%), engaged (6%), or in a committed relationship (22%). The majority of the sample reported being Caucasian (74%), heterosexual (93%), and holding a college degree or beyond (82%). Eighty percent of the sample reported working full-time, whereas 8% worked part-time, 4% were unemployed, 5% were homemakers, and 2% were retired. The sample was highly educated overall with advanced degrees (36%), some graduate school (7%), college (39%), some college (15%), and very few with high school or less (3%). The average age of the respondents was 38 years. Over half of the sample reported that household income was over \$100,000 with an average individual income of \$68,040 and average household income of \$131,490. All three individual groups had very similar household incomes compared to the sample's income.

Table 1  
Characteristics for overall sample

|                          | n   | %    | M              |
|--------------------------|-----|------|----------------|
| <b>Age (years)</b>       |     |      | 38.08          |
| 19 – 25                  | 64  | 8.3  |                |
| 26 – 35                  | 325 | 42.2 |                |
| 36 – 45                  | 188 | 24.5 |                |
| 46 – 55                  | 117 | 15.2 |                |
| 56 – 65                  | 67  | 8.7  |                |
| over 65                  | 6   | 0.8  |                |
| missing                  | 1   | 0.1  |                |
| <b>Education</b>         |     |      | 17.3 (college) |
| High school or less      | 22  | 2.7  |                |
| Some college             | 113 | 14.7 |                |
| College                  | 303 | 39.5 |                |
| Some grad school         | 56  | 7.3  |                |
| Advanced degree          | 274 | 35.7 |                |
| <b>Individual Income</b> |     |      | 68,040         |
| 0 – 25,000               | 137 | 17.8 |                |
| 25,001 – 50,000          | 223 | 29.0 |                |
| 50,001 – 75,000          | 171 | 22.2 |                |
| 75,001 – 100,000         | 103 | 13.4 |                |
| 100,001 – 150,000        | 82  | 10.7 |                |
| over 150,000             | 47  | 6.1  |                |
| missing                  | 5   | 0.7  |                |
| <b>Household Income</b>  |     |      | 131,490        |
| 0 – 25,000               | 20  | 2.6  |                |
| 25,001 – 50,000          | 51  | 6.6  |                |
| 50,001 – 75,000          | 112 | 14.6 |                |
| 75,001 – 100,000         | 163 | 21.2 |                |
| 100,001 – 150,000        | 223 | 29.0 |                |
| over 150,000             | 198 | 25.8 |                |
| missing                  | 1   | 0.1  |                |
| <b>Race/Ethnicity</b>    |     |      |                |
| Caucasian                | 565 | 73.6 |                |
| Hispanic                 | 59  | 7.7  |                |
| African-American         | 51  | 6.6  |                |
| Asian-American           | 48  | 6.3  |                |
| Other                    | 32  | 4.2  |                |
| Pacific Islander         | 8   | 1.0  |                |
| Native American          | 3   | 0.4  |                |
| missing                  | 2   | 0.3  |                |

*Women Who Make More*

When analyzing the group of women who made more than their partners (n=415), the sample was slightly more educated with at least some graduate school as compared to the overall average of a college educated sample. This group appeared to be almost identical to the overall sample in regard to household income at \$131,210, age of 38, and being Caucasian (74%). The most significant difference was that the average reported individual income, which was \$90,167.

Table 2  
Characteristics for women who make more

|                          | n   | %    | M                |
|--------------------------|-----|------|------------------|
| <b>Age (years)</b>       |     |      | 38.07            |
| 19 – 25                  | 30  | 7.2  |                  |
| 26 – 35                  | 183 | 44.1 |                  |
| 36 – 45                  | 103 | 24.8 |                  |
| 46 – 55                  | 61  | 14.7 |                  |
| 56 – 65                  | 35  | 8.4  |                  |
| over 65                  | 3   | 0.7  |                  |
| <b>Education</b>         |     |      | 17.6 (some grad) |
| High school or less      | 9   | 2.1  |                  |
| Some college             | 42  | 10.1 |                  |
| College                  | 168 | 40.5 |                  |
| Some grad school         | 32  | 7.7  |                  |
| Advanced degree          | 164 | 39.5 |                  |
| <b>Individual Income</b> |     |      | 90,167           |
| 0 – 25,000               | 17  | 4.1  |                  |
| 25,001 – 50,000          | 87  | 21.0 |                  |
| 50,001 – 75,000          | 112 | 27.0 |                  |
| 75,001 – 100,000         | 84  | 20.2 |                  |
| 100,001 – 150,000        | 70  | 16.9 |                  |
| over 150,000             | 42  | 10.2 |                  |
| missing                  | 3   | 0.7  |                  |
| <b>Household Income</b>  |     |      | 131,210          |
| 0 – 25,000               | 8   | 1.9  |                  |
| 25,001 – 50,000          | 27  | 6.5  |                  |
| 50,001 – 75,000          | 63  | 15.2 |                  |
| 75,001 – 100,000         | 87  | 21.0 |                  |
| 100,001 – 150,000        | 113 | 27.2 |                  |
| over 150,000             | 117 | 28.2 |                  |
| <b>Race/Ethnicity</b>    |     |      |                  |
| Caucasian                | 307 | 73.9 |                  |
| Hispanic                 | 31  | 7.5  |                  |
| African-American         | 32  | 7.7  |                  |
| Asian-American           | 27  | 6.5  |                  |
| Other                    | 11  | 2.7  |                  |
| Pacific Islander         | 4   | 1.0  |                  |
| Native American          | 2   | 0.5  |                  |
| missing                  | 1   | 0.2  |                  |

For women who make more, eight categories of relationship arguments emerged from the data, including money, household chores, personal relationship and communication, lifestyle choices and preferences, time and schedules, parenting/children, career/work, family issues (e.g., extended family, in-laws, ex-spouses) developed. Money was the category with the most observations, in which 131 responses related to money such as spending, saving, and debt. The second most significant theme, with 67 observations, was household chores, such as cleaning, cooking, and responsibility for household chores. The third most significant theme was personal relationship and communication (54 observations), referring to how couples communicate, aspects that influence communication and relationship (e.g., attitude, trust, support), and sexual relationship. For the purposes of this paper, the three categories with the most observations are reported here.

For the money category, *money* and *finances* as standalone responses accounted for 55 out of the 131 total responses. For participants who elaborated, emerging subtopics included spending and budgeting (29 observations), the role of money in either spouse's career choice (9 observations), saving and investing (8 observations), and debt issues (5 observations). One of the themes to emerge was a difference in financial priorities or differences in how to

allocate their money, where partners disagreed about how to invest, save and spend. For example, a respondent reported that she and her partner had different financial priorities related to their home.

*How to spend our savings/upgrades to our home. We don't have the same priorities. He mostly wants to patch it up, I want to replace.*

Another respondent noted that how their money was allocated was the main argument in their relationship:

*Money (specifically, things that end up on the joint card that should come out of our individual allowances).*

The second most argued about topic among women who earn more surrounded household chores (67 observations). The dominant theme that emerged was the equitable distribution of housework and differences in standards of home maintenance and upkeep. Words and phrases often included word choices suggesting an imbalance of perceived costs and benefits such as “equitable”, “balance”, “who’s turn”, and “ownership”. Exemplar quotes from two different respondents included: *Ownership of duties in the home*, and *Equitable distribution of household duties*. The third most argued about category among women who make more was personal relationship and communication (52 observations). Fifteen respondents focused on communication differences such as “lack of communication”, “miscommunication”, and “not communicating well” while another thirteen built on this theme describing issues such as “poor listening skills”, using trigger words like “you always”, and inability of “trying to understand where the other is coming from”.

#### *Women Who Make Less*

For the group of women who reported making less than their partners (n=311), the average age was 38 years old. The average income for this group was \$38,548, although the average education level was a college degree. Similar to the other groups, women in this category reported race of Caucasian (73%), Hispanic (8%), African- American (6%), Asian-American (7%), and all others (7%). The average household income for this group was \$131,744.

Table 3  
Characteristics for women who make less

|                          | n   | %    | M              |
|--------------------------|-----|------|----------------|
| <b>Age (years)</b>       |     |      | 38.05          |
| 19 – 25                  | 27  | 8.7  |                |
| 26 – 35                  | 128 | 41.2 |                |
| 36 – 45                  | 76  | 24.4 |                |
| 46 – 55                  | 49  | 15.8 |                |
| 56 – 65                  | 27  | 8.7  |                |
| over 65                  | 3   | 1.0  |                |
| missing                  | 1   | 0.3  |                |
| <b>Education</b>         |     |      | 17.1 (college) |
| High school or less      | 11  | 3.5  |                |
| Some college             | 60  | 19.3 |                |
| College                  | 121 | 38.9 |                |
| Some grad school         | 21  | 6.8  |                |
| Advanced degree          | 98  | 31.5 |                |
| <b>Individual Income</b> |     |      | 38,548         |
| 0 – 25,000               | 114 | 36.7 |                |
| 25,001 – 50,000          | 121 | 38.9 |                |
| 50,001 – 75,000          | 46  | 14.8 |                |
| 75,001 – 100,000         | 15  | 4.8  |                |
| 100,001 – 150,000        | 9   | 2.9  |                |
| over 150,000             | 4   | 1.3  |                |
| missing                  | 2   | 0.6  |                |
| <b>Household Income</b>  |     |      | 131,744        |
| 0 – 25,000               | 7   | 1.7  |                |
| 25,001 – 50,000          | 21  | 5.1  |                |
| 50,001 – 75,000          | 42  | 10.1 |                |
| 75,001 – 100,000         | 69  | 16.7 |                |
| 100,001 – 150,000        | 98  | 23.6 |                |
| over 150,000             | 73  | 17.6 |                |
| missing                  | 1   | 0.2  |                |
| <b>Race/Ethnicity</b>    |     |      |                |
| Caucasian                | 226 | 72.7 |                |
| Hispanic                 | 25  | 8.0  |                |
| African-American         | 18  | 5.8  |                |
| Asian-American           | 21  | 6.8  |                |
| Other                    | 17  | 5.5  |                |
| Pacific Islander         | 3   | 1.0  |                |
| Native American          | -   | -    |                |
| missing                  | 1   | 0.3  |                |

For women who make less than their partner/spouse, the categories that developed were money, household chores, lifestyle choices and preferences, personal relationship and communication, time & schedules, parenting and children, career/work, and extended family. For this group, money was also the most significant theme that emerged with 99 observations related to money, household chores with 48 observations, followed by time and schedules with 35 observations in each category. The four categories with the most observations are reported here.

Like the women in the make more category, standalone responses made up the majority of money arguments: money (62 responses), spending (10 responses), and finances (8 responses). Almost all responses were without possession (e.g. *his spending*). Instead, they were phrases such as “saving money” (6 responses), “making ends meet” (2 responses), and “money for leisure” (1 response). This is an important notation as it appears to be a different dynamic than the women who make more who were more likely write phrases that appeared to place blame on their partner or saw their partner as not meeting expectations.

For example, one respondent expressed the following exemplar:

*Finances, specifically, the budgeting process; he is very general and is okay with spending money we don't yet have (using credit). I need specifics down to the penny and prefer saving/planning before spending.*

Household chores remain a contentious subject for women who make less with 49 observations. Outside of single word responses, such as “chores” or “cleaning”, there were responses indicating the desire for equity in the household through the use of words and phrases such as “sharing” and division of labor”.

Time and schedules focused on schedule management, time spent with one another, and balancing work and life. A respondent explained how having one car impacted the couples’ scheduling:

*How many activities I can be associated with since we only have one car (I drive) and one motorcycle, which I cannot drive. We have to plan our schedules accordingly and when we don't communicate effectively, we sometime argue about that.*

#### *Women Who Make the Same*

The smallest group was women who reported making the same as their partner (n=42). This group had an average individual income of \$67,786, was the least educated as a whole, were on average 38 years old, and these households had the highest income average of any of the other households ( $M=\$132,360$ ). This group also had the highest concentration of Caucasian women (76%).



Table 4  
Characteristics for women who make the same

|                          | n  | %    | M              |
|--------------------------|----|------|----------------|
| <b>Age (years)</b>       |    |      | 38.36          |
| 19 – 25                  | 7  | 16.7 |                |
| 26 – 35                  | 14 | 33.3 |                |
| 36 – 45                  | 9  | 21.4 |                |
| 46 – 55                  | 7  | 16.7 |                |
| 56 – 65                  | 5  | 11.9 |                |
| over 65                  | -  | -    |                |
| <b>Education</b>         |    |      | 16.9 (college) |
| High school or less      | 2  | 4.8  |                |
| Some college             | 11 | 26.2 |                |
| College                  | 14 | 33.3 |                |
| Some grad school         | 3  | 7.1  |                |
| Advanced degree          | 12 | 28.6 |                |
| <b>Individual Income</b> |    |      | 67,786         |
| 0 – 25,000               | 6  | 14.3 |                |
| 25,001 – 50,000          | 15 | 35.7 |                |
| 50,001 – 75,000          | 13 | 31.0 |                |
| 75,001 – 100,000         | 4  | 9.5  |                |
| 100,001 – 150,000        | 3  | 7.1  |                |
| over 150,000             | 1  | 2.4  |                |
| <b>Household Income</b>  |    |      | 132,360        |
| 0 – 25,000               | 5  | 11.9 |                |
| 25,001 – 50,000          | 3  | 7.1  |                |
| 50,001 – 75,000          | 7  | 16.7 |                |
| 75,001 – 100,000         | 7  | 16.7 |                |
| 100,001 – 150,000        | 12 | 28.6 |                |
| over 150,000             | 8  | 19.1 |                |
| <b>Race/Ethnicity</b>    |    |      |                |
| Caucasian                | 32 | 76.2 |                |
| Hispanic                 | 3  | 7.1  |                |
| African-American         | 1  | 2.4  |                |
| Asian-American           | -  | -    |                |
| Other                    | 4  | 9.5  |                |
| Pacific Islander         | 1  | 2.4  |                |
| Native American          | 1  | 2.4  |                |

Money, lifestyle choices and preferences, time together and schedules, personal relationship and communication and children were the significant themes that emerged for the group of women who make the same as their partner/spouse. Although this group was the smallest, money was still the most significant theme that emerged with 18 observations. In comparison, both lifestyle choices and preferences and time together and schedules were the categories with the next highest count with each had 9 observations.

Money arguments delineated from the women who earn more group in that the focus on mutual decision-struggles. Couples argued about “how we spend our money” and “money chores” such as who should do the budgeting. Some exemplar quotes included:

*What to do with our money -- where to spend to pay off a mortgage and student loans and where to save for emergencies and a new house fund.*

*He is a spender whereas I am a saver and he wants no part of budgeting process.*

The second and third most argued about topics were grouped into two categories: *lifestyle choices* (9 responses) and *time/schedules* (9 responses). Like money, there was an emphasis on mutual decision making as opposed to blaming or perceiving that expectations were not met. An emerging theme for this group seemed to imply togetherness as much of the language implied joint ownership. For example, for the *time/schedules* category, “time together” and “our schedules” was used. Similarly, “our religious differences” was used as an example for differences in *lifestyle choices*. While women who earn more than their spouses appeared to argue over equity in the household, this group argued about many of the same topics such as household chores without the emphasis on imbalance.

## Discussion

As previously noted, regardless of who makes more, money remains the most argued about topic in the couple relationship. While money as a frequently argued about topic is not new, several themes emerged from the data that provide new insight into the dynamics among these three income disparity groups when it comes to topics that argued about most frequently. When comparing across groups, an emergent theme for the women who make more than their partner is the inability for partners’ to meet respondents’ expectations and as a result conflict occurs. Consider that much of the content of money related responses involved placing blame on the partner or perceptions of how a partner should act. For example, one respondent wrote:

*His salary. He's a college graduate and doesn't earn his worth. Though he has great benefits if earned a little more, we could do so much more.*

Another respondent stated:

*Money - He does not understand when he has spent too much. He doesn't pay attention to money matters.*

Women in both the make less and make the same groups, identified similar topics like spending, debt, work and schedule conflicts, but the language in which they used was different in that they imply viewing the issues as a couple problem or using language that implies that togetherness where less blame was placed on the partner. This could be due to women who make less or make the same as their partners perceiving themselves in a more traditional role within the relationship and either make sense of the argument as a couple concern or their expectations of how a spouse should act differentiated from women who made more. This is interesting considering that household income for all three groups was relatively the same. However, for women who make more, average individual income reportedly higher than the other two groups.

Although both the categories of time and schedules and career/work did not rise to the top three categories in terms of number of observations reported for women who make more, the interconnectedness among money, time and schedules, and household chores appeared to be another important theme for all three groups. For the group of women who make more than their spouse/partner, women tended to report that they argued about who works more and scheduling of time due to work. They also reported that they argued about their partners/spouses not being able to find work, not being motivated in their career, or taking responsibility. One respondent in the women who make more group summarized this circular dynamic:

*I am the breadwinner in our relationship, the one with good credit and a good financial history...I have even hidden our emergency fund in a private bank account, as this money would be spent on expensive dinners, clothes and nights out for my Husband...My husband is seeking work, but never willing to go above and beyond in a very competitive job market and city...I am tired of feeling like I am alone in the relationship and whenever I bring up the fact that we are both unhappy and not heading in a good direction he insists that he sees a beautiful future for us and I need to learn to be more patient and that I expect too much.*

Although there were respondents in the other groups who reported that scheduling and career/work conflicts were argued about, women who make more seem to report that it is due to their own careers/jobs that the arguments occur. However, this connection appears to be different for women who make more than the other two groups. Although sufficient data was unavailable, a developing theme is that women who make more are dealing with a power and control struggle with their partners that is different than women in the other two groups. In a changing economic environment where women may be more employable than men and may make more, this can wreak havoc

on the traditional norms and expectations that partners have of themselves. Although social gender norms are changing, it may be more difficult for partners to adapt than one might think (Knudson-Martin, 2013). If the person in the relationship who is perceived to have the most power in the relationship is the person who makes the most, then socially constructed norms may be violated and adaptation to power in the relationship must be reconstructed. Further research is needed to understand this dynamic.

The results of this study vary from previous results in the literature that suggest that parenting and children and physical intimacy are among the top three arguments. Parenting and children were themes for each group, however they were not among the top three arguments for any of these three groups of women. This could be because not all respondents had children in the home and that money, household chores, lifestyle preferences, and communication are topics that all couples must manage.

From a theoretical standpoint, social exchange theory can help explain the emerging themes in this study especially in regards to the emerging theme of power and control and expectations for women who make more. Social exchange helps to explain to what extent an individual will behave in order to receive a reward - a type of internal cost/benefit analysis. Emerson (1976) extended the theory to include a power-control dynamic describing a relationship in which one person is dependent on another. This study explored whether relationship arguments shifted depending on which spouse was providing the greater share of financial resources. In examining the results, a power-control dynamic began to emerge particularly among women who earned more than their spouses.

### **Limitations, Implication, and Future Directions**

Like any study, this study is not without limitations. The primary limitation is that although the survey question was open-ended, more in-depth inquiry is needed. Capturing the essence of meaning in participants' responses is often a goal of qualitative inquiry. Unfortunately, capturing meaning of responses or depth of understanding with this data was difficult. However, this study sets the stage for further in-depth data collection and analysis, in which face-to-face interviews could be conducted to elicit deeper understanding.

Another limitation was that this sample was limited to women and did not ask about either if the respondent had children or how many children were living in the home. Although the primary intent of the survey was to focus on money dynamics within a couple's relationship, asking about children is an important variable that should have been addressed. In addition, the purpose of this particular study was to focus on women or one person in the relationship. Interviewing or collecting data from both partners may have elicited different results. Self-selection bias may have also had an influence on the results.

Understanding marital arguments surrounding money has implications for counselors, educators, and others involved in the helping profession. Future studies should draw samples from both partners. An understanding of the perceived roles of husbands and wives in the relationship in the presence of changing income dynamics is necessary. Couple conflict is inevitable for professionals who work with money related issues. Having a basic skill set of how to deal with conflict is imperative. Helping couple clients find common ground or focus on their common interests, model and teaching active listening skills, and setting "fair fighting" ground rules for how they talk about money both in the office and at home can be useful. Financial professionals should be cognizant of their scope of practice in working with couples. When these professionals are unsure what to do, it may be time to refer to or collaborate with a relationship therapist.

### **References**

- Anderson, J. R., Van Ryzin, M. J., & Doherty, W. J. (2010). Developmental trajectories of marital happiness in continuously married individuals: A group-based modeling approach. *Journal of Family Psychology, 24*(5), 587-596.
- Archuleta, K. L., Britt, S. L., Tonn, T. J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports, 108*(2), 563-576.
- Archuleta, K. L., Grable, J. E., & Britt, S. L. (2013). Financial and relationship satisfaction as a function of harsh start-up and shared goals and values. *Journal of Financial Counseling and Planning, 24*(1), 3-14.
- Britt, S. L., Grable, J. E., Nelson Goff, B. S., & White, M. (2008). The influence of perceived spending behaviors on relationship satisfaction. *Financial Counseling and Planning, 19*(1), 31-43.
- Carter, B. (1988). The person who has the gold makes the rules. In M. Walters, B., Carter, P., Papp, & O. Silverstein, *The Women's Project in Family Therapy* (237-249). New York: Guilford Press.

- Copur, Z., & Eker, I. (2014). The relationship between financial issues and marital relationship. *International Journal of Arts & Sciences*, (7)5, 683-698.
- Dew, J. P. (2009). The gendered meanings of assets for divorce. *Journal of Family and Economic Issues*, 30, 20–31. doi: 10.1007/s10834-008-9138-3.
- Dew, J., Britt, S. L., & Huston, S. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, 61(4), 615-628.
- Du Rocher Schudlich, T. D., Papp, L. M., & Cummings, E. M. (2004). Relations of Husbands' and Wives' Dysphoria to Marital Conflict Resolution Strategies. *Journal of Family Psychology*, 18(1), 171-183.
- Emerson, R. M. (1976). Social exchange theory. *Annual review of sociology*, 335-362.
- Fingerman, K.L., Cheng, Y-P., Birditt, K., & Zarit, S. (2012). Only as happy as the least happy child: multiple grown children's problems and successes and middle-aged parents' well-being. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*, 67(2), 184–193.
- Fincham, F. D. (2003). Marital conflict correlates, structure, and context. *Current Directions in Psychological Science*, 12(1), 23-27.
- Knudson-Martin, C. (2013). Why power matters: Creating a foundation of mutual support in couple relationships. *Family Process*, 52(1), 5-18.
- Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviors: A meta-analytic review. *Family Relations*, 49(1), 25 - 44.
- Marks, L.D., Hopkins, K., Chaney, C., Monroe, P. A., Nesteruk, O., & Sasser, D. D. (2008). Together, we are strong: A qualitative study of happy, enduring African-American marriages. *Family Relations*, 57(2), 172-185.
- Papp, L. M., Cummings, E. M., & Goeke-Morey, M. C. (2009). For richer, for poorer: Money as a topic of marital conflict in the home. *Family Relations*, 58(1), 91-103.
- Pedro, M. F., Ribeiro, T., & Shelton, K. H. (2012). Marital satisfaction and partners' parenting practices: The mediating role of coparenting behavior. *Journal of Family Psychology*, 26(4), 509 - 522.
- Schaninger, C. M., & Buss, W. C. (1986). A longitudinal comparison of consumption and finance handling between happily married and divorced couples. *Journal of Marriage and the Family*, 48, 129–136.
- Wang, W., Parker, K., & Taylor, P. (2013). Married mothers who out-earn their husbands. Retrieved from Pew Research Center website: <http://www.pewsocialtrends.org/2013/05/29/chapter-3-married-mothers-who-out-earn-their-husbands/#fn-19067-16>
- Whitchurch, G. G., & Constantine, L. L. (1993). Systems theory. In P. G. Boss, W. J. Doherty, R. LaRossa, W.R. Wilcox, W. B., & Dew, J. P. (October 2008). No one best way: Work-family strategies, the gendered division of parenting, and the contemporary marriages of mothers and fathers. Paper presented at a conference at the University of Virginia. Charlottesville, VA.
- Wilkie, J. R., Ferree, M. M., & Ratcliff, K. S. (1998). Gender and fairness: Marital satisfaction in two-earner couples. *Journal of Marriage and Family*, 60(3), 577 - 594.

## **Empowering Information Intermediaries: Impact Evaluation of Financial Education for Library Professionals**

*Barbara O'Neill, Rutgers University<sup>1</sup>*

Evaluating the ability of financial education programs to foster healthy financial behaviors is a continuing challenge for financial educators (Collins & O'Rourke, 2010; Fox, Bartholomae, & Lee, 2005; Fernandes, Lynch, & Netemeyer, 2012; Hensley, 2015; Huston, 2010, 2015; Lyons, Palmer, Jayaratne, & Scherpf, 2006). In addition, some recent evidence exists that financial education interventions provide weak and almost null results. Fernandes, Lynch, & Netemeyer (2014) conducted a meta-analysis of the relationship of financial literacy to financial education and found that interventions to improve financial literacy explain only 0.1% of the variance in financial behavior. Worse yet, the effects of financial education were found to decay over time. Nevertheless, any positive attempt to evaluate financial education program impacts is certainly better than doing nothing. In addition, evaluation of financial education impact is generally not an option but, rather, a required program deliverable by funders, administrators, and/or stakeholders.

This paper describes studies of the impact of a financial education professional development programs for public library professionals. It contributes to existing literature about the impact of financial education on financial capability. In these particular programs, class content was able to be applied by learners both personally and professionally in their capacity as information intermediaries. This study addresses the continuing need for investigation of the effect of financial education on downstream behaviors including positive personal financial management practices (e.g., increased retirement plan savings) and enhanced job performance assisting others with their finances.

Financial capability *is the combination of attitude, knowledge, skills, and self-efficacy needed to make and exercise money management decisions that best fit the circumstances of one's life* (What is "Financial Capability?," 2013). It is one of the most important life skills that people must develop to navigate life successfully. Unfortunately, many Americans sorely lack financial capability as indicated by 2009 and 2012 National Financial Capability Study (NFCS) findings (FINRAIEF, 2014), the annual Retirement Confidence Survey (RCS) sponsored by the Employee Benefit Research Institute (Helman, Adams, Copeland, and VanDerhei, 2014), the annual Consumer Financial Literacy Survey prepared by Harris Poll (The 2014 Consumer Financial Literacy Survey, 2014) and other widely reported metrics. Thus, there is a strong need for community financial education programs and services for adults of all ages to increase knowledge and skills related to budgeting, saving and investing, insurance, wise credit use, retirement planning, and other financial issues that have a significant quality of life impact.

Fortunately, numerous community financial education programs are underway to improve the financial capability of American adults. Some provide direct outreach to consumers while others seek to empower "information intermediaries," i.e., professionals who are employed to assist the public in some financial education capacity. Examples of the latter include non-profit agency social workers, teachers, youth and adult community educators, and front-line library staffers who provide search assistance and access to print and online resources.

During the past decade, hundreds of libraries across the United States have collectively received millions of dollars in funding from the FINRA Investor Education Foundation (FINRAIEF, 2015) and a federal government grant-making agency, the Institute for Museum and Library Services or IMLS (Financial Literacy, n.d.), to provide financial education programs for their patrons and/or staff. A critical requirement for receipt of these funds is the need for library grantees to develop and implement a strong evaluation plan to assess program outcomes.

This article describes the effectiveness of financial education training in building the confidence and capacity of professional staff in two different public library systems to respond to personal finance questions and information search requests. Data were compiled by independent third party program evaluators who were not associated with the delivery of financial education classes. Both qualitative and quantitative research methods were used to assess program impact. The focus of this paper is on the analysis of qualitative data used to assess program impact.

### **Background: Libraries and Financial Education**

It is not surprising that libraries are increasingly serving the public's financial education needs. They are non-profit, service-oriented, and politically neutral with wide geographic availability and free resources, including Internet access (Smith and Eschenfelder, 2011). In addition, libraries have traditionally had an "aura of trust." Library patrons know they aren't going to be "sold" anything if they request information about a topic such as investing. In addition, libraries are often centrally located within communities and their environment is not overwhelming, compared to, say, a college campus or large government services building (O'Neill, 2013a). Providing financial education training helps libraries acquire external funding from the FINRA Investor Education Foundation, IMLS, and other sources, provide new or enhanced financial information resources, form new community partnerships, and better serve the public, resulting in positive reports to funders (e.g., county and city governments) and stakeholders (e.g., Library "Friends" groups). According to Mcneil & Giesecke (2001), libraries must adapt to the changing environment (e.g., declining financial support and an explosion of new technologies and information resources) and proactively prepare for the future. One important step in this process is the identification and development of core competencies for library staff.

Library professionals can also benefit from financial education through increased knowledge for personal use, improved financial behaviors, greater understanding of available personal finance resource materials at libraries and online, and more confidence in handling inquiries from patrons and making information referrals. It is important to note that the focus of financial education training for library staff is providing information, not advice. *Information* gives patrons options and resources to make decisions themselves about the best course of action. *Advice* is telling other people what they should do and may send an unspoken message that the listener is not capable of making his or her own decisions.

While grant-funded classes for library patrons are similar to financial education programs for the general public that focus on specific topics, such as investing, those for library staff emphasize resources and their application to requests for assistance from library patrons (O'Neill, 2013a). An example is online publications from non-commercial sources about how to select a mutual fund. A key component of the programs for library staff that are described in this article was development of online resource lists for a variety of personal finance topics including credit and investing.

FINRA Investor Education Foundation (FINRAIEF) grants to libraries to support financial education efforts began in 2007 when the American Library Association (ALA) and the FINRAIEF formed a partnership to meet the expanding need for unbiased financial education information. In its first five years, the Smart Investing @ Your Library program awarded nearly \$6 million in grants to dozens of library grantees (Monsour, 2013). By 2013, 111 grants totaling over \$8.2 million had been awarded (FINRAIEF, 2015). Libraries selected to receive funding developed partnerships with Cooperative Extension, government agencies, and other non-commercial entities to provide quality educational content and assistance with program evaluation and staff development (Monsour, 2013).

Downloadable tools were developed by the FINRAIEF to help libraries train staff, build partnerships, develop content, market programs, and measure results (Hazlett, 2015). More recently, the Consumer Financial Protection Bureau (CFPB) has led an effort to involve more libraries in financial education. While not a grant-making agency like the FINRAIEF and IMLS, the CFPB is developing financial education resources and training programs for library staff, providing marketing support, and helping to connect libraries with local partnering organizations (Eberhart, 2014; Librarian Training, 2015; Rutherford, 2014).

### **Review of Literature**

Not all financial education programs are equally effective (Huston, 2010). As noted above, results have been mixed regarding the effectiveness of financial education in improving financial behavior. For example, Fernandes et al. (2012, 2014) found that financial education does not have a significant effect on improving financial behavior while other studies (Fox et al., 2005), Joo and Grable, 2005, Lusardi, 2003, and Xiao and O'Neill (2014), have found support for a positive relationship between financial education and positive money management practices and/or measures of financial capability. Huston (2015, p. 103) notes that the type of financial education being delivered is a key factor in evaluating the efficacy of financial education. Many of the activities categorized by Fernandes et al. (2014) "would be more appropriately classified as financial awareness efforts." Limitations of financial education evaluation research, according to Collins and O'Rourke (2010), are that many evaluations measure outcomes over short time periods, use self-reported measures, and cannot rule out selection bias due to nonrandomized designs.

A decade ago, Fox et al. (2005) advocated for the adoption of a comprehensive framework for financial education evaluation research and proposed a five-tiered approach. Huston (2010) also recommended improved measurement of financial literacy. Recently, Huston (2015) questioned the implicit assumption that financial education must have an appreciable impact on financial outcomes to be deemed successful and developed a Financial Health Model conceptualized as a five-stage production process with financial literacy as only one input component. She also called the Fernandes et al. (2014) study a “wake up call” (p. 104) and urged use of a common program evaluation framework.

Until a common financial education evaluation framework is adopted, and more theory-based evaluation is used, as recommended by Collins & O’Rourke (2010), reviews of literature about the impact of financial education will continue to include measures of self-reported financial behavior change. Since the current study involves financial education delivered for professional development in a workplace setting, several studies of workplace financial education follow. Lusardi (2003) found that workplace seminars foster saving, particularly for those with low education and those who save little. Hira and Loibl (2005) found that employees who gain financial literacy and confidence in their future financial situation were more likely to be satisfied with and supportive of their company. Bayer, Bernheim, & Scholz (2008) found participation in and contributions to voluntary savings plans are significantly higher when employers offer retirement seminars. The effect is typically much stronger for non-highly compensated employees than higher earners.

### **Purpose**

This article describes studies of the effectiveness of financial education training programs for library staff in two very different public library systems. The first library, the ninth largest in the world (10 Biggest Libraries, n.d.), is the New York Public Library (NYPL). Their IMLS-funded financial education program, for front-line staff only, is called *Money Matters Pro* (see <https://sites.google.com/a/nypl.org/money-matters/>). The second library is a two-branch system in the Central New Jersey town of Piscataway, where parts of Rutgers University are located. Their FINRAIEF-funded financial education program, which included six hours of training for library staff from across the state of New Jersey, is called *Centsible Living* (see <http://piscatawaylibrary.org/finliteracy>).

The NYPL grant project encompassed 42 three-hour classes conducted in three New York City boroughs over an 18-month period. There were a total of 11 different program topics with three “core” topics that were considered pre-requisites. The core topics were: *Banking*, *Credit 1*, and *Retirement* and the remaining eight topics were *Credit 2*, *Investing 1*, *Investing 2*, *Identity Theft*, *Paying for College*, *Insurance*, *Income Taxes*, and *Living on the Financial Edge*. Each class included a PowerPoint presentation, a PowerPoint game, and hands-on learning activities.

Included in every training class was a small group discussion of scenarios where a patron asks a librarian a question about the class topic [*Example*: A representative of a faith-based group visits the library seeking information on helping low-income people file their taxes and claim the Earned Income Tax Credit (EITC). This person also wants to help people, not only receive tax credits and refunds, but to also put some of the money into savings. What can you do to help this patron?]. There was also a large group discussion following a short animated two-character video where a patron seeks help from a librarian (see <https://sites.google.com/a/nypl.org/money-matters/library-reference-scenarios>). Thus, each training class was structured to help library staff immediately apply information that was presented to their interactions with patrons. Slides were “link heavy” and attendees received online resource lists for each program topic.

With the Piscataway Public Library (PPL) grant, a six-hour training workshop was conducted for about 40 New Jersey librarians. The morning session, *Investment Basics*, focused on key investment concepts (e.g., risk-reward trade-off, types of investment risks, asset allocation, and dollar-cost averaging), characteristics of popular investment products (e.g., bonds, stocks, and mutual funds), and different types of investment fraud. The afternoon session, *Investment Resources*, focused on online resource materials for investors and included hands-on application activities about finding resources for library patrons that were adapted from the NYPL classes. Also included were the FINRAIEF *National Financial Capability Study Quiz*, an investment risk tolerance tool, an *Investment Coat of Arms* activity, and a review of the American Savings Education Council’s *Ballpark Estimate* retirement planning worksheet.

### **Conceptual Background**

As noted earlier, evaluation assessments for both public library financial education programs were conducted by third party evaluators unrelated to the financial education provider. Many funders such as IMLS and the FINRAIEF

require this arrangement so there is no real or potential conflict-of-interest in how data are collected and reported. One of the evaluation methods used for the NYPL grant project was the Critical Incident Technique (CIT).

The CIT, a qualitative research method, is a form of structured story-telling where respondents are asked to share their experiences about some type of event, such as how they handled interactions with customers/clients. It is commonly used in studies of nursing care, marketing efforts, and the effectiveness of employee training programs (O'Neill, 2013b; Radford, 2006; Radford, 1996). As described by Flanagan (1954), there are five steps in the CIT research procedure: 1. determining objectives of the activity, 2. developing plans and specifications for collecting factual incidents, 3. collection of data through a series of open-ended questions, 4. analysis of data, and 5. interpretation and reporting of facts regarding reported incidents.

### **Research Question**

The research question for the two library staff training program assessments was to determine the effectiveness of financial education training for library staff. Comparisons were made of the perceived competence of library staff to respond to personal finance questions from patrons before and after financial education training was delivered.

### **Methodology and Results**

#### *New York Public Library*

Data were collected from New York Public Library (NYPL) staff via electronic surveys sent via e-mail. Using the Critical Incident Technique (CIT) methodology, the following four questions were used to elicit critical incident stories from NYPL staff before they attended financial education classes:

1. Think about your experiences helping patrons with personal finance questions. Remember a time when you had a *successful* experience helping someone with these types of questions. Please write down what happened.
2. What made this a successful, positive experience?
3. Think about your experiences helping patrons with personal finance questions. Remember a time when you had an *unsuccessful* experience helping someone with these types of questions. Please write down what happened.
4. What made this an unsuccessful or challenging experience

Using a Pre-training survey, the number of successful and unsuccessful incidents was recorded and tabulated.

*Successful* incidents were defined as those where staff were able to assist patrons with personal finance questions. These incidents were then sorted into quantifiable categories. *Successful* incident categories were: Provided Quality Information Resources, Patron Satisfied, Provided Referral, and Enabled Patron to Solve Problem. *Unsuccessful* critical incident categories were: Lack of Training/Knowledge, Patron Wanted Advice/More Help than Able to Provide, Lack of Resources, and Poor Patron Attitude (Radford, 2012).

A similar CIT evaluation process was used again at the conclusion of the class series and responses to Pre- and Post-Survey questions were compared (Radford, 2013). In the final project report, respondents recalled 41 *successful* critical incidents, which were sorted into categories also found in the Pre-training Survey: Provided Quality Information Resources (18, 44%), Patron Satisfied (13, 32%), Enabled Patron to Solve Problem (6, 15%), and Provided Referral (4, 10%). Additionally 16 (39%) of 41 positive critical incidents were found to fit a new (overlapping) category labeled Increased Knowledge/Confidence, in the Post-training Survey.

Below are some representative participant comments for each CIT response category (Radford, 2013):

#### *Provided Quality Information Resources*

Responses centered on a staff member's confidence in searching for and finding appropriate web-based and print personal finance resources:

*"Patron had income tax questions and I was able to show them where to get help using the 'cheat sheets' of websites from our training. [This is successful because of me] knowing I had help in my hands."*

*"I've had a few patrons and staff members wanting to know their credit score, so I was able to refer them to the creditkarma.com website. Taking the credit/debt class was very informative, and I was able to forward that knowledge with colleagues and patrons. The only down side was that not everyone was happy with their credit scores."*



### *Patron Satisfied*

These responses mentioned a staff member's observation of patrons' satisfaction or positive feedback from patrons: *"A patron came into the branch wanting information on paying for college and checking his credit score. I referred him to the section where books on paying for college were, and also gave him some websites from the list I had from [the] Money Matters training. The patron came back after about two weeks and thanked me because he was able to increase his knowledge on options to pay for college, and also [to] check his score with the websites that I gave him."*

*"I had a patron request resources for taxes. They were doing their taxes on their own for the first time and were overwhelmed with the documents that they were required to file. I gave them all the resources they'd need to make the proper decisions on the forms they'd need and to understand how to navigate several resources within the library's collections and the irs.gov website. The patron was very thankful that staff knew where to locate everything and to provide the necessary forms and information where they can make the decisions and how to follow up with free services to assist them. This provided me with real-time satisfaction in providing great customer service."*

### *Enabled Patron to Solve Problem*

Responses indicated a staff member's ability to help empower patrons to solve their own information need. It is very positive that this category saw an increase, as it indicates that staff members are more willing to dig for information to help patrons to solve problems (Radford, 2013). A representative example from this category follows here:

*"A patron asked me about finding a website that will help them get a credit report, so that they could go apartment hunting. I directed them to the website annualcreditreport.com and the consumer.ftc.gov website. They were able to get their credit report, and print it without a problem. The person came back to tell me that they were able to find an apartment because of their good credit."*

### *Provided Referral*

These responses centered on the staff member's ability to make a solid referral to help fulfill the patron's information need. This drop in percentage can be indicative that the staff felt more comfortable finding resources on their own, and thus did not need to make as many referrals (Radford, 2013). A representative example from this category follows here:

*"A woman came in and was visibly upset. When I asked her what was wrong, she said she thought she was the victim of ID theft. I gave her the information she needed to contact law enforcement and about her legal options. I had just attended the class on ID theft, so I had fresh knowledge of the situation. I was able to tell her about the legal limits on her liability for stolen credit cards, as well as contact information for the pertinent law enforcement agencies. I did not hesitate to give this information out whereas in the past, I would have fumbled a little bit searching around for it."*

### *Increased Knowledge/Confidence/Satisfaction*

The category Increased Knowledge/Confidence was overlapping, in that each response coded into this category was also coded into one of the four previous categories. Participants revealed this category along with their ability to find resources, notice that patrons were satisfied, or solve a problem (Radford, 2013). Examples included:

*"I am now able to handle these questions better, by providing patrons with better books, websites, and other resources that may be helpful."*

*"A person came in for more information to apply for a personal loan. With all the training I received, I was able to guide him to apply for his loan more efficiently. All the training I received paid off."*

When compared to Pre-training results, a similar number of *successful* critical incidents were recalled (41 for Post-training, 40 for Pre-training). The first two categories had comparable percentages, but Post-training results saw an increase in Enable Patron to Solve Problem (from 7% Pre-training, to 15% Post-training) and a decrease in Provided Referral (from 20% Pre-training, to 4% Post-training). These results suggest that staff is working more closely with patrons to solve problems and is better prepared to do so more frequently without referrals, a very positive result (Radford, 2013). Also, the emergence of the new category, Increased Knowledge/Confidence, provides evidence of the effectiveness of financial education training.

The highest number of *unsuccessful* incidents between library staff and patrons (15, 60%) for the Post-training Survey were grouped by Radford (2013) into the Patron Wanted Advice/More Help than Able to Provide category, which was the second highest category in the Pre-training Survey (10, 26%). Responses centered on patrons requesting specific advice or a large amount of personal assistance from staff members. Incidents from this category demonstrate that patrons' expectations of the level and type of help they can get at a public library do not always match reality, and that library staff members will most likely be continually challenged as a result (Radford, 2013).

Respondents recalled 25 *unsuccessful* critical incidents which were sorted into three of the four categories also found in the Pre-training Survey: Patron Wanted Advice/More Help than Able to Provide (15, 60%), Patron Poor Attitude (7, 28%), and Lack of Resources (3, 12%). There were no instances of Lack of Training in the Post-training Survey, which was the largest category (18, 46% of 29 total) in the Pre-training Survey. Lack of Training, thus, changed from most numerous category in Pre-training, to non-existent in the Post-training Survey, a strong indication that the training was successful (Radford, 2013). The three other unsuccessful categories are illustrated below with representative quotations.

#### *Patron Wanted Advice/More Help than Able to Provide*

Responses described instances where patrons requested very specific advice or a large amount of personal assistance from library staff members as seen in these examples:

*“Patron didn’t want the information; they wanted me to do the work for them. I would count this encounter as unsuccessful simply because the patron had no clue as to where to begin and was very impatient. I also felt that it was unsuccessful because the patron left with nothing being resolved.”*

*“A patron was looking for information comparing interest rates for savings accounts offered by banks. While I was able to offer a number websites with ratings and definitions, I was unable to direct him to a site that offered him the comparison shopping he wanted. The patron wanted a level of guidance that I was not qualified to offer, and didn’t seem that it was conveniently available online.”*

#### *Patron Poor Attitude*

This category is closely related to the Patron Wanted Advice/More Help than Able to Provide category, and centers on patrons who become upset and/or aggressive when they were frustrated with the level of service that was provided. Below are two examples:

*“Someone needed help with what car insurance they should use and wanted my advice. I told them that I could give them information, and that I was unable to provide them advice. I offered to give them a list of car insurance companies, but they insisted for me to tell them on the spot which car insurance company I should use. I was stumped on what to say. The patron was irate and said ‘I thought you were a librarian’ and stormed out.”*

*“Assisting a patron with collection agency questions. The patron was impatient and aggressive, although I believe I had valuable information.”*

#### *Lack of Resources*

In the Post-training Survey, Lack of Resources was identified in 3 (12%) of the unsuccessful critical incidents as compared to 8 (20%) for the Pre-training Survey. One possible reason that there were fewer incidents reported for this category may be that the participants were made aware of web resources that they previously did not know (Radford, 2013). However, three incidents were reported that were sorted into this category, illustrated by this example:

*“A patron asked for a book regarding how to handle debt. We didn’t have the book at this library, so I put it on hold for him. This was an unsuccessful and challenging experience because I wasn’t able to obtain as much information needed to provide the resources necessary for this query.”*

The CIT analysis compared Pre-training and Post-training results. The change in the percentages of the types of critical incidents is indicative of change in the attitudes and abilities of program participants. Participants’ actual comments provide even more evidence of program impact. The CIT findings also resonated with additional quantitative findings [**Example:** Material was very valuable to my job; with responses ranging from 1 = strongly disagree to 5 = Strongly agree], providing confirming evidence that *Money Matters Pro* training was successful in improving participants’ knowledge of personal finance and their ability to be successful in handling patron inquiries (Radford, 2013).

Participants were also asked: *How have the Money Matters workshops and training changed your recent interactions with NYPL patrons having personal finance questions, your vision of this service or other job-related activities?* Many of the respondents mentioned increased confidence and comfort as a result of the workshops:

*“It just gave me a boost of confidence in assisting patrons.”*

*“It is empowering to have such good information at your fingertips.”*

*“I feel more confident that I can assist patrons with their personal finance questions. The training handouts and NYPL’s website listing all the personal finance web sites are invaluable.”*

Others mentioned being more efficient or effective in performing their work-related duties:

*“The MM workshops have changed my recent interactions with our patrons having personal finance inquiries by having the knowledge to provide efficient resources and assisting them to become empowered and knowledgeable as well.”*

Some library staffers also revealed a change in attitude toward the public:

*“It has made me more mindful, informative and able to provide the information in a manner in which the public can understand. It has also made me more sensitive to any situation our public may bring with them upon utilizing the library as a resource.”*

*“I didn’t look at patrons with a funny look. I understood what they were asking for and reached out to help the best I could.”*

Some respondents indicated that they will return again and again to the Money Matters resources:

*“While I already generally abided by standards of providing information, not advice, in all subject areas when providing reference service, the Money Matters workshops have created a highly usable, well organized cache of ready resources for assisting patrons with their personal finance information needs.”*

#### *Piscataway Public Library*

The Piscataway Public Library (PPL) library staff training was not nearly as extensive as that of the NYPL and neither was its funding level and evaluation methodology. No funding was available for CIT research or a follow-up assessment of participant behavior changes. Nevertheless, ample quantitative evidence was found of the training session’s usefulness to participants in a report prepared by the external evaluator (Kelly, 2014). Almost two-thirds of 26 respondents (65%) rated the session “extremely valuable,” 27% “very valuable,” and 8% “valuable” [on a five-part scale that also included “somewhat valuable” and “no value”].

The knowledge gain reported for subject matter content was 85% “a lot” and 15% “some” and the knowledge gain reported for websites and resource materials was 84% “a lot” and 16% “some” [on a four-part scale that also included the responses “little” and “none”]. Participants reported planning to use information in the following ways: helping patrons (52%), personal development (44%), enhance library resources (40%), educate the public (20%), and educate colleagues (20%), (Kelly, 2014).

Program participants were also asked what they liked best about the workshop and what could be improved. Like the NYPL staff training classes, the presenter and resource lists ranked highly with comments such as “various modes of investing and how it can be disseminated to others in a straight forward format,” “highly relevant,” “current info,” “real case studies,” “great resources that can be shared,” “depth of presenter’s knowledge,” and “I appreciate being shown various web resources that are available.” Suggested improvements related to food service or suggestions for new program topics (Kelly, 2014).

On a retrospective post-then-pre format question (Klatt & Powell, 2005), with a five-point Likert-type scale of 1 to 5, with 1 = poor and 5 = excellent, participants were asked to rate their level of preparation to help library patrons with financial questions. Participants compared their perceived level of preparedness before and after the six-hour training session. The mean reported preparedness rating before the training session was held was 2.4 versus a rating of 3.7 afterwards, a noteworthy increase.

#### **Discussion and Implications**

This study of the impact of financial education training for public library staff adds support to previous research that suggests financial education may improve consumer financial literacy, financial behavior, financial capability, and other positive outcomes (e.g., improved job performance). For example, in addition to previously cited studies, Braunstein and Welch (2002) reviewed findings of empirical studies of a variety of financial literacy training efforts and noted “the body of objective research generally concludes that financial literacy training yields some benefits”

(p. 449) and evidence exists that “education can result in more informed consumers who make better financial decisions” (p. 456).

Joo and Grable (2005) found that persons exposed to workplace financial education were more likely to have a retirement savings program and having retirement savings related positively to retirement confidence. Similarly, Kim, Garman, and Quach (2005) found that attending financial education workshops is positively related to both employees’ and their spouses’ contributions to retirement savings plans. Xiao and O’Neill (2014) studied 2012 NFCS data and found a positive association between high school, college, and workplace financial education and five different (objective and subjective) measures of financial capability.

The New York Public Library financial education evaluation results are noteworthy in two respects. First, classes were delivered over a sustained period of 18 months to a group of participants who generally attended multiple classes. Thus, their exposure to financial education was deeper and more frequent than many of the programs summarized by Collins & O’Rourke (2010) and in the Fernandes et al. (2014) meta-analysis that found limited effects from financial education programs. Participants had ample time to apply the information, both personally and professionally, before the final evaluation data were collected. In addition, program impacts were assessed using an infrequently used methodology (for financial education programs) that is painstakingly thorough, albeit expensive and time-consuming, to administer.

Findings from the assessments of financial education for library professionals, reported above, lend support to efforts by the CFPB, IMLS, the FINRAIEF, and others to enhance the capacity of public libraries as financial information providers. Not only are such programs effective in increasing financial knowledge and self-efficacy (i.e., belief in your ability to succeed in certain situations), but they are also cost-effective because benefits accrue to many people. Unlike programs for the general public that teach people individually, programs for information intermediaries such as teachers, social workers, and librarians, have a significant multiplier effect. One trained professional could easily inform and assist hundreds of consumers over time as the “each one, teach one” principle is applied many times over.

The following quote by New York Public Library (NYPL) Science, Business, and Industry Library (SIBL) director, Kristin McDonough, summarizes the impact financial education can provide for library staff and the patrons that they serve (Tackling Money Matters, n.d.): “*Library staff members traditionally feel hesitant to answer financial questions for fear of litigation and other risks. Money Matters changed the culture across the library system and showed staff that providing people with authoritative resources is not advice, but it is the best kind of help they can give.*”

### **Acknowledgements**

Sincere appreciation is extended to the two researchers who provided independent third-party evaluations for the two financial education programs for public library staff that are described in this paper: Dr. Marie Radford, Professor in the School of Library and Information Science at Rutgers University, New Brunswick, NJ (New York Public Library program) and Dr. Pam Kelley, owner of Kelley Analytics, LLC, Princeton, NJ (Piscataway Public Library program).

### **References**

- Bayer, P.J., Bernheim, B.D., & Scholz, J.K. (2008). The effects of financial education in the workplace: Evidence from a survey of employers. *Economic Inquiry*, 47(4), 605-624.
- Braunstein, S. & Welch, C. (2002 November). Financial Literacy: An overview of practice, research, and policy. *Federal Reserve Bulletin*, 88, 445-457.
- Eberhart, G. M. (2014) Public libraries to take center stage in financial literacy. *American Libraries*. Retrieved from <http://www.americanlibrariesmagazine.org/article/public-libraries-take-center-stage-financial-literacy>.
- Collins, J.M. & O’Rourke, C. M. (2010). Financial education and counseling-Still holding promise. *Journal of Consumer Affairs*, 44(3), 483-498.

- Fernandes, D., Lynch, J.G., & Netemeyer, R.G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors. *Management Science* 60(8): 1861-1883.
- Fernandes, D., Lynch, J.G., & Netemeyer, R. (2012). A meta-analytic and psychometric investigation of the effect of financial literacy on downstream financial behaviors. *Advances in Consumer Research*, 40. Retrieved from [http://www.acrwebsite.org/volumes/v40/acr\\_v40\\_12956.pdf](http://www.acrwebsite.org/volumes/v40/acr_v40_12956.pdf).
- Financial literacy (n.d.). Washington, DC: Institute of Museum and Library Services. Retrieved from [http://www.ims.gov/about/financial\\_literacy.aspx](http://www.ims.gov/about/financial_literacy.aspx).
- FINRAIEF (2014). *National financial capability study: U.S. survey data at a glance*. Washington DC: FINRA Investor Education Foundation. Retrieved from <http://www.usfinancialcapability.org/results.php?region=US>.
- FINRAIEF (2015). *Smart investing @ your library*. Washington DC: FINRA Investor Education Foundation. Retrieved from <http://www.finrafoundation.org/grants/awarded/library/>.
- Flanagan, J.C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327-355.
- Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs*, 39(1), 195-214.
- Hazlett, D.R. (2015). Financial literacy- Product spotlight. *Library Journal*. Retrieved from <http://lj.libraryjournal.com/2015/01/public-services/financial-literacy-product-spotlight/#>.
- Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2014). The 2014 retirement confidence survey: Confidence rebounds-for those with retirement plans. Washington DC: Employee Benefit Research Institute *EBRI Issue Brief No. 397*. Retrieved from [http://www.ebri.org/pdf/surveys/rcs/2014/EBRI\\_IB\\_397\\_Mar14.RCS.pdf](http://www.ebri.org/pdf/surveys/rcs/2014/EBRI_IB_397_Mar14.RCS.pdf).
- Hensley, B.J. (2015). Enhancing links between research and practice to improve consumer financial education and well-being. *Journal of Financial Counseling and Planning*, 26(1), 94-101.
- Hira, T.K. & Loibl, C. (2005). Understanding the impact of employer-provided financial education on workplace satisfaction. *Journal of Consumer Affairs*, 39(1), 173-194.
- Huston, S. J. (2015). Using a financial health model to provide context for financial literacy education research: A commentary. *Journal of Financial Counseling and Planning*, 26(1), 102-104.
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- Joo, S. & Grable, J.E. (2005). Employee education and the likelihood of having a retirement savings program. *Financial Counseling and Planning*, 16(1), 37-49.
- Kim, J., Garman, E.T., & Quach, A. (2005). Workplace financial education participation and retirement savings by employees and their spouses. *Journal of Personal Finance*, 4(3), 92-108.
- Kelley, P. (2014). *Piscataway public library's centsible living staff training evaluation progress report*. Princeton, NJ: Kelley Analytics.
- Klatt, J. & Powell, E.T. (2005). *Quick tips: Using the retrospective post-then-pre design*. Madison, WI: University of Wisconsin-Extension. Retrieved from <http://www.uwex.edu/ces/pdande/resources/pdf/Tipsheet27.pdf>.
- Librarian training (2015). Washington, DC: Consumer Financial Protection Bureau. Retrieved from <http://www.consumerfinance.gov/library-resources/librarian-training/>.
- Lusardi, A. (2003). *Saving and the effectiveness of financial education*. Pension Research Council WP2003-14. Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=476022](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=476022).

- Lyons, A.C., Palmer, L., Jayaratne, K.S., & Scherpf (2006). Are we making the grade? A national overview of financial education and program evaluation. *Journal of Consumer Affairs*, 40(2), 208-235.
- Mcneil, B. & Giesecke, J. (2001). *Core competencies for libraries and library staff*. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.196.3140>.
- Monsour, M. (2013). Libraries innovate with new financial education programs. *Public Libraries Online*. Retrieved from <http://publiclibrariesonline.org/2013/04/libraries-innovate-with-new-financial-education-programs/>.
- O'Neill, B. (2013a). It's the latest, it's the greatest, it's [financial education] at the library. *Journal of Extension*, 51(2). Retrieved from <http://www.joe.org/joe/2013april/iw4.php>.
- O'Neill, B. (2013b). Assessing program impact with the critical incident technique. *Journal of Extension*, 51(3). Retrieved from <http://www.joe.org/joe/2013june/tt2.php>.
- Radford, M. (2013). *Final evaluation report: Money Matters financial education program*. New York: New York Public Library.
- Radford, M. (2012). *Evaluation report 1: Money Matters financial education program*. New York: New York Public Library.
- Radford, M. (2006). The critical incident technique and the qualitative evaluation of the connecting libraries and schools project. *Library Trends*, 55(1), 46-54.
- Radford, M. (1996). Communication theory applied to the reference encounter: An analysis of critical incidents. *The Library Quarterly*, 66(2), 123-137.
- Rutherford, D. (2014). *Building a collection of financial education materials for a library near you*. Washington, DC: Consumer Financial Protection Bureau. Retrieved from <http://www.consumerfinance.gov/blog/building-a-collection-of-financial-education-materials-for-a-library-near-you/>.
- Smith, C.A., & Eschenfelder, K. (2011). Public libraries as financial literacy supporters. Madison, WI: *University of Wisconsin Center for Financial Security Working Paper 2011-CFS.10*. Retrieved from [http://www.cfs.wisc.edu/briefs/ArnottSmithEschenfelder2011\\_PublicLibrariesPaper.pdf](http://www.cfs.wisc.edu/briefs/ArnottSmithEschenfelder2011_PublicLibrariesPaper.pdf).
- Tackling money matters at New York Public Library* (n.d.). Washington, DC: Institute for Museum and Library Services. Retrieved from [http://www.ims.gov/tackling\\_money\\_matters\\_at\\_new\\_york\\_public\\_library.aspx](http://www.ims.gov/tackling_money_matters_at_new_york_public_library.aspx).
- 10 biggest libraries in the world* (n.d.). Retrieved from <http://opishposh.com/10-biggest-libraries-in-the-world/>.
- The 2014 consumer financial literacy survey* (2014). New York: Harris Poll. Retrieved from [http://www.nfcc.org/NewsRoom/FinancialLiteracy/files2013/NFCC\\_2014FinancialLiteracySurvey\\_datash eet\\_and\\_key\\_findings\\_031314%20FINAL.pdf](http://www.nfcc.org/NewsRoom/FinancialLiteracy/files2013/NFCC_2014FinancialLiteracySurvey_datash eet_and_key_findings_031314%20FINAL.pdf).
- What is "financial capability?"* (2013). The Center for Financial Inclusion. Retrieved from <http://cfi-blog.org/2013/11/01/what-is-financial-capability/>.
- Xiao, J.J. & O'Neill, B. (2014). Financial education and financial capability. In V. Mason (Ed.) *Proceedings of the Association for Financial Counseling and Planning Education*, 58-68. Retrieved from <http://www.afcpe.org/wp-content/uploads/2014/05/2014-AFCPE-Symposium-Proceedings-QTY-30.pdf>.

## **Financial Advisor Characteristics and Quality of Advice: Fiduciary and Suitability Standards of Care**

*Joseph E. Goetz<sup>44</sup>, Ph.D., Swarn Chatterjee, Ph.D. & Brenda Cude, Ph.D., University of Georgia*

**Key words:** client communication, ethics, fiduciary, financial advisor, financial planner, professional standards, standards of care, suitability

In order to provide clients with the highest level of service, it is essential that the financial planners and counselors follow a very high level of professional and ethical standards in practice. This paper examines predictors of following a higher standard of practice by financial planners when providing advice to their clients. Results indicate that planners who followed the fiduciary standard of care were more likely to be fair, competent, and diligent in providing advice to clients. Educational attainment is positively associated with integrity, competence, and diligence among planners when providing financial advice to their clients. Compared to the newer financial planners, those with experience of 11 to 19 years of practice experience are also more likely to practice with integrity fairness, and diligence, indicating that the quality of advice that planners provide to their clients improve with experience. Conclusions provide important implications for national regulatory policy changes as well guidance for individual financial planners and counselors in maintaining higher professional standards. Guidance on the implementation of high standards of practice is presented.

### **Description**

This study finds that the financial planners' likelihood of following the principles of integrity, fairness, competence, and diligence vary by standard of care, registration type, experience, and educational attainment. This study also provides new evidence on the potential benefits to consumers of a uniform fiduciary standard and highlights the perceived and potential impacts of raising one's standard of care.

---

<sup>44</sup>Joseph Goetz, Department of Financial Planning, Housing and Consumer Economics, 205 Dawson Hall, Athens, GA 30602-2622, Email: [goetz@uga.edu](mailto:goetz@uga.edu), Phone: 706-542-2066.

# Findings from a Student Loan Debt Repayment Counseling Program Pilot

*Victoria Jacobson<sup>45</sup>, Jeanne Ortega, Mark Tranel, University of Missouri-St. Louis*

**Key words:** counseling, debt repayment, student loan

## Abstract

The Center for Excellence in Financial Counseling (CEFC) at the University of Missouri-St. Louis (UMSL) developed and piloted a unique student loan debt repayment counseling program to help financially distressed borrowers. The self-funded program counseled more than 1,200 borrowers with a total \$65 million in student loan debt during the 25-month pilot. A third-party evaluation of program outcomes demonstrates that borrowers greatly benefited; the majority of respondents indicated that they subsequently lowered their federal monthly payments. CEFC now seeks funding to expand the initiative by establishing a community counseling center on the UMSL campus for student loan borrowers in repayment.

## Introduction

National daily headlines attest to the reality that student loan debt is a significant and often financially debilitating burden for many consumers. According to Department of Education data released in the summer of 2015, nearly seven million borrowers are in default on repayment of their federal student loans. Many student borrowers fall into delinquency or default that could have been avoided if they had been aware of their available federal repayment options. Loan servicers do not always have a complete picture of the borrower's financial situation to properly guide them. Currently, there are few places for borrowers to turn for unbiased assistance in sorting out their available federal student loan repayment options or how to work with private lenders regarding issues with private student loan repayment.

The Center for Excellence in Financial Counseling (CEFC) at the University of Missouri-St. Louis' School of Public Policy and Administration was founded and funded to develop ways of improving the quality and effectiveness of education and counseling that is available to consumers in financial distress. For its first initiative, the organization implemented a pilot program to help consumers who are behind on the repayment of their federal and private student loans, and who, as a result, may have fewer opportunities for financial advancement. This is the first such program in the country to help low- to moderate-income borrowers make informed choices about managing student loan debt.

## Program History

During the *first* stage of this program, conducted in 2006 to 2009, CEFC worked with the National Consumer Law Center's student loan expert to develop and deliver student loan repayment training to nearly 400 credit and housing counselors nationwide to help them diagnose and implement solutions for consumers with student loan repayment issues. Once it became clear that this effort required more follow-up support and oversight as well as quality control with the trainees and their employers, CEFC implemented the *second* stage of the program to combine the counselor training with program reporting procedures. When it became evident that an even more comprehensive approach that included quality control measures and a counseling framework would lead to better results, CEFC developed and implemented a *third* stage of the program, beginning in 2013.

## Overview of Program Development for Stage Three

---

<sup>45</sup>Victoria Jacobson, University of Missouri-St. Louis, 106 Bellerive Hall, St. Louis, MO 63121, [jacobsonv@umsl.edu](mailto:jacobsonv@umsl.edu), 315-516-5191 (phone), 314-516-6416 (fax).



The third stage of the student loan debt repayment counseling program focused on a “checklist” approach to determining a borrower’s available repayment options and required consistent delivery of the counseling protocol by the financial counselor. A literature search conducted for financial counseling models that guide consistent delivery of protocol revealed that no evidence-based financial counseling models existed that assured all clients received the same “treatment.” A search of similar helping fields revealed a behavior-change counseling model used for smoking cessation that had been generalized for other applications. Ultimately, a solution-focused exploration of a borrower’s available repayment options was delivered through a behavior-change counseling model which featured a strong emphasis on post-counseling follow up and confidence building.

Intensive training was provided for counselors in both the technical aspects and implications of distressed student loans as well as behavior-change counseling interventions. Program training and counseling materials were developed and provided under contract by the National Consumer Law Center and the nationally ranked and CACREP-accredited Department of Counseling and Family Therapy at the University of Missouri-St. Louis. The Public Policy Research Center (PPRC) at the University of Missouri-St. Louis provided CEFC consultation regarding program evaluation considerations during the early stages of the program’s development. In addition, each financial counseling provider was paired with a legal services provider so that the borrowers who needed legal help could be referred to a lawyer with student loan knowledge, expertise, and a commitment to help. To implement the third stage of the program, CEFC contracted with three first-rate general financial and credit counseling and education services located in both large and small metropolitan areas. Each of these providers contracted with a legal services partner through CEFC to provide the borrower legal consultation when needed.

Several innovations set this counseling program apart from existing financial and credit counseling services, including:

- an emphasis on the need for scheduled follow-up counseling sessions to monitor client progress;
- a combined emphasis on diagnosis, education, and behavior-change elements reinforced by an individualized prescriptive action plan;
- a contractual relationship with a legal service provider that has expertise, in this case, in student loan repayment;
- close monitoring for implementing program protocol for quality control; and
- professional third-party program evaluation.

## **Implementation**

Financial counseling organizations participating in the pilot program were required to provide student loan repayment counseling as a separate service and not combined with their credit and debt counseling or housing counseling services. Referrals for those services were to be made outside the student loan repayment counseling sessions. Each organization marketed the program through a small stipend provided by CEFC.

A Borrower Intake Form was developed to guide counselors through the checklist of repayment options available to the borrower determined by their loan repayment status with the National Student Loan Data System, and current income. A personal budget was developed for borrowers not in default if they were unable to afford their current repayment plan. For defaulted borrowers, a personal budget was developed to determine if they could afford to get out of default. Action plan tasks were created for each borrower to address both federal and private student loan issues, money management issues, and the borrower’s confidence level in completing the tasks. In follow-up sessions, counselors monitored the borrower’s progress in accomplishing his action plan tasks and revised the action plan with new tasks to be accomplished to reach the borrower’s goals. The intake form was used to monitor counselor performance and overall collection of borrower data for program evaluation. Borrowers who needed legal consultation gave permission to have their completed intake form electronically sent to the participating legal services attorney for review prior to meeting for consultation.

Counselor fidelity to protocol implementation was a major concern in assuring each client borrower’s available repayment options were explored. Borrower intake files were submitted monthly for review of protocol compliance. Counselor teleconferences were conducted monthly to discuss protocol implementation and clarification, or address retraining needs.

CEFC provided monthly base and closely monitored performance-based stipends to the three partnered service providers during the third stage of the program. CEFC and two of these direct providers and their respective legal services partners contracted to continue the program for an additional 12-month period, which began on January 1, 2014. One participating organization, a Community Development Corporation, agreed to extend the program an additional three months in 2015 and continued to report data. The program counseled over 1,200 borrowers during the 25-month pilot with student loan debt totaling nearly \$65 million, with \$50 million in federal student loan debt.

### **Evaluation/Assessment Methodology**

Program evaluation, designed and conducted by PPRC, was challenged by the need to protect the confidentiality of the student loan borrowers served by the participating organizations, in addition to the program's decision not to withhold services to any financially distressed borrowers who sought help with their student loans. A Borrower Survey Questionnaire was created and administered several weeks post counseling through Survey Monkey and excluded all borrower identification information. The survey contained items to capture current and retrospective impressions of the borrower's counseling experience as well as student loan repayment situation. Demographic and diagnostic data was collected from the Borrower Intake Form for analysis.

As a nonprofit, service-oriented initiative, CEFC faced limitations with regard to research methodology and design. To study the question of most interest – exactly how much more effective is the CEFC student loan debt repayment counseling model in helping borrowers find a solution for their repayment obligations compared to a control group – an experimental design would have been the most appropriate method for evaluating the program. Experimental design, however, would have required withholding services to a segment of the target population. Given the immediate and pressing needs of student loan borrowers, utilizing an experimental design raised ethical questions.

Pre/post testing also presented a difficulty in that CEFC was committed to protecting the confidentiality of the student loan borrowers served by participating organizations. Survey Monkey provided the option of submitting responses while excluding all identifying information, including email and IP addresses. The Survey Monkey option was applied in data collection for the Borrower Survey Questionnaire, limiting comparison of data to aggregated statistics. Surveys were developed that incorporated questions that captured current and retrospective impressions of the borrower's student loan repayment situation.

### **Evaluation Results**

Two surveys were circulated to borrowers who had received the student loan borrower repayment counseling. Borrowers were asked questions relating to their student loan situation prior to and after counseling; what they viewed as being the results of counseling; and the level of confidence they felt in dealing with their student loans after meeting with the counselor. The survey response rate was slightly over 20 percent.

Highlights from the program findings include:

- Over 90 percent of borrowers responded that their student loans kept them from achieving their personal goals.
- Nearly 74 percent of counseled borrowers responded that they agreed with the statement, "I wish I had found a counseling program like this sooner."
- Over 57 percent responded that as a result of the counseling they changed their federal repayment plan because they qualified for a lower monthly payment amount.
- Nearly 39 percent of borrowers responded that they knew about their repayment options for their federal loans prior to counseling.
- Over 87 percent of counseled borrowers indicated they felt better informed about their student loan repayment options.
- Nearly 84 percent of borrowers responded that as a result of the counseling they now trust that they will make good financial decisions in relation to their student loan debt.
- Over 66 percent of borrowers indicated they felt less stress about their student loan situation as a result of the counseling.

- Over 53 percent of borrowers indicated they were on time with their student loan payments prior to counseling. Seventy-one percent responded they were making their monthly student loan payments on time as a result of the counseling.

Data analyzed from 955 borrowers showed that the majority of borrowers counseled in the program were in the 30 and under age group, followed by the 51 to 60 age group. Approximately 80 percent of counseled borrowers were employed full-time with nearly 50 percent employed in the field of their education major. Income levels for the majority of borrowers counseled ranged from \$24,000 to \$48,000 annually. Over 51 percent of borrowers counseled had completed their education, earning a degree or certificate; 31 percent indicated they had not completed their education program, and over 17 percent of borrowers did not indicate a completion status.

## **Conclusion**

There is clearly a demonstrated need for outcome-focused, unbiased student loan debt repayment counseling for financially distressed borrowers in repayment. CEFC's student loan debt repayment counseling pilot program has been effective in helping financially distressed borrowers explore their available repayment options and eligibility requirements.

The data show positive responses from borrowers in changes to attitudes and behaviors regarding repayment of their student loan debt and overall money management. Implementation of an evidenced-based behavior-change counseling model delivered by counselors trained in effective counseling communication skills appears to be beneficial to the target audience. Program outcomes would likely be further supported by the ability to verify with the National Student Loan Data System whether counseled borrowers did actually change their federal repayment plan as a result of the counseling. In order to more broadly examine the effectiveness of CEFC's motivational, checklist, no-fee approach to student loan debt repayment counseling, further research is needed to explore in greater depth what the initial survey work has revealed.

With additional funding, CEFC plans to expand the initiative by establishing a replicable community counseling center on the University of Missouri-St. Louis' campus to assist borrowers in repayment of federal and private student loans get on track with repayment of their student loan debt.

# Financial Sophistication and its Impact on the Credit Card Debt Puzzle

*Laura C. Ricaldi<sup>46</sup>, Utah Valley University; Sandra Huston, Texas Tech University*

## Abstract

The credit card debt puzzle is not well understood. Households exhibit inefficient behavior when they have sufficient liquid assets to pay off their credit card balance, but do not. Based on three logistic regression analyses of the 2010 Survey of Consumer Finances, the study discovered that households that display this behavior are more likely to have a lower financial sophistication than convenience users. The findings suggest financially sophisticated households are less likely to display irrational behavior regarding the credit card debt puzzle.

**Key words:** credit card debt puzzle, behavioral life-cycle, financial sophistication, 2010 survey of consumer finances

## Introduction

Household credit card use has been widespread in recent years. Over 70% of U.S. households have a credit card (Bucks, Kennickell, Mach & Moore, 2009). There are two main groups of credit card users: those users who pay off their balance at the end of each month, commonly called convenience users, and those who carry a balance from month to month. These households that carry a balance from month to month are known as revolving credit card users (Kim & DeVaney, 2001). According to the 2007 Survey of Consumer Finances, approximately 46% of families carry a balance on their credit cards. Since 2004, the median balance increased by 25% and the mean balance rose 30.4% (Bucks et al., 2009).

Within the revolving credit card users, there is another group of users who have enough liquid assets to pay the balance of their credit cards but choose not to pay it off. Bi (2005) found that approximately 58% of revolving credit card users have liquid assets in excess of their credit card balance. These users are called solvent revolvers. Previous studies that have investigated this irrational behavior call this the credit card debt puzzle (Laibson, Repetto, & Tobacman, 2001; Haliassos & Reiter, 2005; Bertaut, Haliassos, & Reiter, 2009).

Credit cards usually have high interest rates associated with revolving balances while liquid asset accounts, like checking and money market accounts, typically have low after-tax returns. Given this information, it is inefficient for a household to maintain a revolving balance.

The purpose of this study is to look at the impact of financial sophistication on solvent revolving credit card users and the behavioral factors that affect the decision to be a solvent revolver. Behavioral life cycle theory suggests a household is composed of two dueling selves, the planner and the doer. The planner is the forward-thinking, rational self while the doer is myopic and focused on current consumption (Shefrin & Thaler, 1988). The household makes decisions to satisfy both the planner and doer and may display conflicting and inefficient behaviors, such as the credit card debt puzzle.

## Literature Review

Several studies attempted to explain the credit card debt puzzle, or solvent revolving credit card use, with a number of different factors. Gross and Souleles (2002) found that high credit card balances stem from a person's behavior, not liquidity problems. Behavioral factors in the planner/doer model include human capital, mental accounting/precautionary savings motives, and self-control and time management constraints.

---

<sup>46</sup>Laura C. Ricaldi, Ph.D., MBA, Utah Valley University 800 W. University Parkway, Orem UT 84058.

## Human Capital

The planner/doer model suggests the planner will reduce consumption in the current period by exerting a level of willpower. Since willpower is costly, the planner will resort to other techniques to reduce the consumption of the doer. Some of these techniques include mental accounting and rule setting (Shefrin & Thaler, 1988). In the planner/doer model, the level of human capital can impact financial decisions. Becker (1964) described human capital as an individual's stock of knowledge, health, skills or values. It is a function of goods, services, time and the individual's current stock of human capital. Human capital is often improved through learning, maturity and experiences. In the realm of finance, individuals can improve their human capital by taking financial courses to improve their ability to understand and make effective financial decisions. Individuals can also improve their financial human capital through experiences like using credit cards or taking out a home mortgage. Households with a high level of financial knowledge and experience are considered financially literate or sophisticated; these households are able to make more effective financial decisions than the households with a lower level of financial literacy or sophistication.

Financial sophistication gives the household the potential to improve their ability to make better financial decisions. The households with a higher level of financial sophistication tend to be aware of the consequences of their decisions. Bertaut, Haliassos, and Reiter (2009) suggested that financially sophisticated households would be convenience users of credit cards as well as benefit from floating and other advantages of credit cards. Although, some financially sophisticated households display characteristics that are not sophisticated. For example, Haliassos and Reiter (2005) found that in the shopper/accountant model, the shopper is not fully financially sophisticated. The accountant/shopper model is similar to the planner/doer model.

### *Mental Accounting and Framing*

In order to control the doer, the planner creates mental accounts to reduce the temptation to spend from them. Households divide assets, expenditures and income into different categories or mental accounts. An economist would state that these accounts are substitutable, but in reality, they are not (Thaler, 1999). The household views the mental accounts, either assets or expenses, as different things and marginal propensity to consume from these accounts are different. For example, households save money in an emergency fund account to prepare for an uncertain event. The household uses framing to earmark these accounts for difference purposes. Households that save in liquid accounts for emergencies or unexpected events do not believe the assets are substitutable for other assets or expenses.

When households use mental accounting for expenses, especially with credit cards, they decouple the payment from the consumption. Once the bill is received, the purchase is mixed with other purchases. Thaler (1999) stated that it is hard for the consumer to attribute the balance to any particular purchase; therefore the consumer carries a balance from month to month. Since households have mental accounts, they will not view accounts used for savings as available to pay off credit card balances since these accounts are not substitutable.

Uncertainty and precautionary savings motives play a role in mental accounting. Telyukova and Wright (2008) proposed that households would stay solvent revolvers to maintain sufficient liquid assets for uncertain future events. Bi and Hanna (2006) found that households will display the credit card debt puzzle when precautionary savings motives are present.

### *Self-control*

Although the planner creates mental accounts to control the doer, the individual must exhibit self-control. An individual displays self-control issues by either postponing action (e.g., procrastination) or by consuming immediately (e.g., no willpower to wait). Households that display self-control issues either consume all of their resources without saving or paying debt, or put off making critical decisions. One study showed that in an accountant/shopper household, the accountant would choose not to pay off the credit card balance in order to impose control over the shopper (Bertaut, Haliassos, & Reiter, 2009). By reducing the available limit on the credit card, the shopper is unable to consume more.

Other studies have identified other behavioral factors that affect solvent revolving credit card use. Credit attitude

and bankruptcy history are often considered when households exhibit the credit card debt puzzle. First, Chien and DeVaney (2001) found that a positive credit attitude was related to a higher credit card balance. Rutherford and DeVaney (2009) found that those households that had a positive attitude toward credit are less likely to be convenience users.

## **Framework and Concepts**

Other studies evaluate how the credit card debt puzzle and the relevant behavioral factors are related. To find how behavioral factors, like financial sophistication, will influence the likelihood of being a solvent revolver, this study uses a combination of the behavioral life-cycle hypothesis and human capital theory.

Like the life-cycle hypothesis, the behavioral life-cycle hypothesis (Shefrin & Thaler, 1988) suggests that in order to maximize utility, a household will shift resources in periods where the marginal utility of consumption is relatively low to periods where the marginal utility of consumption is relatively high. A good example of this is when households save during the working years for consumption during retirement years. Unlike the traditional life-cycle hypothesis, the behavioral life-cycle hypothesis posits that households have a dual preference framework where they are both planners (long-term) and doers (short-term). The planner preference is when households make rational decisions regarding when to shift resources to maximize utility. The planner focuses on long-term decisions to maximize utility. The doer preference, or short-term preference, is when households succumb to temptation to consume in the current period. The three behavioral factors, self-control, mental accounting, and framing, are what make the behavioral life-cycle hypothesis different from other life-cycle models.

Self-control refers to the household's temptation to make immediate consumption decisions, rather than saving for future consumption. For the doer, immediate consumption is always a tempting alternative to future consumption. There is discomfort for the doer associated with postponing current consumption; therefore, the planner will enforce saving devices and rules of thumb to deal with self-control issues for various situations. These are types of external rules that households use to plan for future consumption. Households also use internal rules, like refusing to borrow for current consumption, to maintain self-control.

Mental accounting refers to placing wealth into different non-substitutable accounts. The typical breakdown of mental accounts is current income, current assets, and future income (Shefrin & Thaler, 1988). Households use mental accounting to restrict the doer from bringing future resources into the current period. The way a household frames the different mental accounts determines the temptation to spend from each account. Each account has a different level of temptation associated with spending from it. The marginal propensity to consume from the current income account is much higher than the marginal propensity to consume from the future income account. Temptation plays an important role in the household's decision to spend or save.

By carrying a credit card balance, the doer is bringing consumption into the current period. The households that are solvent (i.e., households who have enough liquid assets to pay off their balance but do not) are not displaying the planner behavior, but are displaying the doer behavior. In contrast, convenience users are keeping future resources in future periods by paying off the balance while still benefiting from the advantages of using a credit card. In addition to the behavioral life-cycle hypothesis, human capital theory also plays a part in solvent revolving credit card use. Human capital is an individual's knowledge, health, skills or values and is often described as a function of goods, services, time and the individual's current stock of human capital. A household's level of human capital impacts its ability to make efficient financial decisions. Households with a higher level of financial human capital (i.e., financial sophistication) have the potential to improve the ability to make effective and efficient financial decisions.

Based on the theoretical framework, the concepts developed for this paper include human capital, mental accounting/precautionary savings motives, time constraint/self-control factors, and other control factors. The concepts serve as control factors to help explain why households display puzzling behavior that is inefficient. Several hypotheses are developed. First, solvent credit card revolvers will have a lower level of financial human capital (less financially sophisticated) than convenience users. Next, solvent credit card revolvers will be more likely to display mental accounting behaviors and have higher precautionary savings motives. Last, solvent credit card revolvers will be more likely to experience time constraint/self-control factors. Time constrained households will be younger, have more children, work more hours per week, and be less likely to pay their bills on time.

## Method

### *Data and Sample*

The data used were from the 2010 Survey of Consumer Finances (SCF), a triennial survey, which is sponsored by the Federal Reserve Board and collected by the National Organization for Research at the University of Chicago. The SCF collects detailed information on the finances of U.S. households. The 2010 SCF included 6,492 households in the public data set. Since this study only analyzes those households that have a credit card, the sample is limited to 4,433 observations. The 2010 SCF contains five imputates to deal with missing and incomplete data; only the first impute was used in this study.

### *Dependent Variable*

The dependent variable was constructed by categorizing credit card users into one of three categories. First, solvent credit card users have liquid assets greater than or equal to the balance still owed on their main credit card after the last payment was made to the account. The total liquid assets is derived from the Federal Reserve Board definition in the net worth code. Next, insolvent credit card users have liquid assets less than the balance still owed on their main credit card after the last payment was made to the account. Last, convenience credit card users do not have an outstanding balance on their main credit card.

Three logistic regressions were run to establish if there are differences between several combinations of the dependent variable groups. For the first regression, the dependent variable was coded as 1 if the household is a revolving credit card user and 0 if the household is a convenience user. This regression was run to compare the differences between all revolvers and convenience users of credit cards. It is important to distinguish the difference between the two general groups of credit card users before breaking down the revolving group into a specific type of revolvers. After comparing the general groups of credit card users, it is important to evaluate the differences between the two specific types of revolving credit card users. For the second logistic regression, the dependent variable was coded as 1 if the household is a solvent revolving user and 0 if the household is an insolvent revolving user. For the third logistic regression, the dependent variable was coded as 1 if the household is a solvent revolving user and 0 if the household is a convenience user. This regression was run because the solvent revolving user has the ability to be a convenience user, but chooses not to pay off the debt. It is important to establish the differences between these two groups to explain why households remain solvent revolvers.

### *Independent Variables*

Based on the behavioral life-cycle hypothesis and human capital theory, four concepts were identified: human capital, mental accounting/precautionary savings motives, time constraint/self-control factors, and other control factors. Independent variables operationalized these concepts.

The human capital concept explains the household's potential to make effective decisions. Households that do not have a strong base in financial human capital (i.e., financial sophistication) tend to make suboptimal financial decisions (Bertaut, Haliassos, & Reiter 2009). Since the purpose of this study is to evaluate the financial sophistication of solvent revolvers, this concept is the main focus. The human capital concept was measured by two independent variables, financial sophistication and education. Financial sophistication represents a specific type of human capital while education represents a general type of human capital. The variables that make up this concept represent why the household makes suboptimal decisions and does not pay off their credit card balance even though the household has the resources to do so.

Huston, Finke and Smith (2012) developed a financial sophistication score based on a factor analysis of the Survey of Consumer Finances. The score includes four variables: stock ownership (within or outside of tax sheltered accounts), willingness to accept at least some investment risk, not revolving more than 50% of credit card limit, and the level of understanding of personal finance. The indirect measure of financial sophistication is based on observed and self-reported behavioral variables instead of directly measured financial literacy. A direct measure of financial knowledge, ability and confidence is more effective at determining financial sophistication, but the SCF does not contain such variables.

The score is broken into five quintiles to see the magnitude between the groups of credit card users. Quintile 1 is the most sophisticated while Quintile 5 is the least sophisticated. The most sophisticated quintile (#1) was omitted for the regression analyses as the reference group.

The second variable included in the human capital concept is the level of education for the head of household. Education represents a general type of human capital. The level of education was categorized as: less than high school, high school degree, some college, and college degree. The high school degree variable was the reference group for the regression analyses.

The mental accounting concept relates to how the planner controls the doer's consumption by using various mental accounts. Past literature shows that households maintain solvent revolving due to mental accounting and the framing of the different accounts. With the behavioral life-cycle hypothesis, households do not view mental accounts as substitutable. Households do not tend to use emergency savings accounts to pay credit card balances if they are not in an emergency situation. The variables that make up this concept represent why the household will maintain liquid assets in excess of their credit card balance and maintain their status as a solvent revolver.

Mental accounting was measured by six independent variables. The first variable, saving for emergencies, was constructed by combining two variables: if the household indicated they had a savings motive for emergencies or other unexpected needs and if they stated a positive amount for a subjective emergency fund. The variable was coded as 1 if the household had a motive to save for emergencies and 0 otherwise. The second variable, saving for unemployment, was also constructed by combining two variables: if the household stated they had a savings motive for unemployment and if they expect their future income will decrease in comparison with prices in the next year. The variable was coded as 1 if the household had a motive to save for unemployment and 0 otherwise. The third variable, saving for illness, was constructed by combining two variables: if the household stated they had a savings motive for in case of illness or future medical expenses and if they have a poor health status. The variable was coded as 1 if the household had a motive to save for illness and 0 otherwise. The fourth variable is the household's ability to borrow \$3,000 from friends or relatives in an emergency. The variable was coded as 1 if the household was able to borrow and 0 if the household was not able to borrow from friends or relatives. The fifth variable is if either the head of household or the spouse is self-employed. The variable was coded as 1 if self-employed and 0 if not self-employed. The last variable is the number of liquid accounts a household owns. This variable is a summation of the number of checking accounts and the number of savings/money market accounts owned by the household. The number of liquid accounts is coded as a continuous variable.

The time constraint/self-control concept is included since households have limited time to make financial decisions. Households also display self-control issues regarding financial decision making. Self-control plays a role in the household's susceptibility to give in to temptation to spend/consume during the current period. Households also put off making complex financial decisions. Time-constrained households will procrastinate paying off the balance on their credit cards. The variables that make up this concept represent the time constraints a household encounters that retain the household's status as a solvent revolver.

The time constraint/self-control concept was comprised of number of children, past payment history, number of hours worked per week, bankruptcy history, and credit attitude. First, having children reduces the amount of time an individual has to devote to making financial decisions. The number of children was coded as a continuous variable. The second variable is the past payment history of all loans, mortgages and credit cards made during the past year. The variable was coded as 1 for those households who made payments on schedule or had no payments and 0 for those who were behind or missed payments. The on time/no payments category was the reference group for the regression analyses. The third variable for this concept is the number of hours worked in a week. The variable was coded as a categorical variable with 0 hours as not working, 1 to 39 hours a week as working less than full time, and greater than or equal to 40 hours per week as working full time. The reference group is the not working category. Past literature shows that a household maintains solvent revolving due to credit attitude and bankruptcy history. The household's credit attitude was measured by their feelings about using credit. The variable was coded as positive if the household feels credit is a good idea, ambivalent if the household feels credit is good in some ways and bad in others, and negative if they feel credit is a bad idea. The ambivalent credit attitude group was the reference group for the regression analyses. Last, bankruptcy history was coded 1 if the household has ever filed for bankruptcy, or 0 if they have never filed for bankruptcy.

The lifecycle factors concept is included since households make decisions based on being in different stages of the lifecycle. The variables that make up this concept represent why the household will maintain liquid assets in excess of their credit card balance and maintain their status as a solvent revolver.



The concept was measured using age, gender, marital status, and income. First, age was coded categorically as under 35, between 35 and 55, and over 55. The age category over 55 is the reference group for the regression analyses. Next, gender and marital status are included in the analysis. Gender is coded as male or female and male is the reference category for the regression analyses. Marital status is coded as married or not married. The married category is the reference group. Last, household income is a continuous variable. Income is scaled by \$10,000 to see the magnitude and its effect in each of the regressions.

#### *Analysis of Data*

Descriptive statistics were conducted to look at the characteristics of households. To generalize the findings back to the U.S. population, the descriptive statistics were weighted using a weight variable provided by the Federal Reserve (Lindamood, Hanna & Bi, 2007). Since the dependent variables are binary, logistic regression was used to predict the likelihood of the dependent variable occurring given the set of independent variables. The regression analyses were not weighted (Lindamood, Hanna & Bi, 2007).

## **Results**

#### *Descriptive Statistics*

Since the descriptive statistics are weighted, the reported percentages, means, and standard errors represent all U.S. households. See Table 1.1 for a summary of the descriptive statistics.

| Table 1.1: Descriptive Statistics for Credit Card Users. |                       |                     |                     |
|--|-----------------------|---------------------|---------------------|
|  | Insolvent<br>Revolver | Solvent<br>Revolver | Convenience<br>User |
|  | n=985                 | n=949               | n=2,499             |
| Population Percent                                       | 27.43                 | 25.06               | 47.51               |
| <b>Human Capital</b>                                     |                       |                     |                     |
| Financial Sophistication                                 |                       |                     |                     |
| Quintile 1 (most sophisticated)                          | 8.46                  | 18.92               | 27.16               |
| Quintile 2   | 11.02                 | 18.53               | 26.01               |
| Quintile 3   | 25.46                 | 19.76               | 16.97               |
| Quintile 4   | 29.11                 | 21.5                | 13.95               |
| Quintile 5 (least sophisticated)                         | 25.95                 | 21.29               | 15.92               |
| Education  |                       |                     |                     |
| Less than high school                                    | 8.64                  | 6.42                | 4.71                |
| High school graduate                                     | 31.12                 | 27.68               | 24.41               |
| Some college   | 20.11                 | 23.1                | 14.87               |
| College degree   | 40.13                 | 42.8                | 56.02               |
| <b>Mental Accounting/Precautionary Savings Motives</b>   |                       |                     |                     |
| Saving for Emergencies                                   | 40.04                 | 38.38               | 36.21               |
| Saving for Unemployment                                  | 3.63                  | 3.77                | 3.13                |
| Saving for Illness                                       | 3.78                  | 3.9                 | 5.86                |
| Ability to borrow from friends/relatives                 | 37.12                 | 28.04               | 20.76               |
| Self Employed  | 15.69                 | 15.71               | 17.38               |
| Number of liquid accounts                                | 0.4889<br>(0.0159)    | 0.7327<br>(0.0144)  | 0.6958<br>(0.0092)  |
| <b>Time Constraint/Self-control Factors</b>              |                       |                     |                     |
| Number of Children                                       | 1.0145<br>(0.0390)    | 0.8543<br>(0.0378)  | 0.6038<br>(0.0201)  |
| Payment History  |                       |                     |                     |
| On time/ No payment                                      | 70.86                 | 85.51               | 96.56               |
| Behind   | 29.14                 | 14.49               | 3.44                |
| Number of hours worked in a week                         |                       |                     |                     |
| Not working  | 21.02                 | 21.53               | 36.32               |
| Working less than full time (1 to 39 hrs)                | 15.18                 | 14.52               | 10.97               |
| Working full time ( $\leq 40$ hrs)                       | 63.8                  | 63.95               | 52.71               |
| Credit attitude  |                       |                     |                     |
| Positive   | 24.47                 | 25.77               | 21.67               |
| Ambivalent   | 43.88                 | 45.93               | 44.65               |

|  |                           |                           |                            |
|--|---------------------------|---------------------------|----------------------------|
| Negative   | 31.65                     | 28.31                     | 33.68                      |
| Bankruptcy history   | 19.53                     | 11.85                     | 4.52                       |
| <b>Lifecycle Factors</b>   |                           |                           |                            |
| Age  |                           |                           |                            |
| Under 35   | 19.95                     | 20.79                     | 14.21                      |
| 35 to 55   | 52.21                     | 45.5                      | 32.19                      |
| Over 55  | 27.84                     | 33.71                     | 53.6                       |
| Gender   |                           |                           |                            |
| Male   | 75.59                     | 79.43                     | 78.4                       |
| Female   | 24.41                     | 20.57                     | 21.6                       |
| Marital Status   |                           |                           |                            |
| Married  | 56.55                     | 59.14                     | 61.88                      |
| Not married  | 43.45                     | 40.86                     | 38.12                      |
| Income   | \$64,990.41<br>(1,731.65) | \$77,964.79<br>(2,892.96) | \$129,897.18<br>(9,590.03) |
| Source: 2010 Survey of Consumer Finances. Statistics derived from weighted analysis of one implicate.<br>(Mean (standard error) for continuous variables; column percents for categorical variables) (n=4,433) |                           |                           |                            |

Insolvent Revolvers. Overall 27.43% of the sample are considered insolvent revolvers. About 20% of the respondents are in the top two quintiles of financial sophistication, with 8.46% in the top (most literate) quintile and 11.02% in the second quintile.

Solvent Revolvers. Overall 21.41% of the sample are considered solvent revolvers. About 18% of the respondents are in each of the top two quintiles of financial sophistication. Over 50% of the respondents have a high school education, and about 42% have a college degree.

Convenience Users. Overall 47.51% of the sample is considered convenience users. About 53% of the respondents are in the top two quintiles of financial sophistication, with 27.16% in the top (most literate) quintile and 26.01% in the second quintile. The majority of the respondents have a college degree (56.02%).

#### *Results of Logistic Regression: All Revolvers Compared to Convenience Users*

The results for the logistic regression to compare all revolvers to convenience users of credit cards are presented in Table 1.2. Odds ratios compare the magnitude of the effect that each independent variable had on the dependent variable. This regression distinguishes the difference between the two general groups of credit card users before breaking down the revolving group into a specific type of revolvers.

| Table 1.2: Logistic Regressions in the 2010 SCF        |  |                   |              |  |                   |              |  |                   |              |
|--|--|-------------------|--------------|--|-------------------|--------------|--|-------------------|--------------|
|  | Regression #1: Revolving User Compared to Convenience User |                   |              | Regression #2: Insolvent Revolving User Compared to Solvent Revolving User |                   |              | Regression #3: Solvent Revolving User Compared to Convenience User |                   |              |
|  | Param. Estimate  | p                 | Odds Ratio   | Param. Est.  | p                 | Odds Ratio   | Param. Est.  | p                 | Odds Ratio   |
| Intercept  | <b>-0.8003</b>   | <b>&lt;0.0001</b> |              | -0.289   | 0.2934            |              | <b>-1.4273</b>   | <b>&lt;0.0001</b> |              |
| <b>Human Capital</b>                                   |  |                   |              |  |                   |              |  |                   |              |
| Financial Sophistication                               |  |                   |              |  |                   |              |  |                   |              |
| Quintile 2   | 0.0676   | 0.5328            | 1.07         | 0.2615   | 0.1622            | 1.299        | -0.0157  | 0.8981            | 0.984        |
| Quintile 3   | <b>0.9527</b>  | <b>&lt;0.0001</b> | <b>2.593</b> | <b>0.9941</b>  | <b>&lt;0.0001</b> | <b>2.702</b> | <b>0.537</b>   | <b>&lt;0.0001</b> | <b>1.711</b> |
| Quintile 4   | <b>1.0287</b>  | <b>&lt;0.0001</b> | <b>2.797</b> | <b>0.8725</b>  | <b>&lt;0.0001</b> | <b>2.393</b> | <b>0.6804</b>  | <b>&lt;0.0001</b> | <b>1.975</b> |
| Quintile 5   | <b>1.0129</b>  | <b>&lt;0.0001</b> | <b>2.753</b> | <b>0.7755</b>  | <b>&lt;0.0001</b> | <b>2.172</b> | <b>0.6841</b>  | <b>&lt;0.0001</b> | <b>1.982</b> |
| Education  |  |                   |              |  |                   |              |  |                   |              |
| Less than high school                                  | 0.2995   | 0.1055            | 1.349        | -0.0063  | 0.9767            | 0.994        | 0.2724   | 0.2089            | 1.313        |
| Some college   | 0.0269   | 0.8166            | 1.027        | -0.2665  | 0.0633            | 0.766        | 0.082  | 0.537             | 1.085        |
| College degree   | <b>-0.2936</b>   | <b>0.0018</b>     | <b>0.746</b> | 0.0784   | 0.5282            | 1.082        | <b>-0.3756</b>   | <b>0.0008</b>     | <b>0.687</b> |
| <b>Mental Accounting/Precautionary Savings Motives</b> |  |                   |              |  |                   |              |  |                   |              |

|   |                |                   |              |                |                   |              |                |                   |              |
|---|----------------|-------------------|--------------|----------------|-------------------|--------------|----------------|-------------------|--------------|
| Saving for Emergencies  | 0.1034         | 0.1712            | 1.109        | 0.0997         | 0.3288            | 1.105        | 0.0893         | 0.3116            | 1.093        |
| Saving for Unemployment   | -0.034         | 0.8671            | 0.967        | -0.2436        | 0.3396            | 0.784        | 0.102          | 0.6529            | 1.107        |
| Saving for Illness  | -0.2549        | 0.1553            | 0.775        | -0.3769        | 0.1424            | 0.686        | -0.0711        | 0.732             | 0.931        |
| Ability to borrow from friends/relatives  | <b>0.3112</b>  | <b>0.0004</b>     | <b>1.365</b> | 0.0317         | 0.7755            | 1.032        | <b>0.2524</b>  | <b>0.014</b>      | <b>1.287</b> |
| Self Employed   | <b>-0.3901</b> | <b>&lt;0.0001</b> | <b>0.677</b> | -0.1251        | 0.347             | 0.882        | <b>-0.3505</b> | <b>0.0013</b>     | <b>0.704</b> |
| Number of Liquid Accounts   | <b>-0.2394</b> | <b>0.0024</b>     | <b>0.787</b> | <b>-1.0123</b> | <b>&lt;0.0001</b> | <b>0.363</b> | <b>0.2476</b>  | <b>0.0106</b>     | <b>1.281</b> |
| <b>Time Constraint/Self-control Factors</b>   |                |                   |              |                |                   |              |                |                   |              |
| Number of children  | <b>0.0886</b>  | <b>0.0168</b>     | <b>1.093</b> | 0.0668         | 0.1451            | 1.069        | 0.0363         | 0.4035            | 1.037        |
| Payment History   |                |                   |              |                |                   |              |                |                   |              |
| Behind  | <b>1.5356</b>  | <b>&lt;0.0001</b> | <b>4.644</b> | <b>0.7566</b>  | <b>&lt;0.0001</b> | <b>2.131</b> | <b>1.173</b>   | <b>&lt;0.0001</b> | <b>3.232</b> |
| Number of hours worked in a week  |                |                   |              |                |                   |              |                |                   |              |
| Working less than full time (1-39 hrs)  | <b>0.8278</b>  | <b>&lt;0.0001</b> | <b>2.288</b> | 0.0903         | 0.6176            | 1.094        | <b>0.7983</b>  | <b>&lt;0.0001</b> | <b>2.222</b> |
| Working full time (≥40 hrs)   | <b>0.7772</b>  | <b>&lt;0.0001</b> | <b>2.175</b> | 0.1702         | 0.2526            | 1.186        | <b>0.7345</b>  | <b>&lt;0.0001</b> | <b>2.085</b> |
| Credit attitude   |                |                   |              |                |                   |              |                |                   |              |
| Positive  | 0.0744         | 0.4158            | 1.077        | -0.0191        | 0.8765            | 0.981        | 0.0853         | 0.418             | 1.089        |
| Negative  | <b>-0.2794</b> | <b>0.0011</b>     | <b>0.756</b> | 0.0814         | 0.4886            | 1.085        | <b>-0.3013</b> | <b>0.0029</b>     | <b>0.74</b>  |
| Bankruptcy history  | <b>1.0511</b>  | <b>&lt;0.0001</b> | <b>2.861</b> | <b>0.554</b>   | <b>0.0001</b>     | <b>1.74</b>  | <b>0.7006</b>  | <b>&lt;0.0001</b> | <b>2.015</b> |
| <b>Lifecycle Factors</b>  |                |                   |              |                |                   |              |                |                   |              |
| Age   |                |                   |              |                |                   |              |                |                   |              |
| 35 to 55  | 0.0827         | 0.465             | 1.086        | 0.1425         | 0.3014            | 1.153        | 0.0184         | 0.8883            | 1.019        |
| Over 55   | <b>-0.5555</b> | <b>&lt;0.0001</b> | <b>0.574</b> | -0.1162        | 0.474             | 0.89         | <b>-0.4867</b> | <b>0.0008</b>     | <b>0.615</b> |
| Gender  |                |                   |              |                |                   |              |                |                   |              |
| Female  | -0.0902        | 0.4626            | 0.914        | 0.3046         | 0.0521            | 1.356        | -0.1949        | 0.1788            | 0.823        |
| Marital Status  |                |                   |              |                |                   |              |                |                   |              |
| Not married   | 0.0755         | 0.472             | 1.078        | -0.2365        | 0.0841            | 0.789        | 0.1607         | 0.1836            | 1.174        |
| Income/\$10,000   | <b>-0.0182</b> | <b>&lt;0.0001</b> | <b>0.982</b> | <b>-0.0179</b> | <b>0.0056</b>     | <b>0.982</b> | <b>-0.0128</b> | <b>&lt;0.0001</b> | <b>0.987</b> |
| Source: 2010 Survey of Consumer Finances. Statistics derived from an unweighted analysis of one implicate. Bolded values are significant at the 0.05 level. |                |                   |              |                |                   |              |                |                   |              |

Most of the human capital variables are significantly related to the likelihood of being a revolving user. Compared to the group with the highest financial sophistication, those in quintile 3 are 159.3% more likely to be revolvers, those in quintile 4 are 179.7% more likely to be revolvers, and those in the least sophisticated quintile (quintile 5) are 175.3% more likely to be revolvers.

#### *Results of Logistic Regression: Solvent Revolvers Compared to Insolvent Revolvers*

The results for the logistic regression for solvent revolvers compared to insolvent revolvers of credit cards are presented in Table 1.2 – center columns. Odds ratios compare the magnitude of the effect that each independent variable had on the dependent variable. After comparing the general groups of credit card users, it is important to evaluate the differences between the two specific types of revolving credit card users, solvent and insolvent revolvers. Only the financial sophistication quintiles are significantly related to the likelihood of being an insolvent revolver.

Compared to the group with the highest financial sophistication, those in quintile 3 are 170.2% more likely to be insolvent revolvers, those in quintile 4 are 139.3% more likely to be insolvent revolvers, and those in the least sophisticated quintile (quintile 5) are 117.2% more likely to be insolvent revolvers.

### *Results of Logistic Regression: Solvent Revolvers Compared to Convenience Users*

The results for the logistic regression for solvent revolving users of credit cards compared to convenience users are presented in Table 1.2 – right columns. Odds ratios compare the magnitude of the effect that each independent variable had on the dependent variable. Since the solvent revolver has the ability to be a convenience user, it is important to distinguish the differences between the two groups and explain why households remain solvent revolvers.

Many of the human capital variables are significantly related to the likelihood of being a solvent revolver user of credit cards. Compared to the group with the highest financial sophistication, those in quintile 3 are 71.1% more likely to be solvent revolvers, those in quintile 4 are 97.5% more likely to be solvent revolvers, and those in quintile 5 are 98.2% more likely to be solvent revolvers.

### **Summary and Implications**

The research investigates the differences in behavioral characteristics of solvent revolving users of credit cards and the effect of financial sophistication on credit card behavior. There is still much research that needs to be done on the credit card debit puzzle. The purpose of this study is to evaluate solvent revolving credit card users and their financial sophistication compared to insolvent revolvers and convenience users of credit cards. Based on the behavioral life-cycle hypothesis and human capital theory, the results provide an extension of the current literature. Human capital plays a role in the decision to display the credit card debt puzzle. Regarding specific financial human capital, solvent credit card revolvers have a lower level of financial sophistication than convenience users. In addition, solvent revolvers are more financially sophisticated than insolvent revolving users. This finding supports previous literature that solvent revolvers are not financially sophisticated (Hailassos & Reiter, 2005; Bertaut, Haliassos, & Reiter, 2009). In regard to general human capital, solvent credit card users are less likely to have college degrees compared to convenience users. Households should seek as much financial knowledge as possible or invest in the assistance from a financial planner or counselor when making critical financial decisions. Uncertainty and mental accounting does not seem to have a large impact on households that exhibit solvent revolving. Hypothesis 2 suggests that solvent revolvers would be more likely to display mental accounting and have higher precautionary savings motives. Contrary to other studies however, there is no significant support for this hypothesis (Bi & Hanna, 2006; Telyukova & Wright, 2008). Self-employed households are less likely to be revolvers in general and less likely to be solvent revolvers. This finding suggests that households that are self-employed use credit cards for convenience purposes. Last, with every one unit increase in liquid accounts, households are more likely to be solvent revolvers. This finding suggests that households that save liquid assets in different accounts will choose not to pay off their credit card balance with those earmarked funds. Those who use mental accounting to control the doer will have more liquid accounts compared to convenience users who have the self-control to not spend now.

The findings significantly support time constraint factors and the likelihood of being a solvent revolver. Hypothesis 3 suggests that solvent revolvers would be more likely to have more children, be less likely to pay their bills on time, work more hours during the week, have a positive attitude toward credit, and have filed for bankruptcy in the past. First, when compared with those who are on time with their loan payments, the households that are behind are five times more likely to be solvent revolvers. Also, the number of hours worked per week, both less than full time and full time, is significantly related to a household being a solvent revolver. These time constraint factors suggest that as a household becomes busier, the more likely it is to not use liquid assets to pay off the credit card balance, thus maintaining the status as a solvent revolver. Next, a household's self-control variables play a role in solvent revolving. Households that have a positive attitude toward credit and have a history of bankruptcy are more likely to be solvent revolvers.

Financial planners, counselors, and educators should help households understand how a positive attitude toward credit can negatively impact financial decisions. A change in behavior is necessary, especially since revolving credit card users believe it is okay to spend now and pay later. Since time constraint and self-control factors have such an impact on solvent revolving tendencies, financial planners, counselors and educators should help clients identify debt management issues as well as increase their awareness of the importance of making payments on time. The client would benefit from a change in behavior to maximize utility and avoid making inefficient decisions. In regards to the lifecycle factors, solvent revolvers are more likely to be younger and have a lower household income. First, when compared to households under age 35, those households over age 55 are less likely to be

solvent revolvers. Last, with every increase of income by \$10,000 the likelihood of being a solvent revolver decreases by only 1.3%. This finding suggests that solvent revolving credit card use is behavioral and not based on income. This finding also supports previous research found by Gross and Souleles (2002) in that higher credit card balances stem from behavioral factors.

To facilitate the education process for solvent households, there are two steps. One, planners, counselors, and educators must teach the client about behavioral biases that exist when making financial decisions. Two, financial planners, counselors, and educators should teach clients about the inefficiency associated with solvent revolving. The first step is to educate the client about behavioral biases. Since behavioral biases affect most individuals, it is important to know about them in order to diminish some of the unfavorable effects. Financial planners, counselors and educators can help the consumer develop strategies to control the inefficient behavior and implement appropriate behavior. First, the consumer can set up automatic payments toward their credit card balance. This would reduce the credit card balance while decreasing the likelihood of consumers missing or being behind on their payments. Next, the planner, counselor or educator should help the client set realistic goals for paying off the debt and help the client understand their motives for saving.

The next step in helping solvent revolvers understand their inefficient behavior is to educate them as to why the behavior is inefficient. Education about interest rates, savings accounts, and the tradeoff between holding a balance on a credit card and paying off the balance using savings is essential. Following these steps can allow financial planners help clients build wealth instead of exhibiting inefficient behaviors.

## Appendix

Solvent revolvers have the knowledge and ability to be convenience users, but are not. To investigate this further, convenience users and solvent revolvers in the top quintile of financial sophistication are analyzed. The descriptive statistics for the two groups is shown in Table 1.3.

| Table 1.3: Descriptive Statistics for the Top Quintile of Solvent Revolvers and Convenience Credit Card Users. |   |          |   |
|--|---|----------|---|
|  | Solvent Revolvers in the Top Quintile of Financial Sophistication |          | Convenience Users in the Top Quintile of Financial Sophistication |
|  | n=194   |          | n=804   |
| Population Percent   | 9.07  |          | 24.7  |
| <b>Human Capital</b>   |   |          |   |
| Education  |   |          |   |
| Less than high school  | 0.72  |          | 0.69  |
| High school graduate   | 16.98   |          | 13.52   |
| Some college   | 14.69   |          | 12.76   |
| College degree   | 67.61   |          | 73.03   |
| <b>Mental Accounting/Precautionary Savings Motives</b>   |   |          |   |
| Saving for Emergencies   | 43.21   |          | 37.27   |
| Saving for Unemployment  | 2.69  |          | 2.45  |
| Saving for Illness   | 4.37  |          | 4.27  |
| Ability to borrow from friends/relatives   | 16.15   |          | 12.32   |
| Self Employed  | 19.43   |          | 19.84   |
| Number of Liquid Accounts  | 0.7977  | (0.0289) | 0.7551 (0.0152)   |
| <b>Time Constraint Factors</b>   |   |          |   |
| Number of Children   | 0.7991  | (0.0764) | 0.6472 (0.0349)   |
| Payment History  |   |          |   |
| On time/ No payment  | 90.62   |          | 97.73   |
| Behind   | 9.38  |          | 2.27  |
| Number of hours worked in a week   |   |          |   |
| Not working  | 11.66   |          | 24.1  |
| Working less than full time (1-39 hrs)   | 11.18   |          | 12.13   |

|   |                            |                             |
|---|----------------------------|-----------------------------|
| Working full time (≤40 hrs)   | 77.16                      | 63.77                       |
| Credit attitude   |                            |                             |
| Positive  | 22.64                      | 24.23                       |
| Ambivalent  | 52.73                      | 46.22                       |
| Negative  | 24.63                      | 29.54                       |
| Bankruptcy history  | 6.87                       | 3.38                        |
| <b>Lifecycle Factors</b>  |                            |                             |
| Age   |                            |                             |
| Under 35  | 22.33                      | 14.92                       |
| 35 to 55  | 46.58                      | 38.98                       |
| Over 55   | 31.09                      | 46.1                        |
| Gender  |                            |                             |
| Male  | 86.12                      | 87.51                       |
| Female  | 13.88                      | 12.49                       |
| Marital Status  |                            |                             |
| Married   | 66.66                      | 71.09                       |
| Not married   | 33.34                      | 28.91                       |
| Income  | \$120,030.43<br>(9,132.72) | \$185,341.18<br>(18,407.22) |
| Source: 2010 Survey of Consumer Finances. Statistics derived from a weighted analysis of one implicate.<br>(Mean (standard error) for continuous variables; column percent's for categorical variables) (n=998) |                            |                             |

Demographically, solvent revolvers and convenience users tend to have the same level of education, but more convenience users have college degrees. Solvent revolvers save more for emergencies and have the ability to borrow from friends/relatives more than convenience users. Solvent revolvers have more children, have a higher frequency of being behind on payments, and more are working full time. More solvent revolvers view credit as ambivalent, more declared bankruptcy in the past, and they tend to be younger, unmarried, and have a lower income than convenience users.

A logistic regression comparing the two groups was run to analyze where the differences between the two groups. The results for the logistic regression are presented in Table 1.4. Odds ratios compare the magnitude of the effect that each independent variable has on the dependent variable. Since the solvent revolver has the ability to be a convenience user, it is important to distinguish the differences between the two groups and explain why households remain solvent revolvers of credit cards.

| Table 1.4: Logistic Regression of the Likelihood of Being a <u>Top Quintile Solvent Revolver Compared to a Top Quintile Convenience User</u>                |                    |               |          |
|---|--------------------|---------------|----------|
|   | Parameter Estimate | p             | C        |
| Intercept   | <b>-1.5397</b>     | <b>0.0018</b> |          |
| <b>Human Capital</b>  |                    |               |          |
| Education   |                    |               |          |
| Less than high school   | -0.4174            | 0.7117        | 0        |
| Some college  | -0.5273            | 0.1158        | 0        |
| College degree  | <b>-0.5948</b>     | <b>0.017</b>  | <b>0</b> |
| <b>Mental Accounting/Precautionary Savings Motives</b>  |                    |               |          |
| Saving for Emergencies  | 0.2073             | 0.2502        | 1        |
| Saving for Unemployment   | -0.3076            | 0.5716        | 0        |
| Saving for Illness  | 0.2734             | 0.5274        | 1        |
| Ability to borrow from friends/relatives  | 0.1711             | 0.4805        | 1        |
| Self Employed   | -0.361             | 0.0871        | 0        |
| Number of Liquid Accounts   | 0.339              | 0.114         | 1        |
| <b>Time Constraint/Self-control Factors</b>   |                    |               |          |
| Number of children  | 0.1031             | 0.2485        | 1        |
| Payment History   |                    |               |          |
| Behind  | <b>1.2471</b>      | <b>0.0009</b> | <b>3</b> |
| Number of hours worked in a week  |                    |               |          |
| Working less than full time (1-39 hrs)  | <b>0.7455</b>      | <b>0.0411</b> | <b>2</b> |
| Working full time (≥40 hrs)   | <b>1.0223</b>      | <b>0.0007</b> | <b>2</b> |
| Credit attitude   |                    |               |          |
| Positive  | -0.3379            | 0.1127        | 0        |
| Negative  | -0.3615            | 0.0862        | 0        |
| Bankruptcy history  | 0.6278             | 0.1092        | 1        |
| <b>Lifecycle Factors</b>  |                    |               |          |
| Age   |                    |               |          |
| 35 to 55  | -0.2943            | 0.2813        | 0        |
| Over 55   | -0.2887            | 0.3393        | 0        |
| Gender  |                    |               |          |
| Female  | -0.1226            | 0.7211        | 0        |
| Marital Status  |                    |               |          |
| Not married   | 0.3793             | 0.1208        | 1        |
| Income/\$10,000   | <b>-0.0074</b>     | <b>0.0015</b> | <b>0</b> |
| Source: 2010 Survey of Consumer Finances. Statistics derived from an unweighted analysis of one implicate. Bolded values are significant at the 0.05 level. |                    |               |          |

Level of education, have a history of making late payments, the number of hours spent working a week, and household income are the key factors that differentiate the most financially sophisticated solvent revolvers and the most financially sophisticated convenience users. Although income is significant, with every \$10,000 increase of income, the household is only 0.7% more likely to be a convenience user. Thus, households are solvent revolvers based on behavioral issues rather than liquidity issues (as stated by Gross and Souleles, 2002).

## References

- Becker, G. S. (1964). A theoretical and empirical analysis, with special reference to education (First edition). New York: Columbia University Press for the NBER.
- Bertaut, C. C., Haliassos, M., & Reiter, M. (2009). Credit card debt puzzles and debt revolvers for self-control. *Review of Finance*, 1-36.
- Bi, L. (2005). The influence of uncertainty and liquidity constraints on liquid asset holdings of credit card revolvers. Retrieved from OhioLink ETD Center. (osu1127153217).
- Bi, L. & Hanna, S. D. (2006). Do financial planners serve the interests of their clients? Use of financial planners, credit card balances and liquid assets. *Consumer Interests Annual*, 52, 292-314.
- Bucks, B. K., Kennickell, A. B., Mach, T. L., & Moore, K. B. (2009). Changes in U.S. family finances from 2004 to 2007: Evidence from the Survey of Consumer Finances. *Federal Reserve Bulletin*, 95, A1-A55.

- Chien, Y.W. & DeVaney, S.A. (2001). The effects of credit attitude and socioeconomic factors on credit card and installment debt. *The Journal of Consumer Affairs*, 35(1), 162-179.
- Gross, D. B. & Souleles, N. S. (2002). Do liquidity constraints and interest rates matter for consumer behavior? Evidence from credit card data. *The Quarterly Journal of Economics*, February, 149-185.
- Huston, S. J., Finke, M. S., & Smith, H. (2012). A financial sophistication proxy for the Survey of Consumer Finances. *Applied Economics Letters*, 19:13, 1275-1278.
- Haliassos, M. & Reiter, M. (2005). Credit card debt puzzles, unpublished working paper, CFS Working Paper 2005/26.
- Kim, H. & DeVaney, S. A. (2001). The determinants of outstanding balances among credit card revolvers. *Financial Counseling and Planning*, 12, 67-78.
- Laibson, D., Repetto, A., & Tobacman, J. (2001). A debt puzzle. In P. Aghion, R. Frydman, J. Stiglitz, & M. Woodford, (Eds.), *Knowledge, information, and expectations in modern economics: In honor of Edmund S. Phelps* (pp. 228-266). Princeton: Princeton University Press.
- Lindamood, S., Hanna, S. D., & Bi, L. (2007). Using the Survey of Consumer Finances: Some methodological considerations and issues. *The Journal of Consumer Affairs*, 41, 195-222.
- Rutherford, L. G. & DeVaney, S. A. (2009). Utilizing the theory of planned behavior to understand convenience use of credit cards. *Journal of Financial Counseling and Planning*, 20(2), 48-63.
- Shefrin, H. M. & Thaler, R. H. (1988). The behavioral life-cycle hypothesis. *Economic Inquiry*, 26, 609-643.
- Telyukova, I. A. & Wright, R. (2008). A model of money and credit, with application to the credit card debt puzzle. *Review of Economic Studies*, 75, 629-647.
- Thaler, R. H. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12, 183-206.



# Parenthood and Financial Satisfaction of Military Families

*Alyssa Francis<sup>47</sup> and Jing Jian Xiao, University of Rhode Island*

## Abstract

The purpose of this study is to examine the association between parenthood and financial satisfaction of military families. Based on the theory of human capital and previous research, we tested hypotheses that presence of children and number of children are negatively associated with financial satisfaction among military families. Using data from the 2009 and 2012 National Financial Capability Study and the 2009 Military Survey, one-way ANOVA results confirmed our hypotheses. Among military families, parenthood had a significant negative effect on financial satisfaction. An additional two-way ANOVA showed different patterns of number of children and financial satisfaction among families with various income levels.

**Key words:** financial satisfaction, financial well-being, military families, parenthood

## Study Purpose and Significance

Currently, the US military has its highest number of active-duty parents in history, with 40% of military members having at least two children and 55% of the military force being married (House, 2011). Clever and Segel (2013) reported military spouses and children now outnumber service members by a ratio of 1.4 to 1—a statistic supported by the finding that compared to their civilian counterparts, military members tend to marry younger and start families earlier. While service members are paid well, the military lifestyle often affects the spouse's ability to hold a job because of relocation. Due to such circumstances, military spouses, on average, earn less than their civilian counterparts (Hosek, Asch, Fair, Martin, & Mattock, 2003). Yet, in a survey of 22,000 first-time junior-ranking soldiers (E-1 to E-4) in the Army National Guard, Griffith (2008) found money and sense of fulfillment were tied for second for reasons for remaining in the military.

The purpose of the study is to examine the association between parenthood and financial satisfaction among military families, as more families enroll in the military. Financial satisfaction is a subjective evaluation of financial status, found to be closely associated with life satisfaction (Xiao, Tang, & Shim, 2009), and thus, should be examined among various populations in attempt to understand and possibly increase overall life satisfaction. To date, little research has examined financial satisfaction among the unique subpopulation, military families. The majority of Americans report experiencing moderate to high levels of financial stress with housing costs, having enough money, and job stability being most prominent stressors (American Psychological Association, 2010). However, military families endure stressors that differ from the typical civilian population, such as deployment and relocation. Therefore, it is possible service members experience differences in financial satisfaction compared to their civilian counterparts.

Choosing to have children is a significant choice for most human beings, and therefore, understanding the various outcomes associated with having a child is essential in understanding human behavior. The theory of human capital developed by economist, Gary Becker (1981), argues having children is similar to buying a durable good. That is, parents spend money to have children for both current and future benefits, they enjoy the time with children when they are young and expect children will take care of them when they are old. If future benefits of having children outweigh current benefits, parents may consider current lower financial status because of having children as an investment for future benefits. Previous empirical research has explored the net gain of having children. One study using an international data set, found having children is negatively associated with financial satisfaction and overall well-being (Stanca, 2012). Xiao, Chen, and Chen (2014) also found that presence of dependent children is negatively associated with financial satisfaction. With more military members enlisting with children at home (Clever & Segel, 2013), and some families turning to the military as a source of income (Griffith, 2008), it is important to explore the association between having children in military families and financial satisfaction.

---

<sup>47</sup>Alyssa Francis, Department of Human Development and Family Studies, University of Rhode Island, Kingston, RI 02881; Phone: 401-497-6273; Email: afrancis717@gmail.com.

## Hypotheses

Based on previous research, the following hypotheses are proposed. First, military families with children will report lower financial satisfaction than military families without children. Additionally, number of children in a family will be negatively correlated with financial satisfaction among military families.

## Methodology

### *Data*

The study utilized data from the 2009 and 2012 National Financial Capability Study (NFCS) sponsored by the Financial Industry Regulatory Authority (FINRA). The survey asked numerous questions regarding respondents' financial satisfaction, financial capability, financial literacy, financial behavior, and demographic and socioeconomic characteristics. The state-by-state survey was completed online from July 2009 to October 2009 and again from July 2012 to October 2012.

The sample compiled three data sets, the 2009 Military Survey, the 2012 Military Survey, and the 2012 State Survey's Military families, for a total of 2,150 observations. Observations with responses including "don't know" or "prefer not to say" were recoded as missing values. Thus, 11 observations for *financial satisfaction* had missing values and were not included in the analyses.

### *Variables*

The dependent variable is *financial satisfaction*, measured on a 10-point Likert scale. Respondents were asked, "Overall, thinking of your assets, debts and savings, how satisfied are you with your current personal financial condition?" Responses ranged from 1 (not at all satisfied) to 10 (extremely satisfied).

The independent variables include presence of children and number of children. Presence of children was determined using respondents' recorded number of dependent children. Those who responded 1-4 or more were coded as having children. Those who responded "no financial dependent children" or "do not have any children" were coded as not having children. Number of children in a family was determined based on respondents' answers to the question, "How many children do you have who are financially dependent on you?" This included children not living at home and step-children. Responses ranged from "1" to "4 or more," including "no financially dependent children" and "do not have any children." No financially dependent children and do not have any children were recoded as 0.

### *Analysis*

For testing hypotheses, a series of one-way ANOVA between financial satisfaction and child-related variables, including presence of children and number of children, were conducted. For additional analyses, a series of two-way ANOVA were conducted in which financial satisfaction was the dependent variable and child-related variables and income were the independent variables.

## Results

### *Descriptive Statistics of the Sample*

Descriptive statistics for all the variables used in the analysis are reported. Among the sample, 40.8% did not have dependent children, 21.7% had one child, 23.4% had two children, 9.5% had three children and 4.6% had four or more children. In regards to income, 16.9% were low income (<\$35,000), 40.6% were middle income (\$35,000-\$74,999), and 42.5% were high income (>\$75,000) families. The mean financial satisfaction of the sample, on a scale of 1 to 10 (1 being lowest, 10 being highest) was 6.23.

### *One-way ANOVA Results*

A one-way ANOVA was conducted to evaluate the relationship between financial satisfaction and presence of children. The independent variable, presence of children, included two levels: children and no children. The ANOVA was significant,  $F(1, 2137) = 6.416, p < .011$ .

Another one-way ANOVA was conducted to evaluate the relationship between financial satisfaction and number of children. The independent variable, number of children, included four levels: no children, one child, two children, three children, and four or more children. The ANOVA was significant,  $F(4, 2134) = 7.967, p < .015$ .

A post hoc Tukey's test was conducted to evaluate the five pairwise differences among the means. Results revealed families with no children ( $M=6.39$ ) and one child ( $M=6.48$ ) reported significantly higher financial satisfaction than families with three ( $M=5.57$ ) or four or more children ( $M=5.60$ ). There were no significant differences in financial satisfaction among families with no children, one child, or two children.

#### *Two-Way ANOVA results*

To explore the topic further, a 3 X 2 ANOVA was conducted to evaluate potential effects of income and the presence of children on financial satisfaction. The ANOVA indicated a significant interaction effect between income and presence of children,  $F(2, 2133) = 3.33, p = .036$ . The ANOVA also indicated a significant main effect of income  $F(2, 2133) = 47.27, p < .000$ . The income main effect indicated that income was positively associated with financial satisfaction.

A second 3 X 2 ANOVA was conducted to evaluate potential effects of income and number of children on financial satisfaction. The ANOVA revealed a weakly significant interaction effect between income and number of children,  $F(8, 2124) = 1.827, p < .068$ , indicating the effects of number of children on financial satisfaction may differ between the three income groups. To explore the differences, simple main effect tests were conducted. Results of post hoc Tukey tests show among low income families, no differences of financial satisfaction scores are found in families with various numbers of children. Among middle income families, the scores of financial satisfaction of families without children and with one child are significantly higher than those of families with three children or four or more children. Among high income families, the scores of financial satisfaction of families without children and with one child are significantly higher than that of families with three children.

### **Conclusions and Implications**

In this study, associations between parenthood and financial satisfaction among military families were examined using a combined dataset collected throughout the United States. Parenthood was measured by two variables: presence of children and number of children. Overall, among military families, parenthood had a significant negative effect on financial satisfaction, which is consistent with research findings that use data from general populations (Stanca, 2010; Xiao et al. 2014). The finding raises a concern as financial satisfaction is highly correlated with overall well-being.

Based on previous research, it was hypothesized that parenthood negatively affects financial satisfaction among military members. Our results supported the hypotheses. Many benefits exist for military families, including low priced family healthcare, job search assistance, money management services, and child and youth services (Army Military Family Support, n.d; Hosek and Wadsworth, 2010). However, results suggest these policies may not be effective in alleviating the financial stress associated with having multiple children. It is also possible these results speak to the difficulties military spouses face when seeking employment or the many stressors associated with military life (Hosek et al., 2003).

These results have implications for families looking to enlist in the US military, as previous research suggests many families turn to the military for monetary reasons (Griffith, 2008). Furthermore, these findings are particularly problematic because military families are faced with unique stressors (i.e., relocation, deployment, indebtedness) and the longer individuals stay in the military, the more likely they are to have children (Hosek et al., 2010). In terms of indebtedness, past research suggests military members carry a heavier debt load than their civilian counterparts and pay more penalties (Bell et al., 2014). Such indebtedness may be a result of payday loans targeted towards military families and their dependents, which carry high hidden fees, making it unlikely for service members to repay on time (US Department of Defense, 2006). This inability to pay off debt may be exacerbated by financial responsibilities associated with having children. Moreover, reports claim military members struggle with personal financial management (DOD, 2006), possibly adding to the financial stress associated with having children.

This study fills a gap in the literature concerning military families and financial satisfaction by examining possible effects of parenthood on financial satisfaction among married military families and suggests more can be done to support military families. In their study of military members, Bell and colleagues (2014) found being prepared for a

financial emergency, having a higher level of self-assessed net worth, and having higher perceived financial knowledge had a positive impact on subjective well-being. Thus, policies aimed at alleviating the financial stress of service members may benefit overall well-being, thereby influencing unit morale and readiness and overall military careers (DOD, 2006). The findings also have implications for financial counselors working with military families. According to the results, financial counselors should pay careful attention to the needs of families in the military and should work with these families to create financial plans that alleviate the negative impact of children on financial satisfaction.

## References

- American Psychological Association. (2010). *Stress in America findings*. Retrieved from <http://www.apa.org/news/press/releases/stress/national-report.pdf>
- Archuleta, K. L., Britt, S. L., Tonn, T., J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports, 108*(2), 563-576.
- Army Military Family Support Services. (n.d.). Retrieved April 22, 2015, from <http://www.goarmy.com/benefits/soldier-and-family-services.html>
- Becker, G., (1981). *A treatise on the family*. Harvard University Press, Cambridge, MA.
- Bell, M. M., Nelson, J. S., Spann, S. M., Molloy, C. J., Britt, S. L., & Goff, B. N. (2014). The impact of financial resources on soldiers' well-being. *Journal of Financial Counseling and Planning, 25*(1), 41-52.
- Chandra, A., Lara-Cinisomo, S., Jaycox, L. H., Tanielian, T., Burns, R. M., Ruder, T., & Han, B. (2010). Children on the homefront: The experience of children from military families. *Pediatrics, 125*(1), 16-25.
- Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *The Future of Children, 13* 39.
- DePianto, D. E. (2011). Financial satisfaction and perceived income through a demographic lens: Do different race/gender pairs reap different returns to income? *Social Science Research, 40*(3), 773-783.
- Falahati, L., & Paim, L. H. (2011). Gender Differences in Financial Well-being, Financial Socialization and Financial Knowledge among College Students. *Life Science Journal-Acta Zhengzhou University Overseas Edition, 8*(3), 173-178.
- Griffith, J. (2008). Institutional motives for serving in the US Army National Guard: Implications for recruitment, retention, and readiness. *Armed Forces & Society, 34*(2), 230-258.
- Hansen, T., Slagsvold, B., & Moum, T. (2008). Financial satisfaction in old age: a satisfaction paradox or a result of accumulated wealth? *Social Indicators Research, 89*(2), 323-347.
- Hosek, J., & Wadsworth, S. M. (2013). Economic conditions of military families. *The Future of Children, 41*-59.
- Hosek, J., Asch, B. J., Fair, C. C., Martin, C., & Mattock, M. (2002). *Married to the military: The employment and earnings of military wives compared with those of civilian wives*. Rand Corporation.
- House, W. (2011). Strengthening our military families: Meeting America's commitment. Washington (DC): Department of Defense.
- Morath, E. (2014, January 4). Millennials in military are much more financially secure. *The Wall Street Journal*. Available from <http://blogs.wsj.com/economics/2014/01/04/number-of-the-week-millennials-in-military-are-much-more-financially-secure/>
- Soldier and Family Services [webpage] (n.d). retrieved from <http://www.goarmy.com/benefits/soldier-and-family-services.html>
- Stanca, L. (2012). Suffer the little children: Measuring the effects of parenthood on well-being worldwide. *Journal of Economic Behavior & Organization, 81*(3), 742-750.
- U.S. Department of Defense, Report on Predatory Lending Practices Directed at Members of the Armed Forces and Their Dependents (Arlington, VA: U.S. Department of Defense, 2006).
- Van Praag, B. M. S. (2004). *The connexion between old and new approaches to financial satisfaction* (No. 04 053/3). Tinbergen Institute Discussion Paper.
- Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer financial capability and financial satisfaction. *Social Indicators Research, 118*(1), 415-432.
- Xiao, J. J., Tang, C., & Shim, S. (2009). Acting for happiness: Financial behavior and life satisfaction of college students. *Social Indicators Research, 92*(1), 53-68.

# Risky Higher Education Decisions and Family Dynamics: What Role for Parents?

*Jonathan G. Kimmes<sup>48</sup> and Stuart J. Heckman, Kansas State University*

## Abstract

In this study, we examined how parents influence young adults' higher education decision-making process. Using data from the National Longitudinal Survey of Youth 1997 (NLSY97), results from a path analysis showed that although parenting style was not directly linked with college enrollment, parenting style was related to young adults' subjective probability of completing college, time preferences, academic achievement, cognitive ability, and parental expectations – all of which were associated with college enrollment. These findings suggest that although parents may be less directly involved with higher education choices of young adults, they still have an important indirect influence on these choices.

**Key words:** college enrollment, financial attitudes, higher education, parenting style, risky financial decisions

## Introduction

Higher education choices are fascinating decisions with important implications at both the macro- and micro-economic levels. Investment in higher education is critical to economic growth via a productive labor force and involves significant time and monetary investment on the household side. Much of the current literature and popular media sources treat higher education as an investment choice, highlighting that individuals can choose to invest in their own productivity (human capital) by attending higher education, which leads to higher wages in the labor market. A key, but often overlooked aspect of higher education choices is that these decisions are risky (see Heckman, 2014); that is, the outcomes are not known at the time of the decision to invest in higher education.

Considering the risky nature of higher education choices is useful because it shifts the emphasis from the outcome to the process that leads to the decisions (Heckman, 2014), such as factors to consider in enrollment decisions or how much of a financial burden is appropriate to take on for expenses related to higher education attainment. Although the literature clearly shows that family background and parental involvement matter in educational outcomes, what remains unclear is the extent to which parents directly and indirectly influence the decision process. Subsequently, this study sought to explore the role that parents, and specifically their parenting styles, play in young adult higher education choices.

## Literature Review

### *Parent-Child Bargaining and Financial Socialization*

College enrollment may be, at least in part, the direct outcome of a parent-child bargaining process. This conceptualization was proposed by Kalenkoski (2008) in her adaptation of McElroy and Horney's (1981) husband-wife bargaining model of consumption and labor supply decisions. This runs counter to traditional models regarding educational outcomes, however. Kalenkoski noted that most models used to explain adolescent and young adult educational and earnings outcomes tend to fall into one of two categories: the parent-as-decision maker models and child-as-decision maker models. By departing from unitary preference framework, Kalenkoski used the parent-child bargaining model to describe the way in which parents and children engage in dialogue with each party keeping a desired outcome in mind. Her study demonstrated that data from the High School and Beyond Surveys fit well with a parent-child bargaining model of college enrollment and concluded that the data "strongly reject the unitary preference model" (Kalenkoski, 2008, p. 432).

Although parent-child bargaining may be a way in which parents have a direct impact higher education decisions, parents may have an indirect influence on these decisions by impacting the socialization process. Consumer socialization has been an important conceptual framework in consumer research and has been defined as "... the

---

<sup>48</sup>Jonathan G. Kimmes, Kansas State University, 139 Campus Creek Complex, Campus Creek Road, Manhattan, KS, 66506, E-mail: [jonathankimmes@k-state.edu](mailto:jonathankimmes@k-state.edu), Phone: (785) 532-6984, Fax: (785) 532-6523.

development of skills, knowledge, and attitudes relevant to consumption behavior” (Ward, 1974, p. 4). Parents are a primary source of experiences that help to instill financial attitudes, knowledge, and capabilities (for review, see Gudmunson & Danes, 2011) in children. This approach has been applied widely in a variety of contexts and emphasizes the importance of early childhood learning experiences as they relate to future behaviors.

Parenting style is often reflected in parent-child communication, and, as Serido, Shim, Mishra, and Tang (2010) found, the quality of parent-child communication involving financial topics has been identified as a predictor of college students’ financial well-being. Parents who exhibit an uninvolved style of parenting may also be unlikely to utilize explicit channels to deliberately provide their children with direct input involving financial knowledge, initiate discourse related to financial decisions, or be responsive to questions regarding financial decisions. These parents may demonstrate less confidence and shorter time preferences in making financial decisions, intimating to their children that one should mostly avoid risk and delayed gratification.

### *Parenting Style*

Parenting style forms the bedrock of the parent-child dynamics and dictates the nature of the overall parent-child relationship, which theoretically impacts one’s orientation regarding financial decision-making. In a study by Hill and Wang (2014), parental warmth, monitoring, and autonomy support by parents of seventh-grade students was associated with those students’ rates of college enrollment via its associations with aspirations, school engagement, and grade point average (GPA). The link between parent-child relationship and financial decision making has also been identified in a conceptual model created by Gudmunson and Danes (2011). They suggested, “A trusting relationship has enabled trusting individuals to engage in appropriate financial risk taking and to be accepting of financial opportunities” (p. 646). Thus, the parent-child relationship influences one’s future perceptions of financial risk and the financial decisions that are the outcomes of such perceptions.

Baumrind (1971) developed the most commonly used typology for parenting styles, which delineated between authoritative, authoritarian, and permissive parenting. Authoritative parenting is characterized by high expectations for achievement while facilitating bidirectional communication and providing the child with encouragement, warmth, and responsiveness. Next, authoritarian parenting is also characterized by high expectations, but authoritarian parents they lack warmth and rely on using their power to have their children to meet the expectations. Permissive parenting is the last type Baumrind identified, the hallmark of which is warmth and reassurance without expectations regarding behavior or achievement. In 1983, Maccoby and Martin added a fourth parenting style, neglectful parenting, which is used to describe parents who do not impose expectations on their children and are not responsive to the child’s needs.

Previous research has provided preliminary support for the notion that parenting styles play a role in college enrollment. Authoritative parenting style, for example, has repeatedly been found to correspond with high levels of academic motivation and school achievement in adolescents (for review, see Spera, 2005). However, the links between parenting styles and primary school outcomes may vary based on a number of factors, including ethnicity and socioeconomic status (Spera, 2005). Because parenting styles have also been associated with different decision-making styles in college students (Bednar & Fisher, 2002), it is possible that parenting styles are of great importance in college decision-making process.

### *Gap*

Despite the theoretical and empirical evidence suggesting that parents are involved, directly or indirectly, in the decision-making process involving college enrollment, the association between parenting style and college enrollment has not yet been established. Identifying parenting style as a factor that plays a role in college enrollment, therefore, extends previous research regarding the college decision-making process. A better understanding of the way in which parents impact the decision to enroll in college can shape policy such that decision aids can be more effectively designed and distributed based on who is most involved the decision-making process as well as the way in which they are involved in the process.

### **Theory**

The theoretical framework used in exploring the link between parenting styles and college enrollment was based on Perna’s (2006) conceptual model of student college choice. This model takes a contextual approach in that it models the college choice as a human capital investment decision but also accounts for the factors that impact the decision-

making process at various levels of context. We make a slight modification to include a risky human capital model as the basic decision framework that is influenced by contextual factors proposed by Perna. The following are the levels of context that influence the decision-making process, as identified by Perna: (1) habitus, which refers to the collection of internalized attitudes and beliefs acquired from the immediate environment that inform the process of reasoning during the decision-making process, (2) high schools and community, (3) higher education institutions, and (4) the social, economic, and policy context. Perna's model suggests that parenting style may influence higher education decisions because habitus is likely to be influenced by the nature of parent-child interactions. Furthermore, the literature shows that parenting style has been linked to important attitudes (e.g., time preferences) and beliefs (e.g., self-efficacy). Therefore, we posit that parenting styles should influence higher education decisions through several mechanisms.

Higher education decisions should vary with parenting styles because parents may or may not be involved with the decision process depending on the parenting style. The parenting style literature shows that authoritarian and authoritative parents set high expectations for their children. Therefore, we hypothesize that young adults from authoritarian and authoritative families to be more likely to enroll in higher education than students from permissive and uninvolved families. Because the literature suggests that parenting style may influence young adult attitudes and preferences, in addition to the previously described direct effect, we expect parenting style to have an indirect effect on enrollment decisions through the following mediators: risk tolerance, probability of degree attainment, time preferences, parental expectations of degree attainment, cognitive ability, and academic achievement.

## **Method**

### *Sample and Procedure*

The hypotheses in this investigation were evaluated using data from the National Longitudinal Survey of Youth 1997 (NLSY97). The NLSY97 was carried out by the Bureau of National Labor Statistics. Beginning in 1997, a sample of 8,984 youths in the United States born between 1980 and 1984 were assessed annually. The NLSY97 cohort made up of two subsamples, one of which was nationally representative consisted 6,748 youths. The other subsample consisted of 2,236 youths and was designed to oversample African American and Hispanic or Latino individuals.

A path analysis was used to explore the direct and indirect associations between parenting styles and key independent variables of interest, including risk tolerance, time preferences, probability of degree attainment, cognitive ability, academic achievement, and, finally, college enrollment. Mplus 7.11 (Muthén & Muthén, 2012) was used to conduct the analysis, and full-information maximum likelihood was used to fit the model.

### *Measures*

A full explanation of how parenting style was measured can be found by accessing the National Longitudinal Surveys website ([www.nlsinfo.org](http://www.nlsinfo.org)). Parents were considered to be uninvolved when rated by the participant as non-responsive and non-demanding, authoritarian when rated as non-responsive and demanding, permissive when rated as responsive and non-demanding, and authoritative when rated as responsive and demanding. The mothers' parenting style was used in the analyses when both parents were in the household. When the adolescent lived with one parent, the parenting style of the parent with whom the adolescent lived with was used in the analyses.

We examined risk tolerance, time preferences (proxied by smoking behavior), subjective probability of degree attainment, cognitive ability, and academic achievement as potential mediators in the path analysis. A number of variables were controlled for in this analysis so as to account for extraneous variation. Based on previous research involving young adults' decisions regarding higher education, we elected to control for the following variables: sex, race/ethnicity, family structure, family income, family net worth, parent education level, and region. The coding for the dependent variable, college enrollment, as well as the mediator and control variables can be viewed in Table 1.

Table 1: *Dependent, Mediator, and Control Variables: Names and Coding*

| Full Variable Name                              | Abbreviation       | Description  |
|---|--------------------|--|
| Dependent Variable: Higher Education Enrollment | College Enrollment | = 1 if respondent enrolled in higher education by age 20; 0 otherwise.   |
| <b>CONTROL VARIABLES</b>                        |                    |  |
| <i>Family Structure</i>                         |                    |  |
| Both Biological Parents                         | -                  | = 1 if respondent lived with both biological parents; 0 otherwise.   |
| Two Parents, One Biological                     | -                  | = 1 if respondent lived with two parents and one was a biological parent; 0 otherwise.                         |
| Biological Mother Only                          | -                  | = 1 if respondent lived with biological mother only; 0 otherwise.  |
| Biological Father Only                          | -                  | = 1 if respondent lived with biological father only; 0 otherwise.  |
| Other Parental Figures                          | -                  | = 1 if respondent lived with parent figures who were of some other relation; 0 otherwise.                      |
| <i>Parental Education</i>                       |                    |  |
| Less Than 12th Grade                            | -                  | = 1 if highest education level of respondent's parent(s) was less than a high school diploma; 0 otherwise.     |
| 12 <sup>th</sup> Grade                          | -                  | = 1 if highest education level of respondent's parent(s) was a high school diploma or equivalent; 0 otherwise. |
| Some College                                    | -                  | = 1 if highest education level of respondent's parent(s) was less than four years of college; 0 otherwise.     |
| Four Years of College                           | -                  | = 1 if highest education level of respondent's parent(s) was four years of college; 0 otherwise.               |
| More than Four Years                            | -                  | = 1 if highest education level of respondent's parent(s) was more than four years of college; 0 otherwise.     |
| Family Net Worth                                | -                  | Difference between assets and liabilities, measured as a continuous variable in \$10,000 increments.           |
| Family Income                                   | -                  | Total family income for 1996, measured as a continuous variable in \$10,000 increments.                        |
| <i>Sex</i>                                      |                    |  |
| Female  | -                  | = 1 if respondent's reported sex was female; 0 if respondent's reported sex was male.                          |
| <i>Race/Ethnicity</i>                           |                    |  |
| White   | -                  | = 1 if respondent's reported race/ethnicity was White only; 0 otherwise.                                       |
| Black   | -                  | = 1 if respondent's reported race/ethnicity was Black only; 0 otherwise.                                       |



| Full Variable Name  | Abbreviation           | Description  |
|---|------------------------|--|
| Hispanic  | -                      | = 1 if respondent's reported race/ethnicity was Hispanic; 0 otherwise.   |
| Asian/Other   | -                      | = 1 if respondent's reported race/ethnicity was non-White, Non-Black, and non-Hispanic; 0 otherwise.   |
| <i>Census Region</i>  |                        |  |
| Northeast   | -                      | = 1 if respondent resided in Midwest Census Region in 1997; 0 otherwise.   |
| Midwest   | -                      | = 1 if respondent resided in Midwest Census Region in 1997; 0 otherwise.   |
| South   | -                      | = 1 if respondent resided in South Census Region in 1997; 0 otherwise.   |
| West  | -                      | = 1 if respondent resided in West Census Region in 1997; 0 otherwise.  |
| MEDIATORS   |                        |  |
| Relative Risk Preferences   | Risk Tolerance         | Measured as a continuous variable, responses from 0 to 10. Rate yourself from 0 to 10, where 0 means 'unwilling to take any risks' and 10 means 'fully prepared to take risks. Higher scores indicate that the respondent is more risk tolerant. |
| Time Preference Proxy: Ever Smoked                                  | Time Preferences       | = 1 if respondent reported ever smoking; 0 otherwise.  |
| Probability of College Degree by 30 According to Parent             | Parent Expectations    | Parent estimate of the probability that the respondent would have a college degree by the age of 30, measured as a continuous variable in increments of 10%.   |
| Probability of College Degree by 30 According to Respondent         | Subjective Probability | Self-estimate of the probability that the respondent would have a college degree by the age of 30, measured as a continuous variable in increments of 10%.   |
| Cognitive Ability Proxy: Armed Services Vocational Aptitude Battery | Cognitive Ability      | GPA on a four point scale, measured as a continuous variable.  |
| Academic Achievement: High School GPA                               | Academic Achievement   | Percentile score created by the NLS staff, measured as a continuous variable ranging from 0% to 100%.  |

## Results

### *Descriptive Results*

Preliminary analyses showed that 49.9% of the sample was female and 50.1% of the sample was male. Among adolescents in the sample, 48.8% had enrolled in college. The results also revealed that 10.8% of adolescents experienced an uninvolved parenting style, 35.6% experienced a permissive parenting style, 12.0% experienced an authoritative parenting style, and 41.6% experienced an authoritarian parenting style. Means or proportions for the variables in the model can be viewed in Table 2.

Table 2: *Adolescent and Family Characteristics Organized by Parenting Style*

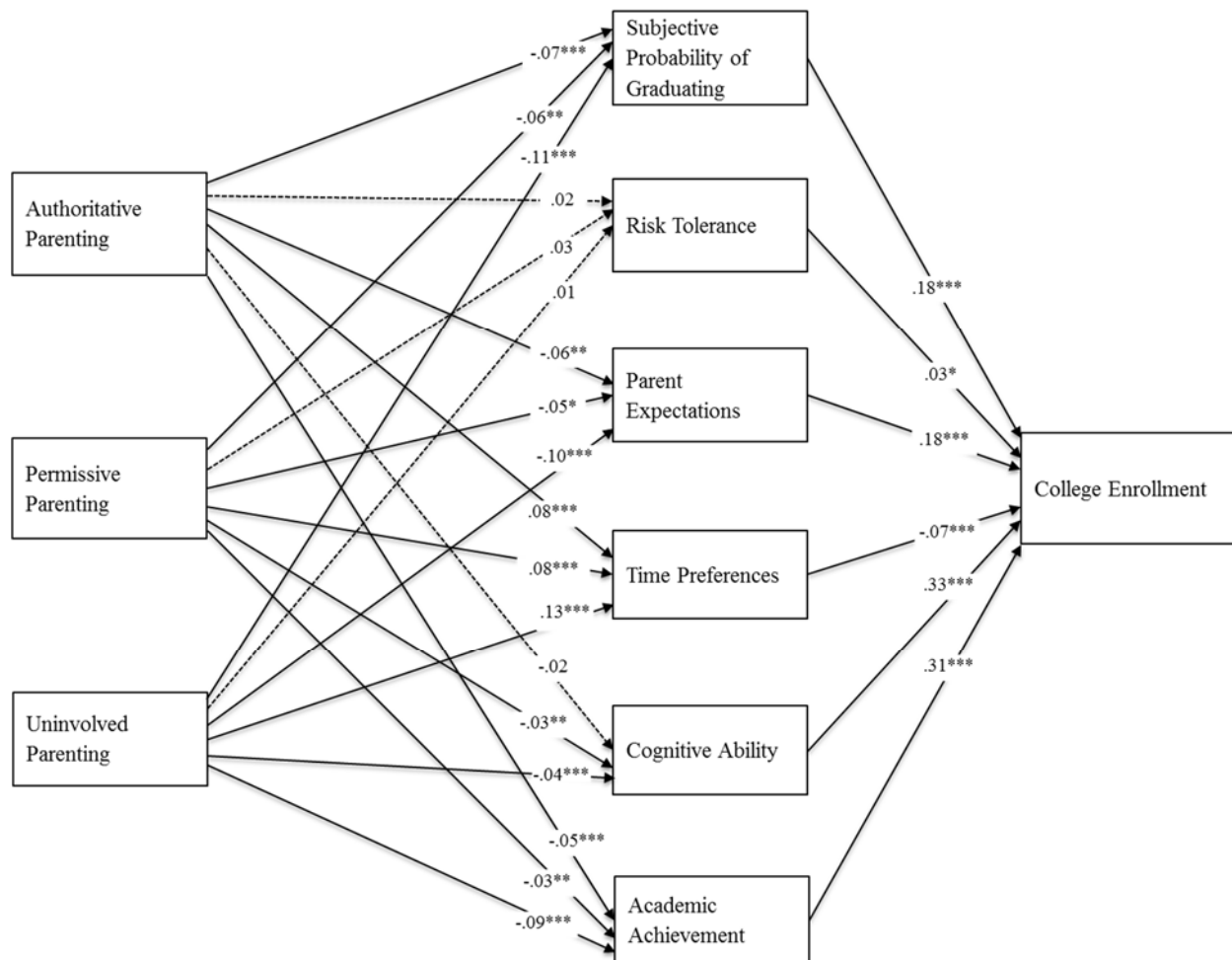
|  | Total<br>(N = 5,719) | Authoritative<br>(N = 688) | Authoritarian<br>(N = 2,379) | Permissive<br>(N = 2,035) | Uninvolved<br>(N = 617) |
|--|----------------------|----------------------------|------------------------------|---------------------------|-------------------------|
| <i>Continuous Variables (Means)</i>        |                      |                            |                              |                           |                         |
| Family Income (in dollars)                 | 45,410               | 42,200                     | 47,230                       | 46,810                    | 37,370                  |
| Family Net Worth                           | 93,230               | 78,350                     | 98,960                       | 98,270                    | 71,090                  |
| Relative Risk Tolerance                    | 5.6                  | 5.6                        | 5.5                          | 5.6                       | 5.5                     |
| ASVAB                                      | 44.6                 | 44.5                       | 47.9                         | 46.4                      | 40.9                    |
| GPA  | 2.7                  | 2.6                        | 2.8                          | 2.8                       | 2.5                     |
| Probability of Degree                      | 72.6%                | 69.2%                      | 76.3%                        | 72.2%                     | 64.5%                   |
| Probability of Degree – Parent             | 68.2%                | 65.0%                      | 71.7%                        | 67.7%                     | 60.0%                   |
| <i>Dichotomous Variables (Percentages)</i> |                      |                            |                              |                           |                         |
| Enroll                                     | 48.8%                | 43.0%                      | 53.3%                        | 49.4%                     | 35.7%                   |
| Ever Smoked                                | 39.7%                | 45.6%                      | 32.4%                        | 41.6%                     | 55.3%                   |
| Female                                     | 49.9%                | 56.7%                      | 46.5%                        | 48.9%                     | 55.3%                   |
| Race/Ethnicity                             |                      |                            |                              |                           |                         |
| White                                      | 52.4%                | 48.7%                      | 50.0%                        | 56.4%                     | 53.0%                   |
| Black                                      | 24.0%                | 27.6%                      | 27.4%                        | 19.9%                     | 20.6%                   |
| Hispanic                                   | 20.2%                | 20.3%                      | 19.2%                        | 20.2%                     | 23.7%                   |
| Asian/Other                                | 4.4%                 | 4.4%                       | 4.4%                         | 4.5%                      | 2.7%                    |
| Census Region                              |                      |                            |                              |                           |                         |
| Northeast                                  | 15.6%                | 14.5%                      | 17.8%                        | 15.9%                     | 17.1%                   |
| Midwest                                    | 24.9%                | 22.4%                      | 21.6%                        | 26.6%                     | 25.4%                   |
| South                                      | 37.4%                | 41.6%                      | 39.1%                        | 34.4%                     | 33.5%                   |
| West                                       | 22.1%                | 21.5%                      | 21.5%                        | 23.1%                     | 24.0%                   |
| Family Structure                           |                      |                            |                              |                           |                         |
| Both Biological                            | 48.9%                | 39.5%                      | 51.6%                        | 51.7%                     | 39.9%                   |
| Two Parents, One Biological                | 13.8%                | 19.8%                      | 12.9%                        | 12.1%                     | 16.4%                   |
| Biological Mother Only                     | 29.7%                | 31.5%                      | 28.4%                        | 29.2%                     | 34.5%                   |
| Biological Father Only                     | 3.3%                 | 4.7%                       | 2.8%                         | 3.2%                      | 4.4%                    |
| Other Parental Figures                     | 4.3%                 | 4.5%                       | 4.3%                         | 3.8%                      | 4.8%                    |
| Parental Education                         |                      |                            |                              |                           |                         |
| Less than 12 <sup>th</sup> Grade           | 21.2%                | 22.7%                      | 20.0%                        | 19.9%                     | 28.7%                   |
| 12 <sup>th</sup> Grade                     | 30.2%                | 32.0%                      | 28.9%                        | 31.0%                     | 31.0%                   |
| Some College                               | 25.4%                | 25.6%                      | 25.4%                        | 25.3%                     | 25.6%                   |
| Four Years of College                      | 12.4%                | 11.9%                      | 13.5%                        | 12.4%                     | 9.4%                    |
| More than Four Years                       | 10.8%                | 7.8%                       | 12.2%                        | 11.4%                     | 5.3%                    |

### **Path Analysis**

Prior to testing the full path analysis, we tested the direct association between each parenting style (authoritarian, permissive, and uninvolved parenting styles relative to authoritative parenting style) and college enrollment, but, contrary to expectations, none of these relationships were statistically significant ( $p > .05$ ). Next, as anticipated, the path analysis revealed a number of statistically significant direct paths, all of which can be seen in Figure 1. Permissive, authoritative, and uninvolved parenting were positively associated with time preferences and negatively

associated with parental expectations ( $p < .05$ ), subjective probability of graduating college ( $p < .01$ ), and academic achievement ( $p < .05$ ). The link between authoritative parenting and cognitive ability did not reach statistical significance ( $\beta = -.02, p = .05$ ), but cognitive ability was negatively linked with permissive ( $\beta = -.04, p < .001$ ) and uninvolved parenting ( $\beta = -.04, p < .001$ ). Higher levels of risk tolerance ( $\beta = .04, p < .05$ ), parental expectations ( $\beta = .15, p < .001$ ), subjective probability of graduating college ( $\beta = .17, p < .001$ ), cognitive ability ( $\beta = .35, p < .001$ ), and academic achievement ( $\beta = .31, p < .001$ ) were each linked with an increased probability of enrollment in a higher education institution. Higher scores on time preferences, on the other hand, were associated with a lower probability of enrolling in college ( $\beta = -.07, p < .001$ ).

Figure 1: *Path Analysis Model for the Relationship between Parenting Style and College Enrollment*



Note: Standardized Solution. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$  (two-tailed).

Of the eighteen possible indirect effects, fourteen of them were significant. A selection of the significant indirect effects is discussed here but all of the results can be viewed in Table 3. Three of the four indirect effects that were not significant were those in which risk tolerance was the mediator, and the fourth non-significant indirect effect was from authoritative parenting style → cognitive ability → college enrollment ( $b = -.06, p = .06$ ). One significant indirect effect was from uninvolved parenting style → time preferences → college enrollment ( $b = -.08, p < .001$ ). Stated differently, relative to the authoritarian parenting style, the uninvolved parenting style was linked to a decreased likelihood in college enrollment, via its previous effect on adolescents' time preferences. In addition, there was a significant indirect effect from permissive parenting style → subjective probability of graduating college → college enrollment ( $b = -.06, p < .001$ ). Another significant indirect effect was from authoritative parenting style → academic achievement → college enrollment ( $b = -.13, p < .001$ ). In other words, relative to adolescents who had

a parent with an authoritarian parenting style, adolescents who were raised with a permissive parenting style had lower levels of academic achievement, which, in turn, was negatively linked to college enrollment.

Table 3: *Indirect Effects for the Relationships between Parenting Styles and College Enrollment (N = 5,719)*

| Predictor                     |   | Mediator               |   | Outcome            | b       |
|-------------------------------|---|------------------------|---|--------------------|---------|
| Uninvolved Parenting Style    | → | Parent Expectations    | → | College Enrollment | -.15*** |
|                               | → | Time Preferences       | → | College Enrollment | -.08*** |
|                               | → | Risk Tolerance         | → | College Enrollment | .00     |
|                               | → | Subjective Probability | → | College Enrollment | -.17*** |
|                               | → | Cognitive Ability      | → | College Enrollment | -.13*** |
|                               | → | Academic Achievement   | → | College Enrollment | -.24*** |
| Permissive Parenting Style    | → | Parent Expectations    | → | College Enrollment | -.08*   |
|                               | → | Time Preferences       | → | College Enrollment | -.03*** |
|                               | → | Risk Tolerance         | → | College Enrollment | .00     |
|                               | → | Subjective Probability | → | College Enrollment | -.06*** |
|                               | → | Cognitive Ability      | → | College Enrollment | -.06*** |
|                               | → | Academic Achievement   | → | College Enrollment | -.06*   |
| Authoritative Parenting Style | → | Parent Expectations    | → | College Enrollment | -.09*** |
|                               | → | Time Preferences       | → | College Enrollment | -.04*** |
|                               | → | Risk Tolerance         | → | College Enrollment | .00     |
|                               | → | Subjective Probability | → | College Enrollment | -.11*** |
|                               | → | Cognitive Ability      | → | College Enrollment | -.06    |
|                               | → | Academic Achievement   | → | College Enrollment | -.13*** |

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .01$ , two-tailed.

## Discussion

Contrary to our expectations, the results of this study show that parenting style did not have a significant direct effect of higher education enrollment decisions. However, the findings indicate that parenting style may be a central factor underlying a number of variables linked to the decision regarding whether or not to enroll in higher education, including subjective probability of completing college, time preferences, academic achievement, cognitive ability, and parental expectations. Our results neither support nor reject the validity of the parent-child bargaining framework; rather, the results suggest that, if parent-child bargaining does play a role in college enrollment decisions, parenting style may not be a factor that influences the parent-child bargaining process.

The indirect effects, taken together, provide some preliminary empirical support that parenting style, while not likely a proximate cause, may be a key distal cause in college enrollment decisions. This is consistent with financial socialization perspective and points to the importance of acknowledging the more fundamental factors involved in financial decision-making. The indirect effects that were supported in this study are also consistent with Perna's contextual model. That is, the results fit well with the notion that parenting styles and the parent-child relationship dynamics that emerge through parenting styles may constitute a core determinant of one's habitus, which, as Perna (Perna, 2006) argued, includes key attitudes, expectations, and aspirations related to higher education.

## Conclusion

Financial planners and counselors have an especially important role to play in helping clients understand and evaluate how their financial decisions reflect their attitudes, values, and goals. Facilitating clients' insight and understanding regarding their own implicitly held attitudes, values, and goals along with their origins puts them in a position to consciously evaluate them. Some may not be cognizant of attitudes that may be driving financial

decisions. Or perhaps upon further consideration, a client may find that a previously held goal does not reflect core values. By engaging in conversations that allow these factors that are often presupposed and unexamined to become more explicit, financial planners can help their clients become empowered to be intentional about financial decisions. This process can help clients choose whether or not they would like to retain their attitudes, values, and goals or to, instead, develop new ones through a conscious, deliberative process.

## References

- Bednar, D. E., & Fisher, T. D. (2002). Peer referencing in adolescent decision making as a function of perceived parenting style. *Adolescence*, 38(152), 607-621.
- Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, 32(4), 644-667.
- Heckman, S. J. (2014). *Consumer risk preferences and higher education enrollment decisions*. (Doctoral Dissertation), The Ohio State University, Columbus, OH. Retrieved from [https://etd.ohiolink.edu/ap/10?0::NO:10:P10\\_ETD\\_SUBID:96695](https://etd.ohiolink.edu/ap/10?0::NO:10:P10_ETD_SUBID:96695)
- Hill, N. E., & Wang, M. T. (2015). From middle school to college: Developing aspirations, promoting engagement, and indirect pathways from parenting to post high school enrollment. *Developmental psychology*, 51(2), 224-235.
- Kalenkoski, C. (2008). Parent-child bargaining, parental transfers, and the post-secondary education decision. *Applied Economics*, 40(4), 413-436.
- Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 21, pp. 99-157). Netherlands: Springer.
- Serido, J., Shim, S., Mishra, A., & Tang, C. (2010). Financial Parenting, Financial Coping Behaviors, and Well-Being of Emerging Adults. *Family Relations*, 59(4), 453-464. doi:10.1111/j.1741-3729.2010.00615.x
- Spera, C. (2005). A review of the relationship among parenting practices, parenting styles, and adolescent school achievement. *Educational Psychology Review*, 17(2), 125-146.
- Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, 1, 1-14.

## The Effect of Certification on Investment Decisions

*Michael A. Guillemette<sup>49</sup>, Ph.D., CFP® and Jesse B. Jurgenson, University of Missouri*

**Key words:** certification, designation, financial advice, investments, principal-agent relationship

Forty-six participants were endowed with real money and received hypothetical investment advice from a CFP® Professional and a stockbroker. Results indicate that among low-income households, advice from a CFP® Professional influenced investor choice behavior within hypothetical education and retirement savings accounts. Statistically significant results indicate that when participants made investment decisions using education funds and received advice from a CFP® Professional, the mean expected value of their investment choices was \$43,913, compared to \$25,870 given advice from a stockbroker. When investment decisions were made using retirement funds the average expected value given advice from a CFP® Professional and a stockbroker was \$53,424 and \$33,207, respectively.

---

<sup>49</sup>Michael Guillemette, PhD, CFP®, 239B Stanley Hall, University of Missouri, Columbia, MO 65211, Phone: (573) 884-9188, E-mail: [guillemettem@missouri.edu](mailto:guillemettem@missouri.edu), Fax: (573) 884-8389.

# Student Paper

## Financial Education for Prisoners: Program Development and Implementation in a Work Release Facility

*Katherine (Kate) S. Mielitz<sup>50</sup>, AFC<sup>(R)</sup>, Kansas State University*

### Introduction

Numerous scholarly articles and books have been published on the needs of education in the re-entry process but little work has explored the need for financial education programs. Identifying programs that decrease recidivism is a common theme (Gaes, 2008; Jenkins, 2008; Petersilia, 2003; Petersilia, 2004; Ubah & Robinson, 2003). Educational programs commonly offered include GED education and testing, vocational education, community employment programs, and cognitive behavioral programs (Jenkins, 2008; Petersilia, 2004). The focus on the required skills needed for a successful re-entry into society is of critical importance because the process allows inmates to prepare for their eventual return to their respective communities.

The minimal published scholarly work in the area of financial literacy and the incarcerated is limited to development of financial education programs (Call, Dyer, Wiley, & Day 2013; Koenig, 2007) or to a small minimum security population in a Western state (Richel, 2013). Recent popular media articles have highlighted money and prisoners with a primary focus on how prisoners learn financial skills from other prisoners (Hill, 2014a; Hill, 2014b) who have no formal financial education training skills, rather than from trained financial professionals. Overall, the published works are limited in the measurement of effectiveness of training and in sample size. No published works were identified that have addressed financial education programs as a component of work release programs.

Work release programs are not offered in all states and there is little research regarding the effectiveness of such programs (Turner & Petersilia, 1996). Regardless, these programs do exist and they provide on-the-job training and other educational opportunities for the work release prisoners. Not all prisoners will qualify to participate in a work release program. Those who do qualify are assigned jobs and soon have access to some of their earned wages and places to spend their discretionary income. The range of years spent incarcerated prior to admission into a work release program can vary greatly. Some work release prisoners have been incarcerated for over twenty years. This length of time in the prison system, combined with rapid changes in the financial industry, necessitates the teaching of financial education so that these men return to society able to understand the numerous financial products and services available to them.

The purpose of this study is to determine if a financial education class increases the financial knowledge of work release prisoners in a southern Transitional Center. Quantitative survey methods will explore any statistically significant difference in pre-test and post-test scores of participants for single and composite financial knowledge variables. Qualitative methods will explore whether participants perceive an increase in their financial knowledge. Additionally, qualitative methods will address work release prisoner's suggestions for improvement to the current financial education class.

### Theoretical Framework

Opportunity Theory was developed specifically for the inmate population to support the need for college-level education (Ubah & Robinson, 2003) and suggests that "evidence of being engaged in the process of upward mobility...provides inmates with some necessary human-capital resources (skills and knowledge) that can help some

---

<sup>50</sup> Kate Mielitz, AFC®, PhD Student in Personal Financial Planning at Kansas State, Research Fellow for The American College, 706-840-6140, [mielitz@k-state.edu](mailto:mielitz@k-state.edu).

of them...when released into free society” (Ubah, 2003, p. 119). The skills and knowledge Ubah references could easily be applicable to basic financial education. Exposure to financial education may influence decision-making skills when an individual encounters a financial situation for which they are unprepared or that comes upon them at an unfortunate time (Huston, 2010). Participation in a financial education class may allow the student the opportunity to get a clearer understanding of how to create and use a budget, generate savings or even utilize credit in day-to-day life or in a crisis situation (Joo, 2008; Robb & Woodyard, 2011).

## **Methods**

This study uses primary quantitative and qualitative data collected between November 2014 and May 2015, from 124 inmate participants in a two-hour Money Management class at a southern Transitional Center. The inmates live at the Transitional Center as they finish their respective sentences and the class is part of their Phase One Re-entry Program. The class is required by the Transitional Center, but participation in the research study pre-test and post-test is optional. Data collection will continue for an additional six months between June and December 2015 in order to increase the sample size.

The pencil-paper pre-test and the informed consent form are distributed at the beginning of class by the instructor. The instructor maintains an Accredited Financial Counselor designation and is also the researcher conducting the study. Students are given the background and qualifications of the instructor and informed that their participation is voluntary. The instrument is comprised of eight true/false knowledge questions and 18 5-point scale Likert-type statements to measure financial attitude and knowledge. Finally, there are four yes/no statements to measure past financial behavior.

The financial education class is a single two-hour session and covers topics of income, benefits of the banking system, needs versus wants, spending plans, savings strategies, combatting identity theft, credit, and dangers of alternative financial services. At the end of class the instructor distributes the post-test. The pre-test and post-test are identical except for three factors: (a) the post-test questions are ordered differently to address the specific learning objectives; (b) the post-test provides for qualitative response to the statements “What I Learned”, “Suggestions for Improvement”, and “Other Comments”; and (c) the four yes/no past behavior questions are omitted.

The two separately-analyzed dependent variables are financial knowledge and financial attitude. The financial knowledge variable is a composite variable created from the eight true/false statements and two of the Likert-type scale statements. The financial attitude variable is also a composite variable created from four Likert-type scale statements. Independent variables include race, age, education, and past financial behaviors.

## **Results**

Respondents were all male with almost 61 percent black and over 35 percent white. Over 65 percent of the respondents were between ages 19-40, and more than 65 percent have high school or General Equivalency Diplomas. More than 66 percent of respondents have used a budget in the past and over 62 percent of respondents also stated that they have borrowed from friends or family in order to pay bills.

Preliminary paired t-test data indicated a statistically significant increase between pre-test and post-test scores for the Likert-type scale variable “understanding how credit works” and in knowledge of what to do if one’s identity has been stolen. Additionally, more than 95 percent of respondents answered “agree” or “strongly agree” that they learned something new during the Money Management class. Respondents also provided comments specifying what they learned in the class. Responses reflect an increase in (a) knowledge about credit (36.1%), (b) saving (29.6%), and (c) budgeting (18.5%). Additional investigation will be conducted through December 2015 on additional variables including (a) obtaining credit reports in and out of incarceration; (b) savings; (c) use of banking products; (d) affordable financial practices; (e) handling identity theft; and (f) the composite financial knowledge and financial attitude variables. The preliminary results show promise for additional statistically significant findings that financial education in a work release program may increase inmates’ financial knowledge.



## Discussion and Implications

Money, financial services, and the types of financial decisions individuals make are a constantly changing, yet always present, part of our society. When an inmate spends time away from society their ability to appropriately handle money and apply financial skills likely weakens. The minimal published research about the incarcerated population and financial education is a short-coming in the overall personal financial planning field and the criminal justice system.

This study has widespread potential for application and implications for financial counseling and planning professionals. Working with underserved populations is an area that is not as prevalent in the financial services industry due to the lack of revenue-producing interactions. However, providing financial education to at-risk populations may provide an important community connection for the service-minded financial professional. Additionally, though extensive research is needed, financial education may eventually be found to impact the rate of recidivism.

In order to empower successful financial decision-making, financial education programs need to be provided by qualified professionals to work release prisoners as they begin the process to re-enter society. The initial statistics presented in this study indicate that prisoners in a southern Transitional Center perceive benefits from a financial education program and increase their financial knowledge. There is also an opportunity for research regarding future implications of financial education on the financial attitudes and behaviors of offenders after release from prison. This study may provide a foundation on which future research can assist in understanding the financial education needs of prisoners in work release programs and provide policy makers with evidence to financially support more financial education programs for underserved populations.

## References

- Gaes, G. G. (2008, March). *The impact of prison education programs on post-release outcomes*. Paper presented at the Reentry Roundtable at John Jay College of Criminal Justice in New York City, NY.
- Hill, C. (2014). *How prison inmates learn about money*. Retrieved from: <http://www.marketwatch.com/story/how-prison-inmates-learn-about-money-2014-07-10>
- Hill, C. (2014). *Murderer turned stock picker is 'Oracle of San Quentin'*. Retrieved from: <http://www.marketwatch.com/story/murderer-turned-stock-picker-is-oracle-of-san-quentin-2014-07-10>
- Huston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296-316.
- Jenkins, H. D. (2008). Educational and vocational training. In P.M. Carlson & J.S. Garrett, (Eds.), *Prison and Jail Administration Practice and Theory* (pp. 83-90). Sudbury, MA: Jones and Bartlett.
- Joo, S. (2008). Personal financial wellness. In Xiao, J.J. (Ed). *Handbook of Consumer Finance Research* (pp. 21-33). New York, NY: Springer Science + Business Media.
- Koenig, L. A. (2007). Financial literacy curriculum: The effect on offender money management skills. *Journal of Correctional Education*, 58 (3), 43-56.
- Petersilia, J. (2003). *When prisoners come home: Parole and prisoner reentry*. New York: Oxford University Press.
- Petersilia, J. (2004). What works in prisoner reentry? Reviewing and questioning the evidence. *Federal Probation*, 68(2), 4-8.
- Richel, K. 2013. Introducing inmates to Extension through financial education and experiential learning tools. *Journal of Extension*, 51(3). Retrieved from <http://www.joe.org/joe/2013june/iw5.php>
- Robb, C. A., & Woodyard, A. S. (2011). Financial knowledge and best practice. *Journal of Financial Counseling and Planning*, 22(1), 60-70.
- Turner, S., & Petersilia, J. (1996, June). Work release in Washington: Effects on recidivism and

corrections costs. *Prison Journal*, 76(2). Retrieved from <http://go.galegroup.com.er.lib.k-state.edu/ps/i.do?id=GALE%7CA18580480&v=2.1&u=ksu&it=r&p=AONE&sq=w&asid=7a312723bf8713cf72c9a9f2866d724a>

Ubah, C. B. A., & Robinson, Jr., R. L. (2003). A grounded look at the debate over prison-based education: Optimistic theory versus pessimistic worldview. *The Prison Journal*, 83(2), 115-128.

# **Financial Literacy in America's Schools: A Proposal to Examine Curriculum Differences at the High School Level**

*Vance J. Larsen<sup>51</sup>, Purdue University*

## **Abstract**

Several studies have examined the effectiveness of implementing different financial education interventions on student financial literacy at the High School level. However, little research exists that measures the comparative effectiveness of two different sets of curriculum. This proposed study would test an interactive curriculum against an objective curriculum, immediately following the curriculum as well as after a three month time lag. Interactive education would include elements of experiential learning and periodic testing that was free response and reflective while objective education would not include a hands-on learning element and use periodic testing in multiple choice format only.

## **Introduction**

Alan Greenspan, former Chairman of the Federal Reserve, has stated that “The number one problem in today's generation and economy is the lack of financial literacy.” In the wake of the 2008 financial crisis, the need for increased understanding of personal finance concepts has become more apparent. As the cost for higher education increases at a rate that is far outpacing inflation, recent high school graduates will have to make tough choices regarding whether or not they can afford to pursue post-secondary education. Those who choose to attend post-secondary education will have to make important decisions in regards to financing their education, and how to budget while earning little to no income during this time. Many students enter college with scant knowledge about interest rates (Lusardi, Mitchell, & Curto, 2010), which is an important concept that will help them understand the many types of debt, such as student loans and credit card debt. Student loan debt in America now exceeds a trillion dollars. This is further evidence of the fact that a growing number of students are financing their education through borrowing. Need is not limited to college students, those who choose not to attend college will have to enter the work force and learn how to budget and plan financially in order to live within their incomes, which will likely be modest, without exposing themselves to risky financial practices such as credit card debt and payday type loans. The literature reports an unsatisfactory level of financial literacy for the population as a whole, but particularly for high school students and recent high school graduates (Mandell, 2008). Who is responsible for educating these students to make sound financial choices? Does this fall under the umbrella of public education? Financial education curriculum implemented at the high school level has achieved mixed results (McCormick, 2009), with some curriculum showing no improvement in financial literacy (Mandell, 2008). One potential method of comparison is looking at curriculum at the college level, which has traditionally achieved much better results than high school level financial education. Examining the existing literature to investigate this effect can influence policy decisions and will have important implications in shaping curriculum in order to reach populations that do not attend college or other post-secondary education where financial education courses are not typically offered. To understand which types of curriculum work best to increase financial literacy outcomes, an experimental design comparing the relative effectiveness of different curriculum is needed. Most current studies have aimed to determine whether or not a particular curriculum improved outcomes when compared to a control group who did not receive the instruction (Danes, Huddleston-Casas, & Boyce, 1999; Mandell, 2008; McCormick, 2009). By contrast, this project proposes a design experiment to compare two different types of curriculum to determine their similarities and differences in regards to short and long term effectiveness in improving financial literacy and subsequent financial behaviors.

---

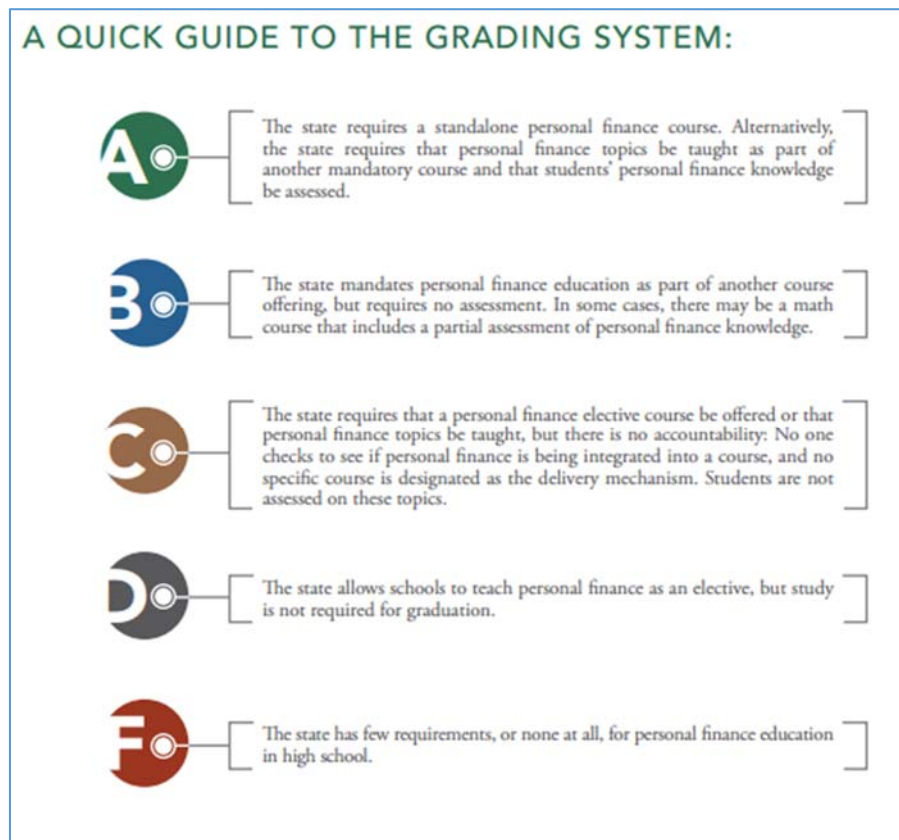
<sup>51</sup>Vance J. Larsen, Purdue University, Matthews Hall 326, West Lafayette, IN 47906, Phone: 765-494-8356, [vlarsen@purdue.edu](mailto:vlarsen@purdue.edu).

## **Current State of Youth Financial Literacy and Financial Education Programs**

One of the most comprehensive studies of financial literacy among America's youth was conducted by the Jump\$tart Coalition for Personal Financial Literacy. They administered tests to determine financial education effectiveness every other year from 1997-2008. In the most recent 2007 survey, the mean score on the exam for high school students was 48.3% compared with 62.2% of college students (Mandell, 2008). Furthermore, this study also showed no positive effect on financial literacy for those students who had taken a money management or personal finance course in high school, as tests scores for the treatment group and the control group were not significantly different. Other studies have reported similar findings about the overall disappointing state of financial literacy in America. Studies have also found that certain subgroups, such as those with low income and low education, minorities and women, have a much higher chance of being financially illiterate. In one study, of the few individuals who were found to be financially literate, they were disproportionately white males who had college degrees (Lusardi et al., 2010). These findings are troubling because these groups are traditionally more vulnerable during times of economic hardship (Lusardi & Mitchell, 2007) and are often even targeted by being forced to take loans at higher interest rates. These findings suggest that disadvantaged socioeconomic groups face additional barriers to obtaining financial literacy that are similar to the challenges they face within other aspects of education. In response to shifting public opinion about the importance of financial literacy for later success in life, 43 states now include personal finance in their K-12 standards ("Survey of the States", 2014). While this number may sound promising, it should be noted that only 17 states require a stand-alone personal finance test to be taken for high school graduation, and only six require student testing in personal finance. The other states have varying numbers of required hours of personal finance education which are taught within a variety of different subjects (Pelletier, 2013). Of the 17 states that include requirements for a stand-alone personal finance course many are located in the American South, and almost all of them are states that would be considered political red states. It would be interesting to see why it is that these states have disproportionately adopted personal finance requirements while others have not. Furthermore, three of the seven states that do not include any personal finance standards are California, New York, and Illinois, which are three very populated states ("Survey of the States", 2014). These states also house the three largest urban population centers, and it would be interesting to try and determine if and how the lack of standards affects urban youth differently than rural youth. These states also house cities that are known as major financial hubs, and if this trend continues they may not be able to fill positions in financial institutions with qualified applicants.

How different are the requirements and quality of education in each state? The Champlain College Center for Financial Literacy issued a report card for all 50 states in 2013 to assess efforts to increase financial literacy through personal finance education in the K-12 public school system. Only 40% of the states were awarded an A or B, while 44% of states received a D or an F (Pelletier, 2013). A quick guide for the specifics they are looking for to assign grades to each state can be found in the excerpt from their report, shown in Figure 1.

Figure 1 – Champlain College Financial Literacy Grading Scale



### Opposition and Barriers to Financial Education

While financial literacy may seem like a no-brainer in terms of importance, there are those who oppose its implementation for a variety of reasons (Willis, 2008). The first is that these are skills often learned within the home and it is not the place of the public education system to teach them, largely because personal finance is an area where there are not necessarily universal truths as much as preferences. Another argument is that the energy being focused on financial education should be focused on reforming financial regulations to protect consumers, instead of teaching consumers how to protect themselves (Willis, 2008). On the contrary, the support for financial education typically centers around the need for continued financial education in America, in addition to a comprehensive framework for curriculum and testing to ensure that goals are being met in this increasingly complicated financial environment (Fox, 2005). The argument against financial education focuses on the fact that as financial products become more complex it will continue to be more difficult for consumers to understand them. Opponents argue that the idea of a financially literate public achieved through financial education is a romantic, largely unachievable vision (Willis, 2008). They state that financial education's effectiveness lacks empirical support and the ever changing financial landscape means education is becoming outdated even as it is taught. Their proposed solution lies in regulation of financial instruments to protect consumers, not increasing consumer knowledge. There is also suggestion that lack of financial literacy is not solely responsible for negative financial behaviors, but that lack of

access to financial instruments and institutions is also a key element, and that any policy addressing financial literacy must also address this issue of accessibility (Johnson & Sherraden, 2007).

Some argue that a barrier to successful financial literacy amongst American youth is the lack of inclusion of academic standards that specifically address personal finance (McCormick, 2009). As stated early, not all states mandate financial education, and implementation of standards is not always required for those that do. Even more discouraging is that only six states require testing in the area of personal finance (Mandell, 2008). In states that do offer or mandate financial education, the nature of this education can vary differently from location to location. Many different, competing sets of curricula are being implemented within different subject areas, such as economics, social studies or math. Personal finance topics are usually not offered as a stand-alone course, and if they are taught within a broader subject, Economics seems like a good candidate for inclusion (Morton, 2005). However, since economics is typically not offered until later on in the high school years, research needs to be conducted to determine where personal finance will fit into the classroom if education on this topic begins as early as elementary school, and there is evidence that starting financial education earlier has many positive benefits (Sherraden, 2011).

Another issue that is not often addressed in the literature on financial education is the importance of teacher training and other elements of the classroom environment that contribute to learning outcomes. The effectiveness of teachers, familiarity and use of all curriculum materials by instructors, and other elements of the learning context must all be considered when evaluating the effectiveness of different financial education curriculum (Danes, Rodriguez, & Brewton, 2013). Lack of teacher training in the areas of money management and personal finance almost certainly has a negative impact on the financial literacy levels of high school students (Mandell, 2008). Despite these obstacles, there is evidence that increased financial literacy, and specifically exposure to financial education can have a positive impact on adult financial behavior, particularly in regards to attitudes towards saving, later in life (Bernheim, Garrett, & Maki, 2001; Xiao, Ahn, Serido, & Shim, 2014). This highlights the potential for positive behavior change through implementation of personal finance education mandates. To be effective, we must ensure that curriculum is tailored to maximize student outcomes and subsequent decision making.

## **Literature Review**

A review of the literature offers mixed results on the effectiveness of various high school financial education programs on increasing financial literacy. There are many different types of financial education, and much of the literature has been focused on adult financial education strategies. However, knowledge about these programs is not directly transferable to high school and college level financial education, because it is typically tailored towards planning for a certain event or addressing a problem with the way adults use money and financial instruments (McCormick, 2009). It is also important to note that these consumer oriented financial education trainings are often sponsored by banks or other financial corporations. In regards to bank sponsors in a K-12 setting, it is often the case that these bank sponsors do not evaluate the programs in which they participate, because they do not necessarily have an incentive to do so, and often the rigor of the curriculum is called into question (Fox, 2005) due to a lack of enforcement and no way to measure success or failure. These bank sponsors also have a sales motive, which may potentially cause a bias in the financial advice they are rendering to individuals.

Conversely, college results are slightly different. The literature reveals a consistent theme that collegiate level personal finance courses are currently more effective than those implemented in high school. Peng et al. found that “a college level personal finance course was associated with higher levels of investment knowledge” (Peng, Bartholomae, Fox, & Cravener, 2007, pg. 265). The collegiate population is much different than the high school population, and many of the students who would benefit most from financial education do not attend college. The JumpStart Coalition notes that only 28% of American youth complete college (Mandell, 2008), some never enrolling and other’s not attaining a degree after starting college. There traditionally has been a lack of discussion about the role maturity and age play in achievement in financial literacy. However, even if it becomes consensus that high school is too early to properly address personal finance, there will be a large segment of the population that may lack access to financial education if it is only addressed at the university level. Furthermore, there is a self-selection bias for taking a personal finance course in college. This is due to the fact that most individuals who take a personal financial course in college choose to do so, and very few colleges have a personal finance requirement for graduation. This self-selection bias means that a college level course may be associated with higher investment knowledge because students who consider personal finance to be important may be more likely to take a course, and

also more likely to make sound financial decisions. However, lessons learned from college level personal finance courses designed to improve financial literacy can influence curriculum design and implementation in American high schools.

Several studies show no major impact of high school financial education on later investment knowledge or financial behavior (Mandell, 2008; Peng et al., 2007). Similarly, evidence has been found that shows college level financial education courses are much more effective in influencing later financial behaviors in comparison to high school financial education courses. However this is problematic since the majority of American youth will not graduate from a four year institution (Mandell, 2008). There are other studies that have produced more encouraging results, which suggest that if the curriculum is properly tailored and effectively delivered that high school students can experience an increase in financial literacy as a result of financial education efforts (Walstad, 2010).

One of the most encouraging studies in recent years was done with elementary school age children who completed a financial education and savings program called *I Can Save* (Sherraden, 2011). This study found that those who participated in the program scored higher on a financial literacy test than a control group who did not participate, regardless of the income and education levels of their parents (Sherraden, 2011). This program incorporated elements of experiential learning. Part of the curriculum was the ability to participate in a savings program. Children were compensated for attendance of an after school club, and every couple months were allowed to go on field trips to deposit money into a savings account at a local bank. Coupling experiential learning elements with financial education have also proven effective in other studies (Frijns, Gilbert, & Tourani-Rad, 2014). The success of the program evaluated by Sherraden et al. suggests that early exposure to financial concepts and an experiential learning element can enhance student financial literacy.

## Hypotheses

For the purpose of this paper I will define the following two terms. *Objective education*, is traditional curriculum that does not include an experiential learning element and tests students throughout the course using multiple-choice, or true-false, tests and quizzes. *Interactive education* is education that includes an element of experiential learning, such as taking students to a local bank or credit union to participate in a savings program, and also includes testing and assignments throughout the course that requires reflective, free response answers as part of periodic testing. An objective question would be something like “Karen has \$100 in savings and gets 3% interest compounded annually for 5 years, how much will she have at the end of the 5 years” and then listing 4 possible answers in a multiple choice format. A reflective question would be the same question, but with an open response answer instead of multiple choice answers and an additional question that is contemplative in nature, such as “How would you explain the concept of compounding interest to somebody?” In this paper, I have formulated the following two hypotheses for proposed research. It should be noted that these different approaches will occur during the course, but the post-tests for both groups will be identical.

H1: Implementing interactive education will not have a greater impact on improving financial literacy posttest scores when administered immediately following the course when compared to objective education.

Both groups in the experiment will receive the same pre-test and the same post-test following the course. However the curriculum received will be different for the two groups. This hypothesis states that the post-test scores immediately following the course will be no different for the two groups, regardless of the curriculum received. This is because the interactive education is expected to increase long term retention, but make little to no difference in the short-run.

H2: Implementing interactive education will have a greater impact on improving financial literacy post-test scores when administered three months after completion of the course when compared to objective education.

This hypothesis aims to capture the long term benefits of an interactive financial education curriculum. Too often in the field of education, metrics are developed that measure proficiency immediately following a course, but do little to ascertain what impact the curriculum had on students retention and long term knowledge of the subject. By administering a time lagged post-test to students who have been exposed to the two different types of curriculum, I hope to observe the effects of the interactive education on retention, which is a better indicator of long term financial

literacy than a post-test immediately following the course. The use of a time lagged post-test lacks thorough examination in the financial education literature.

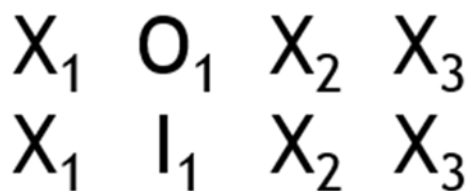
### Proposed Experiment Design

A key component in determining how to be most effective in increasing financial literacy among American youth is to compare and contrast the effects of different types of curriculums on student outcomes. It is important to figure out which types of curricula will have the greatest effect not only on increasing student test scores immediately following the course, but which curricula will have the greatest impact on increasing financial literacy that will translate into improved financial behaviors that students will carry into adulthood. As stated previously, the majority of studies and literature have focused on a model where researchers give a pre-test, implement a specified curriculum, and then administer a post test. Many studies will do this in comparison to a control group who do not receive the curriculum. However, these studies have only been effective in answering the question, does this curriculum have a positive effect on student outcomes? It cannot be used to evaluate the comparative effectiveness of two different types of financial education curriculum.

To test the hypotheses and compare the effectiveness of different styles of curriculum, I propose the following experimental design. Identify candidates for two different groups of students at the high school level, most likely at the junior or senior grade since this is when Economics and personal finance are typically taught. In order to ensure consistency, but accounting for practical concerns, schools where the students have similar socioeconomic characteristics should be chosen. Ideally, students at the same school would receive the different curriculums for comparison purposes. However, it is not feasible from a practicality standpoint for a school to use two different sets of curriculum within their classrooms. I propose implementing each of the two curricula in three schools each, for a total of six schools. This is to control for effects such as differences in teacher quality, administration, and shocks that may occur at one school but not another (i.e. death of a classmate).

To begin, students at every school would be given the same pre-test. Then the treatment would occur for each of the two groups. The first group would receive a curriculum that is interactive in nature. This would include elements of experiential learning, such as the ability to participate in a savings club or partnering with a local credit union. It would also use reflective questions as a key component of periodic evaluation throughout the course, rather than simple multiple choice answers for test questions. The second group would receive a curriculum that is objective in nature. The two groups would then both be given the same post-test at the conclusion of the course. My prediction is that both groups will perform similarly on the initial post-test. Those receiving the objective education may actually do slightly better because their curriculum will be more analytical in nature. However, the effect I want to measure is not knowledge immediately following the course, but retained knowledge after a time delay. As such, a second post-test will be administered to all students following a three month time delay. The model for using a second post-test three months after the course is completed comes from a study by Danes et al. to evaluate the effectiveness of the National Endowment for Financial Education High School Financial Planning program, and has been used to test long term effectiveness of financial education (Danes et al., 1999). It is my expectation that after this time delay, students who received the interactive education will perform better on the second post-test. This will provide evidence that curriculum that includes elements of experiential learning and periodic testing that requires contemplation will lead to better long term retention, which ideally will lead to greater overall financial literacy and better financial behaviors later in life.

Figure 2 – Proposed Experiment Design



### Theoretical Framework



Not all literature in financial literacy and financial education uses a theoretical framework, but of those that do the most popular is the transtheoretical model of change (Lyons & Neelakantan, 2008; Xiao et al., 2004). Typically the transtheoretical model of change is used within the health behavior domain, most notably for smoking cessation. The transtheoretical model of change consists of six stages precontemplation, contemplation, preparation, action, maintenance, and termination (Prochaska & Velicer, 1997). This model is more applicable in financial education programs aimed at adult consumers, specifically those that target or correct a current, potentially troublesome, financial behavior such as abuse of credit cards and the use of high interest payday loans. The theory may not be directly applicable to students, who are often too young to have engaged in poor financial practices. The exception here is older students such as later high school or college aged students, who may benefit from a framework aimed at behavior change. This framework highlights the importance of contemplation and preparation as necessary to influence behavior change in an individual. It is for this reason that I highlight the importance of incorporating testing that requires reflection and includes experiential learning tools. It is not expected that well informed, educated individuals make perfect decisions all the time, particularly in regards to financial matters. However, by exposing students to financial education early, and implementing a curriculum that encourages contemplation we expect improved later actions, and a higher probability of maintaining financial security.

Figure 3 – Transtheoretical Model of Change Phases



## Conclusion

Research has shown American youth are currently lacking in financial literacy. There is still much debate about the effectiveness of financial education and whether or not it should be a priority within the American school system. However, if the trend of more states implementing legislation and standards regarding increased financial education continues, it is important to test whether or not different financial education curricula are effective. Scant research has been conducted to compare one type of curriculum against another curriculum to determine which achieves better outcomes. This proposed research design and subsequent findings will contribute to the growing body of literature on financial literacy and financial education in American high schools. By studying the different findings from the implementation of the two different types of curriculum, I will be able to see what effect the experiential and interactive educational element have on outcomes. The time lagged post-test will also provide useful insight into the long term retention of financial education, as increased financial literacy of high school students will have little societal benefit if it does not directly lead to better financial behaviors in later adult life.

## References

- Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving:: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics*, 80(3), 435-465. doi: [http://dx.doi.org/10.1016/S0047-2727\(00\)00120-1](http://dx.doi.org/10.1016/S0047-2727(00)00120-1)
- Danes, S. M., Huddleston-Casas, C., & Boyce, L. (1999). Financial planning curriculum for teens: Impact evaluation. *Financial Counseling and Planning*, 10(1), 25-37.
- Danes, S. M., Rodriguez, M. C., & Brewton, K. E. (2013). Learning Context When Studying Financial Planning in High Schools: Nesting of Student, Teacher, and Classroom Characteristics. *Journal of Financial Counseling & Planning*, 24(2).
- Fox, J., Bartholomae, S., and Lee, J. (2005). Building the Case for Financial Education. *The Journal of Consumer Affairs*, 39(1), 195-214.
- Frijns, B., Gilbert, A., & Tourani-Rad, A. (2014). Learning by doing: the role of financial experience in financial literacy. *Journal of Public Policy*, 34(01), 123-154. doi: doi:10.1017/S0143814X13000275
- Johnson, E., & Sherraden, M. S. (2007). From Financial Literacy to Financial Capability among Youth. *Journal of Sociology & Social Welfare*, 34(3), 119-146.
- Lusardi, A., & Mitchell, O. S. (2007). Financial Literacy and Retirement Preparedness: Evidence and Implications

- for Financial Education. *Business Economics*, 42(1), 35-44.
- Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial Literacy among the Young. *Journal of Consumer Affairs*, 44(2), 358-380. doi: 10.1111/j.1745-6606.2010.01173.x
- Lyons, A. C., & Neelakantan, U. (2008). Potential and Pitfalls of Applying Theory to the Practice of Financial Education. *Journal of Consumer Affairs*, 42(1), 106-112. doi: 10.1111/j.1745-6606.2007.00097.x
- Mandell, L. (2008). The Financial Literacy of Young American Adults: Results of the 2008 National Jump\$start Coalition Survey of High School Seniors and College Students. . *Seattle, WA: University of Washington and the Aspen Institute.*
- McCormick, M. (2009). The Effectiveness of Youth Financial Education: A Review of the Literature. *Journal of Financial Counseling and Planning*, 20(1), 70-83.
- Morton, J. S. (2005). The interdependence of economic and personal finance education. *Social Education*, 69(2), 66-69.
- Pelletier, J. (2013). National Report Card on State Efforts to Improve Financial Literacy in High Schools. 1-30.
- Peng, T.-C., Bartholomae, S., Fox, J., & Cravener, G. (2007). The Impact of Personal Finance Education Delivered in High School and College Courses. *Journal of Family and Economic Issues*, 28(2), 265-284. doi: 10.1007/s10834-007-9058-7
- Prochaska, J. O., & Velicer, W. F. (1997). The Transtheoretical Model of Health Behavior Change. *American Journal of Health Promotion*, 12(1), 38-48. doi: 10.4278/0890-1171-12.1.38
- Sherraden, M., Guo, B., Lissa Johnson, William Elliott III. (2011). Financial Capability in Children: Effects of Participation in a School-Based Financial Education and Savings Program. *Journal of Family and Economic Issues*, 32, 385-399.
- Wage and Hour Division (WHD): Handy Reference Guide to the Fair Labor Standards Act (2014). Retrieved 11/27/2014, 2014, from <http://www.dol.gov/whd/regs/compliance/hrg.htm>
- Walstad, W., Rebeck, K., MacDonald, R. (2010). The Effects of Financial Education on the Financial Knowledge of High School Students. *The Journal of Consumer Affairs*, 44(2), 336-357.
- Willis, L. E. (2008). Against Financial-Literacy Education. *Iowa Law Review*, 94(1), 197-285.
- Xiao, J. J., Ahn, S. Y., Serido, J., & Shim, S. (2014). Earlier financial literacy and later financial behaviour of college students. *International Journal of Consumer Studies*, n/a-n/a. doi: 10.1111/ijcs.12122
- Xiao, J. J., O'Neill, B., Prochaska, J. M., Kerbel, C. M., Brennan, P., & Bristow, B. J. (2004). A consumer education programme based on the Transtheoretical Model of Change. *International Journal of Consumer Studies*, 28(1), 55-65. doi: 10.1111/j.1470-6431.2004.00334.x.

# Financial Socialization and Related Financial Behaviors Among College Students

*Kenneth John White Jr.<sup>52</sup>, The Ohio State University*

**Key words:** financial socialization, financial education, college students, financial counseling

Financial responsibility and financial independence are signs of transitioning into early adulthood. Establishing healthy financial behaviors is important to both short-term and long-term financial success and satisfaction. Saving and spending behaviors lay the foundation of proper financial management and they begin within the family (Cohen, 1994). Children must be trained in spending, saving, and the intricacies of investing. Such training involves children in family discussions of financial planning and financial management (Cohen, 1994). If children are to develop effective saving and spending plans, parents can be instrumental in teaching them how to carefully and thoughtfully manage their resources.

Managing financial resources is becoming more important as income and wealth inequality persist, education costs rise, debt levels increase, and retirement adequacy continues to be in question. Financial socialization can be a tool that complements formal learning to improve the financial capability of both lower socioeconomic families and more affluent households. Intergenerational transfers of knowledge through observation, experiential learning, modeling and direct teaching can help adolescents and youth develop behaviors that can lead to financial well-being over their life-cycle. The purpose of this study is to test and analyze whether financial socialization influences money management, financial advice seeking and participation in financial education among college students.

Gudmunson and Danes (2011) proposed the Family Financial Socialization (FFS) model. The conceptual FFS model is two part, it includes the family socialization process and financial socialization outcomes. The process involves family interactions and relationships and purposive financial socialization. Family interactions and relationships says family members are financially socialized by mere interactions with others in family roles. Whereas purposive financial socialization means intentional efforts by family members are used to financially socialize each other. The financial socialization process is meant to promote financial attitudes, financial knowledge and financial capabilities that leads to positive financial behaviors and overall financial well-being.

Prior to Gudmunson and Danes' (2011) FFS model, Shim et al. (2009) built on the Student Financial Well-being Model to propose a financial socialization model. Guided by two theories, the theory of consumer socialization (Moschis, 1987) and the theory of planned behavior (Ajzen, 1991), Shim et al. developed an anticipatory financial socialization model involving observational learning and formal learning. Observational learning is done through informal means such as role modeling and discussions with family and friends. Formal learning is gained through structured educational channels and work experiences. This study uses the Shim et al. (2009) model as a guide to address the following questions:

- a) Do financial behaviors of college students differ by observational learning and adopting parental financial role modeling?
- b) Do financial behaviors of college students differ by differ by mechanisms of formal financial learning?
- c) Do financial behaviors of college students differ by the encouragement of parental subjective norms?
- d) Do financial behaviors of college students differ by their direct financial teaching from parents?
- e) Do financial behaviors of college students differ by their source of financial advice?
- f) Do financial behaviors of college students differ by differ by their personal financial experience?
- g) Do financial behaviors of college students differ by their perceived financial control and financial confidence?

This study uses the 2010 Ohio Student Financial Wellness Study (OSFWS) dataset conducted by the Center for the Study of Student Life at The Ohio State University. Over 5000 students from nineteen institutions of higher

---

<sup>52</sup>Kenneth John White Jr, PhD Candidate, The Ohio State University, 265L Campbell Hall, 1787 Neil Avenue, Columbus, OH 43210, (313) 614-9353, white.2035@osu.edu

education in the state of Ohio participated in the study. The institutions included two-year colleges, as well as four-year private and four-year colleges and universities. One limitation of the study is the ability to generalize the findings since all of the students attended school in Ohio.

The dependent variables are nine specific financial behaviors, divided into four general categories: money management, spending, formal financial education, and professional advice seeking. The independent variables are 14 questions that fit into seven categories: observational learning (defined as students adopting parental financial role modeling), formal learning, parental subjective norms, parental direct financial teaching, primary sources of financial advice, financial experience, and perceived financial control and financial confidence. Although, perceived control and confidence may be more a product of financial socialization rather than a factor or mechanism of financial socialization. Gudmunson and Danes (2011) would consider perceived control and financial confidence as intermediate outcomes of financial socialization that lead to healthy financial habits and overall financial wellbeing.

Each of the 14 financial socialization variables were tested by each of the nine financial behaviors using a cross tab, bivariate analysis with chi-square. This resulted in 125 different tests (the test involving finance class in college by finance class in college was excluded). The results of the chi-square test indicated significant differences exist between the specific components of financial socialization and specific financial behaviors. Correlation matrices were conducted to consider multicollinearity between the financial socialization variables of interest. Variables were classified as highly correlated with a value greater than 50% in the correlation matrix. The variable deemed least significant was then omitted from the multivariate analysis, with one exception. In the parental subject norms category, parents encouraging students to save was kept in the study over parents encouraging students to open a bank account. This exception was made for purposes of providing clarity to the message given by parents to students. It was more clear to know that parents encourage saving versus merely opening a bank account.

The descriptive statistics consists of three components: demographic information, financial socialization variables, and financial behaviors. The sample was composed of 31.26% male and 68.74% female. Freshman (25.64%), sophomores (24.39%), and seniors (25.20%) were similarly represented in the sample. Juniors represented 19.64% of the sample. While 5.12% were classified as "other status." Of the 19 institutions that participated in the study, 23.60% of the sample was enrolled in two-year colleges, 40.40% enrolled in four-year private schools, and 36% of the sample attended four-year public schools. Nearly 34% of the students lived in on-campus residence halls and more than 75% reported GPAs greater than 3.0. The sample was predominantly White (83.70%). Blacks were the next most represented group at 6.98%. Asians and Hispanics were 2.43% and 2.16%, respectively. Students that classified themselves as "other race" made up 4.73% of the sample.

The study includes 14 financial socialization variables. In terms of observational learning, 67.83% of the students reported having parents who were excellent role models of sound financial management. A similar percentage of students (67.79%) reported that while growing up, their parents discussed money with them either sometimes or often. A much greater percentage of students (79.03%) said that their parents were comfortable talking with them about money. There was a big discrepancy in the message being communicated to the students by the parents, 87% of students reported that their parents encouraged them to save money but only 39.43% of students said their parents encouraged them to invest money. The message is even smaller concerning credit, 23% of students reported having parents that assisted them in obtaining their own credit card.

Nearly 80% of students worked for pay while in high school and 47.50% said they received an allowance at some point as a child or teenager. Only 25.95% of students had attended a personal finance class or workshop in high school, and an even lower percentage (16.91%) had attended such a course in college. 62.55% of students relied on family members for financial advice, but less than 20% said they relied on friends for financial advice. When considering all the formal, informal, observational and direct teaching received by students, a high percentage perceived to be in financial control and be financially confident. Nearly 80% of students reported being able to manage their money well, while 72.52% said they could manage their personal finances without any assistance.

There are four categories of financial behaviors considered in this study, money management, spending, formal financial education and professional advice seeking. Nearly 66% of students report having a weekly or monthly budget that they follow and 61.48% of students claim to have a financial plan that will serve their needs until they graduate. The awareness of money is high among students in the sample, 79.29% of students track all transactions (debit card and check) to balance their accounts and 92.56% report knowing where their money goes. While 82.53%

of students profess to pay their bills on time each month, only 38.26% of students said they add to their savings on a regular basis.

Of the students in the sample, 15.41% report spending more money than they have by using credit or borrowing. 45.42% of students said they have met with a financial professional. In this study, a financial professional is defined as a financial counselor, financial advisor, financial aid counselor, credit counselor, investment advisor, attorney, insurance agent, tax advisor, accountant, banker or trust officer.

Multivariate regression estimates the influence of financial socialization on the financial behaviors of college students within the 2010 OSFWS. Nine logistic regressions are analyzed in the study, where each financial behavior is used as a dependent variable, each financial socialization question is used as an explanatory variable and the demographics of the students are included as control variables. The purpose of the logistic regression analysis is to determine the influence of financial socialization on the financial behaviors of the students by using t-tests to establish the significance of the independent variables of interest.

The findings from the logistic regression analyses conclude that hypotheses 1-6 were each partially supported. Hypothesis 1 states when students learn from their parents by observation and adopt parental financial role modeling, the students will have positive financial behaviors. Students that have parents that were excellent role models display positive financial behaviors by being more likely to have a financial plan, pay monthly bills on time, add regularly to savings, track transactions, know where their money goes, and spend within their means. Yet, they still may be missing out on the benefits of financial advice by being less likely to have met with a financial professional.

Hypothesis 2 suggests that formal financial learning produces positive financial behaviors. Formal financial learning is defined as working for pay while in high school, attending a personal finance class in high school or attending a personal finance class while in college. Formal financial education produced positive results in terms of students following a budget, regularly adding to savings, and tracking transactions. Students that have participated in formal financial education are also more likely to experience potential benefits by participating in opportunities for formal financial learning in college and seek help from financial professionals. However, formal financial education in college was a significant indicator of students spending more money than they have by using credit or borrowing.

Hypothesis 3 states that parental subjective norms promote positive student financial behaviors. The findings conclude that the message delivered by parents is important as a predictor of positive student behaviors. Students that were encouraged to invest money were more likely to follow a budget and attend a personal finance class in college, whereas being encouraged by parents to save money had the opposite influence on students following a budget and pursuing formal financial education while in college. The findings further conclude that when students are encouraged by their parents to invest money, the students are more likely to develop positive behaviors such as having a financial plan, paying bills on time each month, regularly adding to savings, and seeking the assistance of financial professionals.

Hypothesis 4 states that when parents take on a direct teaching role, students display positive financial behaviors. The findings conclude students with parents that were comfortable talking about money with them were more likely to pay their bills on time each month. The findings further conclude when parents have financial discussions with their children and teenagers, those students are more likely to track transactions, be aware of where their money goes, and seek help from financial professionals.

Hypothesis 5 tests the significance of the source of financial advice for students. The two sources being tested in hypothesis 5 are advice from family and advice from friends. The findings conclude that the source of advice is important in predicting positive financial behaviors among students. When students relied on financial advice for family, then students were more likely to pay bills on time each month, but less likely to have a useful financial plan. Students that relied primarily on friends for financial advice were more likely to have a financial plan and attend personal finance classes while in college. However, students that relied on friends for financial advice were also more likely to overspend by using credit and borrowing.

Hypothesis 6 tests whether personal financial experiences are indicators of positive financial behaviors in students. The results indicate when students were assisted by parents in obtaining their own credit card, the students were

more likely to pay their bills on time each month and regularly add to their savings. However, the students with parents that assisted them in obtaining their own credit card were also more likely to overspend using credit and less likely to follow a budget. Receiving an allowance as a child or teenager was related to being less likely to seek the help of financial professionals.

Hypothesis 7 tested the significance of perceived financial control and financial confidence in predicting positive financial behaviors. It was the only hypothesis totally supported by the test. Students that report being able to manage their money or specifically being able to manage their personal finances without assistance had the most salient results in the analysis. Perceived financial control and financial confidence among students were highly correlated with positive financial behaviors. Students that said they manage their money well, with or without assistance, were more likely to follow a budget, have a useful financial plan, pay bills on time each month, track transactions, have money awareness, to meet with financial professionals, regularly add to their savings, and not overspend.

There are interesting findings relating to both the demographics and financial socialization aspect of the analysis. First, students that work more than 20 hours per week are more likely to follow a weekly or monthly budget. Second, Black students being less likely to pay monthly bills on time may be a function of income and wealth, but it also may be a predictor of academic interruption due to financial strain. Other findings suggesting racial differences are Asian students being more likely to overspend. This may be an indication of higher costs associated with being an international student. Black students are also more likely to pursue formal financial education in college and seek the help of a financial professional.

Another interesting finding is the difference in behaviors based on the message emphasized by parents to the students. The findings suggest parents encouraging students to invest, and not just save, could increase enrollment in college personal finance courses and increase use of financial professionals among college students. Furthermore, students were more likely to overspend when their parents assisted them in obtaining their own credit card. This may be a function of having access to credit that allowed them to overspend. However, this may indicate that debt and credit is an area where parents, financial professionals and financial educators could focus on improving the behavior of students. The findings also suggest that formal financial education begets more financial education in college. Students that either worked for pay in high school or took a personal finance course in high school were more likely to take a personal finance course in college. Additionally, formal financial education appears to be related to seeking the assistance of financial professionals among college students.

Observational learning versus direct financial teaching by parents has some interesting results. Parents who are excellent role models of sound financial principles seem to have a more consistent significant influence on promoting healthy financial behaviors among college students. This does not discount the importance of parents having discussions with their children and teenagers about money. The analysis suggests that both are important influences in students developing sound financial habits. Students whose parents were not comfortable talking to them about money were less likely to pursue formal financial education courses in college. The frequency of money management discussions with parents while growing up was significant in the likelihood of college students seeking professional advice. Implications of these findings suggest that more emphasis should be placed on the importance of parents talking to their children about money and being good financial role models. Financial counselors, planners and educators may use these findings to motivate parents to develop the skills and knowledge needed to socialize their children.