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Exploring the Effect of Financial Literacy Programs on Low-Income Adults

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ABSTRACT

Financial literacy is a necessity of modern adult life. Obtaining control of personal finances is challenging for everyone. The lack of financial literacy in the low income adult grouping has become more problematic as personal finances become more complex. Utilizing a series of interviews the shared experiences of the study participant's reflected in-depth descriptions of the personal lived experiences relating to financial literacy concepts, educational programs, and future expectations from the participants. This study addresses the perceptions and expectations of low-income adults regarding financial literacy programs and attempts to isolate ways to increase attendance in educational financial literacy programs. Using a series of thematic questions, three significant areas emerged relating to participants' characteristics, types of services required and access to programs are explored.

The results reverse the top down approach of financial program development from what low-income adults need to learn to participate in mainstream financial sector to what low-income adults want to learn to secure a stable financial future. The conclusions, recommendations and implications reached are generalizable and appropriate for developing best practices delivering financial literacy programs to the low income adult population.

Keywords: *Low-Income, Maslow's Hierarchy, Prochaska's Theory, Financial Literacy, and Top down development:*

INTRODUCTION

The need for financial literacy in the twenty-first century grows with increasing financial complexity, the shift of public policy toward individual fiscal responsibility, and the expanding percentage of the United States population living in poverty (Arthur, 2011). Low-income families are reported to have limited financial literacy (Tang and Lachance, 2012). As noted in a Federal Deposit Insurance Corporation (FDIC, 2013) research paper approximately there are seven million low-income families in the United States, and noted that Financial literacy programs in the United States directed toward low-income adults have had limited success as measured by the number of low-income adults unbanked or underbanked. This study discovered low-income adults' perceptions and expectations of financial literacy and provided information for financial literacy curriculum designs and marketing to attract low-income participants. Recommendations of curriculum and marketing changes from the low-income adult participants reflected the populations' current time frame orientation and transitory living situations and, therefore, could increase participation in financial literacy programs. Increasing the financial literacy of the low-income adult cohort can cause a positive ripple effect on global economic stability.

BACKGROUND

Low-Income Adults

Approximately thirty-two percent of households in the United States are categorized as low-income, earning less than \$30,000 annually by the Federal Deposit Insurance Corporation (FDIC, 2013). Curley, Ssewamala, and Sherraden (2009) noted that Financial literacy programs for low-income adults in the United States are designed for basic financial management to guide participants into mainstream financial services as well as to decrease their perceived vulnerability to predatory lenders. An argument raised by Chang and Lyons (2008) was the reliance of low income adults on social subsistence programs where the need and value of financial literacy programs were mitigated. In general community based literacy programs were developed without interaction or input of the low-income populations they serve, and the programs available through government agencies and financial institutions have low levels of participation (Servon and Kaestner, 2008).

Financial Literacy

Financial literacy at the end of the 20th century emphasized one dimensional financial knowledge (Huston, 2010). As discussed by the U. S. Financial Literacy and Education Commission (FLEC) financial literacy research undertaken during the first decade of the 21st century determined that financial literacy encompasses two dimensions: financial knowledge and financial behavior that creates financial capability (U. S. Financial Literacy and Education Commission (FLEC, 2010). The Organization of Economic Cooperation and Development (OECD), concluded that Financial literacy is defined by FLEC as “the ability to make informed judgments and to take effective actions regarding the current and future use and management of money”. Financial education was defined by the OECD, (2008) as follows:

“Financial education is the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being and protection”.

Individual governments, the World Bank, and the OECD promote financial literacy because the financial environment has changed for individuals from reliance on defined pensions and social retirement funding to personal long-term financial responsibility. Financial literacy behaviors in the United States as measured by an individual’s use of mainstream financial institutions have three classifications: banked, unbanked, and underbanked. Research conducted by the FDIC (2013) on the use of mainstream financial depository institutions found that 7.7% of the United States population is unbanked and that 20% of the population is underbanked. A large subset comprising nearly 32% of the United States population is classified as low-income. Approximately seven million low-income families are unbanked and are reported to have limited financial literacy (FDIC, 2013; Tang and Lachance, 2012). This study considered participant motivation to be a key factor is the desire to achieve financial literacy. The two central theories which were applied to this study were Maslow’s Hierarchy of Needs and Prochaska’s Theoretical Method for Change.

Maslow’s Hierarchy of Needs

Maslow’s (1948) motivation theory structure of individual character growth stems from the fulfillment of lower-level needs before advancing to the next higher level of need. Maslow’s prescribed

hierarchy of needs progresses through five need levels: physiological, security, social, ego or self-esteem, and self-actualization. Devaney, Anong, and Whirl (2007) applied Maslow's hierarchy of needs to encapsulate seven levels of savings by expanding on Maslow's five stages by adding one additional level (no savings) and splitting Maslow's security level into savings for possible short-term financial setbacks and financial retirement security. The results revealed that movement from lower savings levels were stagnant at the security level of safety needs because of a lack of financial knowledge. Mandell and Klein study (2009) found that the inability to make appropriate personal financial decisions has far-reaching negative effects on the nation's economy. Data collection included the motivational and environmental factors of low-income adult behaviors in relation to his or her experiences with and expectations of financial literacy.

Prochaska's Theoretical Method for Change

The transtheoretical model of change first established to influence change in unhealthy behaviors includes five stages that reflect the steps required for change and a sixth stage when a person relapses into previous unhealthy behaviors (Prochaska, 1979). The first stage, precontemplation, involves initial awareness but no decision yet to make any changes in the coming six months. In the second stage, contemplation, an individual decides to make changes over the next six months. Third, preparation plans are made for change in the next 30 days. The fourth stage is the period the individual has changed his or her behavior, but is still within the first six months of change. The fifth stage, maintenance, occurs if the individual has continued with the change for more than six months (NEFE, 2006; Prochaska, 1979). Xiao, O'Neill, Prochaska, Kerbel, Brennan, and Bristow (2004) applied trans- theoretical change to financial literacy education through the program Money 2000 because "research shows behavioral change is a process, not an event". The study resulted in individuals successfully replacing the undesirable behaviors of impulse buying and accumulating credit card debt with the development of the desirable behavior of saving. Numerous studies concerning low-income populations have found the transtheoretical model of change can be used effectively as a basis for evaluating a person's stage of change with regard to financial behavior (Loibl, Grinstein-Weiss, Zhan, and Bird, 2010; Lyons and Neelakantan, 2008; Palmer, Bliss, Goetz, and Moorman, 2010; Shockey and Seiling, 2004; Spader et al., 2009). The responses gathered in this study were reviewed for trends associated with the transtheoretical model of change in the acceptance of financial behavior change. The interview questions were evaluated to determine the transtheoretical stage of the participant when they attended the Money Smart program (FDIC, 2010). The transtheoretical stage identified can help financial literacy program marketing to reach low-income adults at each transtheoretical stage, thereby increasing low-income adults' participation in financial literacy programs therefore, increase participants' long-term financial security.

METHODOLOGY

Research Questions

This study involved interviews of low-income adults in a community-based organization their interview responses were compiled in respond to the central research question, "What are your perceptions and expectations concerning the financial literacy program?" Subsequent interviews of selected respondents provided participants with the opportunity to divulge both their perceptions and expectations of financial literacy.

The sub-questions categories for the central research question represent the construct variables of personal financial literacy, financial literacy program results, and personal thoughts on how to increase participation in financial literacy programs. The sub-questions supporting the central research question included:

- (1) “What do you feel is your financial literacy aptitude?”
- (2) “What are your reactions to the financial literacy program?” and:
- (3) “What should be done to increase participation in the financial literacy program?”

Data Collection Process

The participants for the study came from a population of approximately 390 low-income families registered at a community organization. Participation was limited to adults in the population earning less than thirty thousand dollars annual and who attended a financial literacy program available at the nonprofit organization. A distribution of a flyer soliciting participants and contact through mail from participants was used to access to low-income adults. Additional respondent and participants were developed using a snowballing sampling technique. As noted in Biernacki and Waldorf (1981), the snowballing technique is a non-probability sampling technique that utilizes current participants to refer others to take the financial literacy program offered at the nonprofit organization. Interviews occurred at either the nonprofit site or at the participant residence, depending on the participant’s request.

Data and Analysis

The research methodology comprised of multiple phases. Each phase considered the participants’ mindsets and obtaining answers that would facilitate a possible a solution to increasing financial literacy among low-income adults. Phase one included a substantial review of existing literature to comprehend the financial literacy levels within low-income adults and the challenges of accessing low-income adults for participation in the study. Phase two was the development of the interview questions which could acquire responses to answer the central research question. Phase three increased the validity of the research; the interview questions were peer reviewed by community organization directors familiar with the local low-income adult community. Phase four consisted of locating a site for the interviews where the participants would be comfortable. Phase five, a pilot test of the questions at the site was conducted increase the reliability of the study. The data analysis phase involved the interpretation of participant responses and enlisting the NVIVO 9 software to extract the trends and patterns in responses.

RESULTS

The study involved invitation announcements to 1,300 families registered at the organization to access the approximately 390 low-income families. Twenty positive responses were received from the 390 low-income families. Data collected from the initial measurement instrument was used as a screening mechanism to accept or reject respondents as well as to develop baseline impressions of the research subjects relating to central research question, “What are your perceptions and expectations concerning the financial literacy program?” Subsequent interviews of selected respondents provided participants with the opportunity to divulge both their perceptions and expectations of financial literacy in regards to:

- (1) “What do you feel is your financial literacy aptitude?”
- (2) “What are your reactions to the financial literacy program?” and:
- (3) “What should be done to increase participation in the financial literacy program?”

The responses resulted in identifying three themes; participant characteristics, presentation of financial literacy programs, and access to low-income adults. The themes present information that could inherently increase participation in financial literacy programs by low-income adults.

Participants' characteristics

Participants' responses to inquiries about their financial literacy aptitude and reactions to the financial literacy program they attended included personal descriptions of their expectations and experiences regarding financial literacy which identified two characteristics the belief in self and current time-frame orientation. These characteristics link to Proschaska's theoretical method for change second stage of contemplation, change within the next 30 days, but with repetitive actions to resolve similar financial dilemmas keeps participants in the second stage. A study by Devancy, Anong and Whirl (2007) used Maslow's hierarchy of need linking the levels to savings found movement from lower levels of savings (security) did not occur because lack of financial knowledge. In this study, only three participants were savings.

Belief in self emerged from the participants' acknowledging their perceived strengths and weaknesses and how they attempt to correct their perceived weakness. The participants rated themselves on their perceived financial literacy before the start of the financial literacy program and rerated themselves towards the end of the program. The discussion that ensued upon the rerating uncovered many of the participants did not realize what they did not know and therefore rated themselves higher at the onset. Their belief in self continues because individually they constantly have unexpected expenses and they are able to pay them so they consider themselves successful. Their focus is on catching up rather than saving for unexpected expenses. Porto and Xiao (2016) study indicated overconfidence keeps people from seeking out financial advice.

Current time-frame as captured by the responses is a time period of less than ninety days. Current time-frame orientation surfaced from the references by participants to deal with financial issues as they appear and references to financial planning as a next month bills or an upcoming event with a need for a financial outlay. The current time-frame orientation again keeps the participants in Proschaska's second level of change. The focus on the short-term did not have participants' savings for future events, however a single participant did register in Proschaska's 1st level of change, precontemplation, on savings for her daughter's education.

Presentation of financial literacy programs

Inquiring about the participants reactions to the financial literacy program they attended uncovered three topics of interest that brought value to the participants. The first topic is information wanted covers both the financial literacy program title and availability of support when the program was over. The financial literacy program title had to be thought of as useful to the participants. The Money Smart program have eleven modules (FDIC, 2010), the study participants attended only the module for budgeting. The participants were offered any additional modules however the participants only were interested in modules presenting information relevant to their current time-frame orientation. Another factor the participants expressed an interest in was the availability for future support whether by phone, text, email or returning to the site.

The second topic, presentation style, came from responses on what the participants liked about the program. The presentations staying under two hours, keeping it focused on a single task, simple ideas to support the long term use of the topic, and the opportunity for interaction among everyone attending.

Financial literacy programs such as the Money Smart program available through the U.S. treasury department has eleven modules the scope of the material is relevant to develop financial literacy and represents a top down approach to educating people. This study's participants found only a few of the modules relevant such as *Money Matters*, *Financial Recovery*, and *To Your Credit* while modules, they believe they know *Bank On It* and *Check It Out*. The module *Your Own Home* was perceived as impossible.

The third topic environment of the financial literacy class describes how aspects of the environment of a financial literacy class can impact a participant. Participants indicated the classes should be held somewhere convenient, accessible by public transportation and small class size so participants can feel comfortable expressing themselves, however the most important facet is the location be a site where they feel safe and trust the organization presenting the financial literacy programs. Studies by Robb, Babiarz, and Woodyard (2012) and Tang and Lachance (2012) both confirm the aspect of low-income adults needing to feel people conferring financial advice are trustworthy.

Presentation of financial literacy programs suggestions from participants confirm the current time-frame orientation and to possibly effect increasing financial literacy for low-income adults, market and present financial literacy programs that can support a change in the mindset from short-term to long-term orientation.

Access to low-income adults

Accessing low-income adults reflects on the challenge of increasing low-income adults to participate in financial literacy programs. The study participants were asked how they became aware of the program and for suggestions to increase more people like themselves making less than thirty thousand a year to attend a financial literacy program. One hundred percent of the participants became aware of the program from verbal referrals. Either a friend or a family member told the participant about the program. The participants suggested target advertising at local trusted community sites with regular interval of programs. The programs also have to follow the previously mentioned two hour time-frame and the ability of participants to attend only individual events and not be required to sign up for extended programs.

The themes were evaluated using both Proschaska's (1979) transtheoretical model of change and Maslow's (1948) hierarchy of needs. The themes, participant characteristics and presentation of financial literacy programs, interpretation resulted in participants rated to be in Proschaska's first or second stage of contemplating change and 85% of the participants were considered to be in Maslow's second level of security and safety.

IMPLICATIONS

Qualitative research basic premise is to provide information to improve situations studied and suggest future research to continue progress.

Implications for Practice

Exploring low-income adults' perspectives regarding financial literacy programs resulted in understanding how low-income adult perceive financial literacy by identifying three themes. Acknowledging the three themes of personal characteristics, presentations of financial programs, and access to low-income adult population can provide information to modify current financial literacy

programs to increase participation. Increasing participation of low-income adults is a challenge and current studies indicate access to low-income households through children (Sherraden and Grinstein-Weiss, 2015). This study's participants had aged out of the education system and their children were not old enough to be in school, therefore the participant suggestions to increase participation relates directly to the low-income population without direct access to financial literacy education available in the education system. The result can be minimal change in curricula with an increased advertisement in trusted community organization involved with low-income adults. The effect of these new strategies can support low-income adults prepare for secure financial future and United States FLEC organization delivery of financial literacy.

Implications for Future Research

Two implications for future studies consolidate the themes and focus on increasing participation in financial literacy programs. First, increasing access to the low-income population without children can come through building a trusting relationship with local organizations while decreasing financial literacy class time commitments. Lachance and Tang's (2012) research of trust and financial advisors found that there is a U-shape curve regarding trust and financial advisors. Higher levels of distrust of financial advisors occurred from people of both low and high levels of financial literacy. A researcher from the University of Wisconsin-Madison, Collins (2012), reported that financial advisors should complement rather than substitute for personal financial capabilities. Robb, Babiarz, and Woodyard (2012) researched when people seek professional financial advice and found that 40% of the participants earning less than \$35,000 located debt counseling. These studies confirm that trust is a factor in financial literacy program attendance and set the framework for further research on the aspect of trust in financial literacy programs.

The second implication involves understanding that the low-income adult attributes of current time-frame orientation in dealing with situations and wanting quick results requires modifying financial literacy program curricula. Futures studies recommendations combine the hypotheses proposed and measure the outcome by attendance numbers and referrals.

RECOMMENDATIONS

Exploring the perceptions and expectations of low-income adults regarding financial literacy resulted in discovering possibilities to increase participation by low-income adults in financial literacy programs.

Recommendations for Practice

This study's recommendations represent ideas to increase this populations' financial literacy. The first recommendation involves revising financial literacy curricula to meet the needs of the population by recognizing the populations' attributes, especially their current time-frame orientation. The second recommendation follows the first, because without smaller modules of information and the removal of long term commitments an increase in participation cannot occur. The second recommendation is to offer the financial literacy program modules in familiar and trusted sites in the community at regularly scheduled intervals. The sites can provide other necessary support for attendance based their local resident's needs. This recommendation is consistent with Maloney's (2010) research findings that financial literacy education needs support from organizations on a state by state basis. These recommendations attempt to break the barriers of connecting with the low-income adult population

because of their current time-frame orientation and transitory living situations. Community leaders providing financial literacy classes to low-income adult populations should understand that lengthy commitments to financial literacy programs that extend over multiple sessions are not of interest. Information should be provided as single sessions and calendars of other available sessions handed out at the end of classes to provide (1) opportunities for further personal development and (2) information on classes for participants to refer friends and family. The offering and presentation of financial literacy programs with a better understanding of low-income adult audience attributes can increase participation and, subsequently, create a foundation of long-term financial success for individuals. This provides an opportunity to cause a positive ripple effect on global economic stability.

Recommendations for Research

The results of the study present opportunities for future research to determine possible causal relationships between financial literacy program attendance using variables of program duration and trust factors such as the class site location and instructor. The phenomenological research study's conclusions presented options to national and local leaders to revise the financial literacy programs' designs and presentation to increase access to low-income adults. The study's implications for future studies revolve around the research study's three constructs and resulting themes: (1) participants' characteristics; (a) the belief in self, (b) current time-frame orientation; (2) presentation of financial literacy program; (a) wanted information, (b) presentation style, (c) environment of financial literacy classes; and (3) access to low income adults; (a) how the participants' learned of the financial literacy program – word of mouth, and (b) the participants' advertisement suggestions to increase participation in financial literacy programs.

CONCLUSION

Through the shared experiences of the participants the study of how low-income adults approached financial literacy increased the understanding of how low-income adults manage their finances. In doing this the research was able to explore the participants' reactions to a financial literacy programs related to the sub questions reflected above and more specifically whether the financial literacy program provided them with the knowledge and skills to meet their personal financial literacy needs. The unique perspective of understanding the financial literacy program participation of low-income adults from a community nonprofit organization provided insights to develop financial literacy programs, discovered new measurements of financial literacy education effectiveness, and uncovered possible methods for increasing participation. This study increased the knowledge base to develop financial literacy programs that actively engage the cohort under study, and provided recommendations that could increase participation in financial literacy programs. Thereby switching the top down approach of what the low-income population requires to attain financial literacy to what the low-income cohort wants to learn to increase their financial literacy.

The purpose of this research study was to ascertain and interpret the experiences and future financial expectations of low-income adults to increase attendances in financial literacy programs. Understanding that financial literacy levels are the lowest nationally for low-income adults, and that the population represents 32% of households in the United States (FDIC, 2013), requires increasing this population's financial literacy. This is paramount in increasing national financial stability.

Limitations to the study reflected availability of participants, honesty of the participants regarding their financial literacy perceptions and expectations and the attendance of a single financial literacy

program module. Participants' were only required to attend a single financial literacy program module, because attendance records from the site gatekeeper showed a lack of attendance in a five module financial literacy program. Weiss and Bailar (2002) explained that low-income adults' lack of participation in research studies comes from various factors, such as no telephone service, frequent moves, language barriers, transitory nature, and often suspicion of strangers.

Participation in the study through interviews was supported by the nonprofit organization's gatekeeper and the use of the snowballing technique. The gatekeeper maintained regular contact with low-income adults (Weiss & Bailar, 2002). The use of snowballing was required because of the transitional nature of low income populations and makes it difficult to follow up with the low-income participant population to determine whether or not the participants made changes in their behaviors as assumed by Prochaska's (1979) second stage of contemplation.

The recommended curriculum additions at the institution level could be applied to the target population in order to increase participation in financial literacy programs not generalized to low-income populations because opportunities and barriers reflect local environments. This study could be replicated by other local organizations concerned with understanding the needs of their service population. The study provided new strategies, to increase attendance in financial literacy programs.

REFERENCES

- Arthur, C. Fall, (2011). Against teaching financial literacy. *Our Schools/ Our Selves*, 21(1), 13-16.
- Biemacki, P., & Waldorf, D. (1981). Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research*, 10(2), 141-163.
- Chang, Y., & Lyons, A. C. (2008). Are financial education programs meeting the needs of the financially disadvantaged consumers? *Journal of Personal Finance*, 7(2), 84-109.
- Collins, J. M. (2012). Financial advice: A substitute for financial literacy? *Financial Services Review*, 21, 307-322.
- Curley, J., Ssewamala, F., & Sherraden, M. (2009). Institutions and savings in low-income households. *Journal of Sociology & Social Welfare*, 36(3), 9-32.
- Devaney, S. A., Anong, S. T., & Whirl, S. E. (2007). Household savings motives. *Journal of Consumer Affairs*, 41(1), 174-186. doi:10.1111/j.1745-6606.2006.00073.x
- Federal Deposit Insurance Corporation (FDIC). (2010). *The Money Smart program*. Retrieved from <http://www.fdic.gov>
- Federal Deposit Insurance Corporation (FDIC). (2013). *FDIC national survey of unbanked and underbanked households*. Retrieved from http://www.fdic.gov/householdsurvey/2013/full_report.pdf
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 44(2), 296-316. doi:10.1111/j.1745-6606.2010.01170.x
- Loibl, C., Grinstein-Weiss, M., Zhan, M., & Bird, B. R. (2010). More than a penny saved: Long-term changes in behavior among savings program participants. *Journal of Consumer Affairs*, 44(1), 98-126. doi:10.1111/j.1745-6606.2010.01159.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
- Maloney, P. J. (2010). Financial literacy: A practitioner's update on the status of integration in school curricula. *Journal of Personal Finance*, 9, 11-29
- Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Journal of Financial Counseling and Planning*, 20(1), 15-24.
- Maslow, A. H. (1948). Some theoretical consequences of basic need-gratification. *Journal of Personality*, 16(4), 402-416. doi:10.1111/j.1467-6494.1948.tb02296.x

- National Endowment for Financial Education (NEFE). (2006). Closing the gap between knowledge and behavior: Turning education into action. *Journal of Financial Counseling & Planning*, 17(1), 73-90.
- Organisation of Economic Co-operation and Development (OECD). (2008). *OECD project on financial education and its international network on financial education*. Retrieved from <http://www.oecd.org/dataoecd/8/28/44409678.pdf>
- Palmer, L., Bliss, D., Goetz, J. W., & Moorman, D. (2010). Improving financial awareness among college students: Assessment of a financial literacy management project. *College Student Journal*, 44(3), 659-676.
- Porto, N., & Xiao, J. J., (2016). Financial Literacy Overconfidence and Financial Advice Seeking. *Journal of Financial Service Professionals*, 70(4), 78-88.
- Proschaska, J. O. (1979). *Systems of psychotherapy: A transtheoretical analysis*. Homewood, IL: Dorsey.
- Robb, C. A., Babiartz, P., & Woodyard, A. (2012). The demand for financial professionals' advice: The role of financial knowledge, satisfaction, and confidence. *Financial Services Review*, 21, 291-305.
- Servon, L. J., & Kaestner, R. (2008). Consumer financial literacy and the impact of online banking on the financial behavior of lower-income bank customers. *Journal of Consumer Affairs*, 42(2), 271-305. doi:10.1111/j.1745-6606.2008.00108.x
- Sherraden, M. S., & Grinstein-Weiss, M. (2015). Creating Financial Capability in the Next Generation: An Introduction to the Special Issue. *Journal of Consumer Affairs*, 49(1), 1-12. doi:10.1111/joca.12054
- Shockey, S. S., & Seiling, S. B. (2004). Moving into action: Application of the transtheoretical model of behavior change to financial education. *Journal of Financial Counseling & Planning*, 15(1), 41-52.
- Spader, J., Ratcliffe, J., Montoya, J., & Skillern, P. (2009). The bold and the bankable: How the nuestro barrio telenovela reaches latino immigrants with financial education. *Journal of Consumer Affairs*, 43(1), 56-126. doi:10.1111/j.1745-6606.2008.01127.x
- Tang, N., & Lachance, M. E. (2012). Financial Advice: What About Low-Income Consumers? *Journal of Personal Finance*, 11(2), 121-158.
- U. S. Financial Literacy and Education Commission (FLEC). (2010). *Financial literacy and education commission website*. Retrieved from <http://www.ustreas.gov/offices/domestic-finance/financial-institution/fin-education/commission/>
- Weiss, C., & Bailar, B. A. (2002). *High response rates for low-income population in-person surveys*. Retrieved from <https://aspe.hhs.gov/hsp/welf-res-data-issues02/pdf/03.pdf>
- Xiao, J. J., O'Neill, B., Proschaska, 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