High School Seniors' Financial Knowledge: The Impact of Financial Literacy Classes and Developmental Assets

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High School Seniors’ Financial Knowledge:
The Impact Of Financial Literacy Classes
and Developmental Assets
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The Impact Of Financial Literacy Classes
and Developmental Assets

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Social Work

By

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University of Arkansas
Bachelor of Arts in Psychology, 2010

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This thesis is approved for recommendation to the Graduate Council.

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ABSTRACT

Low levels of financial literacy among high school students are a growing concern in the United States. High school students lack the financial knowledge to make important financial decisions. Financial literacy and money management skills are important for high school students as they transition into an ever-changing economy. High school students, who are financially literate, are likely to develop positive financial behaviors and make positive financial decisions. Previous studies show that financial literacy classes can increase financial knowledge.

The present study has three objectives. First, this study examined whether the Money Management Skills for Young Adults Class increased high school seniors’ financial knowledge. There were seven units that were measured: (1) Financial Psychology, (2) Managing Credit, (3) Income, (4) Investment, (5) Savings, (6) Risk Management, and (7) Long-Term Planning. Second, this study examined whether there was a correlation between students’ developmental assets and financial knowledge. Finally, this study examined whether there was a correlation between students’ social support and financial knowledge. Participants in this study (n = 18) were required to take the class as stipulation for their Youth IDA Program enrollment. Findings indicated that students’ financial knowledge significantly increased in five units. There was not a significant correlation between students’ developmental assets and financial knowledge. Social support, however, was correlated with financial knowledge.

The findings in this study suggest that financial literacy classes increased students’ financial knowledge through financial socialization and effective experiential teaching techniques. Future research should further explore the universal effectiveness of financial
literacy classes and the importance of students’ developmental assets. Implications of the findings for evaluating theory development, policy practice, and direct practice are also discussed.

*Key words:* financial knowledge, financial literacy, financial capability, developmental assets, financial socialization, social capital theory
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DEDICATION

I dedicate my thesis to the School of Social Work at the University of Arkansas. This thesis is especially dedicated to my supervisor, Anna Piazza, and my Thesis Chair, Dr. Kimberly Stauss. Both have provided me genuine support and allowed me to take everything away as a positive learning experience.
# TABLE OF CONTENTS

## CHAPTERS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Background of the Problem</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>The Need for Financial Literacy Classes</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Developmental Assets</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Purpose of the Study</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Statement of the Problem</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Significance of the Study</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Policies</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>The Excellence in Economic Education Act</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>National Association of State Board Education</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>National Strategy for Financial Literacy</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical Framework</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Financial Socialization: A Conceptual Model</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Social Capital Theory</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Financial Socialization and Social Capital Theoretical Frame</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Literature Review</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Testing Financial Literacy</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Financial Literacy Studies</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>High School Students’ Financial Literacy</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>College Students’ Financial Literacy</td>
<td>15</td>
</tr>
</tbody>
</table>
### Financial Literacy Using Financial Product Components

Gaps in the Literature

**CHAPTER 5: Methodology**

- Research Design
- Participant Recruitment
- Sample Design
- Data Collection Procedures
- Outcome Measures
- Money Management Skills for Young Adults Pretests and Posttests
- Developmental Assets Profile
- Social Support Survey
- Data Coding and Operational Definitions
- Demographic Variables
- Dependent Variables
- Predictor Variables
- Missing Data
- Data Analysis for Bivariate Findings
- Paired Samples T-Test
- Pearson’s Correlation
- Ethical Considerations
- Informed Consent and Confidentiality
- Benefits and Risks

**CHAPTER 6: Results**
LIST OF TABLES

Table 1: High School Seniors’ Housing Academic Enrollment Status and Educational Plans.................................................................30

Table 2: Mean, Mean Differences, and Standard Deviations for Pretest and Posttest Scores........................................................................31

Table 3: Correlation Between Knowledge, External, Internal, Total Assets, and Social Support ...............................................................33
Chapter 1

Introduction

Background of the Problem

The need to increase financial literacy is important as the United States’ economy continues to change. Researchers have observed that a few consumers are unable to make sound financial decisions and investments in an economy that has not fully recovered since the recession of 2008 (Gennetian, Castells, & Morris, 2010; Jorgensen, 2010; Johnson & Sherraden, 2007; Perry, 2008; Remund, 2010; Willis, 2009). Financial illiteracy not only affects adults, but some youth are having difficulty understanding basic financial concepts such as credit management, balancing checkbooks, and the importance of savings (Martin & Olivia, 2001). This is a concern because youth who are financially illiterate may lack the knowledge to make important financial decisions for their future as they transition into adulthood (Chen & Volpe, 1998; Dinwoodie, 2010; Gutter & Garrison, 2008; Johnson & Sherraden, 2007; Kindle, 2010; Lusardi et al., 2010; Mandell & Klein, 2009; Manning, 2005; Nutbeam, 2009; Perry, 2008). As a result, youth are likely to experience long-term financial burdens.

Debt can be an overwhelming concern for most young adults and students. In fact, youth are one of the fastest growing populations to accumulate debt (Burdman, 2005; Lusardi et al., 2010; Pinto & Mansfield, 2005). Between the years 1997 to 2008, student loan debts have significantly increased to 58% (Lusardi et al., 2010). With rising college tuition costs and cuts in federal grants and scholarships, college students are likely to take out loans to cover expenses (Burdman, 2005; Pinto & Mansfield, 2005). College loans, however, may not even cover all student expenses (e.g., room and board) and students may find alternative financial resources. Unfortunately, students frequently use credit cards to cover their daily expenses (Pinto &
Mansfield, 2005). Studies show that credit card ownerships can lead to compulsive and irresponsible overspending, in which students incur more debt (Roberts & Jones, 2001; Schor, 1998; Scott, 2010). Students often experience financial burden after graduation due to long-term indebtedness such as difficulty repaying student loans after the grace period, filing for early bankruptcy, and choosing to default on their loans (Harrast, 2004).

A few people are unable to save due to debt accumulation. Lower-income individuals save less than their middle and higher-income counterparts because they do not have the economic resources to do so (Loibl, Grinstein-Weiss, Zhan, & Red Bird, 2010, p. 98). As such, Sherraden (2010) uses the word “unbanked” to describe how lower-income individuals have difficulty saving because they do not hold a checking or savings account (p. 7).

The Need for Financial Literacy Classes

Most studies define financial knowledge and financial literacy synonymously (Hutson, 2010). Currently, there is no universal definition for financial knowledge because researchers measure and examine different financial topics (Hung, Parker, & Yoong, 2009). The HM Treasury and the Presidents Advisory Council on Financial Literacy (PACFL, 2008) operationalized financial literacy as a set of acquired skills individuals use to recognize their financial situations and spending habits and behaviors. Similarly, the U.S. General Accountability Office (2004), the JumpStart Coalition (2007), and other studies define financial literacy as the increase in one’s financial knowledge in multiple components that enable them to better manage finances and invest in their future endeavors (Hung et al., 2009; Sherraden, 2010; Willis, 2009). Other popular definitions of financial literacy include: (1) having knowledge in multiple financial concepts; (2) having the ability to manage finances; (3) having the ability to
make positive financial decisions; and (4) increasing one’s financial capability so one can invest in his or her future endeavors (Huang et al., 2013; Remund, 2010; Scott, 2010; Willis, 2009).

The goal of financial literacy classes is to teach youth the benefits of early money management skills (Carswell, 2009; Chen & Volpe, 1998; Remund, 2010). The National Council on Economic Education (NCEE, 2005) is an organization in the United States that concentrates on increasing K-12 students’ financial knowledge. Under the NCEE (2005), 40 states are required to implement standardized testing for financial literacy or a financial literacy course must be offered. Seventeen states require that economics be provided as an elective, and 15 of those states make it a requirement for graduation (NCEE, 2005). The NCEE report card shows that at least one-third of all high school students in America successfully completed a financial education course (NCEE, 2005). Results, however, are mixed as high school students continue to demonstrate poor financial literacy after they graduate (Manton, English, Avard, & Walker, 2006).

Despite strategic efforts to improve youth (e.g., children and high school students) financial literacy, scores have been less than satisfactory (U.S. Department of the Treasury, Financial Literacy and Education Commission, 2006). For instance, USA Today reports that between the years 2011 and 2012, 80,000 to 84,000 students scored an average of 69%, which was 1% lower than the previous year (Malcom, 2012). Another survey reported that high school students in particular have average scores of 52.4% to 58%, indicating low financial literacy (Perry, 2008). In fact, high school seniors’ financial literacy scores have gradually gotten lower since 1997 (Mandell, 2006).

Poor financial literacy scores is a result of insufficient financial literacy programs (Connor, 1992). In order to increase students’ financial literacy scores, additional courses are
needed to teach students the necessary skills and knowledge to make better financial decisions and practice better money management skills (Huang et al., 2013; Remund, 2010). These are resources that allow students to thrive in an increasingly competitive and complicated economy (Kozup & Hogarth, 2008; NCEE, 2005).

Although financial literacy is associated with positive financial wellbeing, its effectiveness is questionable. This suggests that some people who are financially literate have the tendency to make risky financial decisions and investments (OECD, 2006). Willis (2009) argues that financial literacy is effective only when participants need it to improve their financial situations. In addition, financial literacy seems to be effective when topics are most relevant to them. For example, is financial literacy effective for individuals who have credit card debt? Thus, Willis (2009) states that one’s financial welfare (e.g., current financial situation) and financial literacy be examined.

**Developmental Assets**

Developmental assets are significant interpersonal resources that influence positive youth development (Bruyere, 2010; Burrow, O’Dell, & Hill, 2010; Li, Lerner, & Lerner, 2010; Mannes, Roehlkepartain, & Benson, 2005). Search Institute conceptualized 40 developmental assets (Bruyere, 2010). Each asset is categorized as either an external or internal asset (Beckford, Zeller-Berkman, Clark, & Imbimbo, 2005; Jain, Buka, Subramanian, & Molnar, 2012; Lofquist, 2009). External assets consist of youth’s support empowerment, boundaries and expectations, and constructive use of time (Beckford et al., 2005; Lofquist, 2009). Internal assets include youth’s commitment to learning, positive values, social competencies, and positive identities (Beckford et al., 2005; Lofquist, 2009).
Scales (1997) cites that building external assets allowed adolescents and youth to increase their internal assets. Both external and internal assets allow youth to develop positive and meaningful relationships within their communities (Bruyere, 2010; Lofquist, 2009). Additionally, youth with more developmental assets are able to become self-sufficient adults (Bruyere, 2010). Developmental assets are also determinants in youth’s academic performance (Jorgensen & Savla, 2010). Youth with fewer to no assets, however, often experience riskier behaviors and consequences (Bruyere, 2010). It is important to highlight the significance of developmental assets because they can increase youth’s self-efficacy and educational outcomes (Mannes et al., 2005). Since there are no current studies examining the relationship between students’ developmental assets and financial knowledge, this study will be the first to do so.

**Purpose of the Study**

A project attempting to address the efficacy of financial literacy programs and the importance of developmental assets was recently undertaken in Northwest Arkansas. There were three primary purposes in this descriptive study. First, this study aimed to evaluate the efficacy of the Money Management Skills for Young Adults financial literacy class. This study specifically examined whether financial literacy classes could increase high school seniors’ financial knowledge. Second, this study analyzed whether high school seniors with more developmental assets had higher levels of financial knowledge. Third, this study analyzed whether students’ social support correlated with their financial knowledge.

**Statement of the Problem**

Currently, the state of Arkansas’ K-12 schools required that schools must offer economic courses, however, no testing standards were implemented (NCEE, 2011). This limits the chance for high school students to become financially literate as they transition into adulthood and
college life. In order to determine whether Arkansas’ high school students can increase their financial knowledge, it is imperative to determine the effectiveness of financial literacy classes in Arkansas’ public schools because it will demonstrate the importance of statewide financial literacy programs.

**Research Questions**

To further explore the area of interest, the following questions were addressed in this study:

1. Does the Money Management Skills for Young Adults class effectively increase students’ financial knowledge?
2. Is there a relationship between students’ developmental assets and their financial knowledge?
3. Is there a relationship between students’ social support and their financial knowledge?

**Significance of the Study**

Nationwide access to financial literacy programs is analyzed as a critical component in promoting financial wellbeing in the United States (Mandell & Klein, 2007; NCEE, 2005). High school students can benefit from developing financial knowledge at an early age if more public schools implement financial literacy programs into their core curriculum (McCormick, 2009; NASBE, 2006). Implementing more inclusive financially literacy programs can also potentially reduce educational gaps between lower-income students and their higher-income counterparts. However, there are no existing studies documenting whether financial literacy classes are effective in Arkansas. This study attenuates the chance for Arkansas’ lower-income students
to reach their fullest potential. In addition, this study is the first to examine the relationship between high school students’ developmental assets and their financial knowledge.
Chapter 2

Policies

A number of federal organizations and policies have focused on implementing financial literacy in educational curricula (Hutson, 2010; Johnson & Sherraden, 2007; McCormick, 2009; Perry, 2008, Scott, 2010). One notable organization was the National Jump$tart Coalition for Personal for Financial Literacy (Klemme, 2002; Manton, English, Avard, & Walker, 2006). Organized in 1995, this non-profit coalition evaluates and promotes financial literacy for K-12 and college students. The Coalition also provides a framework that establishes and “identifies benchmarks and achievement levels for grades 4, 8, and 12” (Klemme, 2002, p. 12; Scott, 2010). Several organizations became involved in the Jump$tart Coalition. Some of these organizations include the American Association of Family and Consumer Sciences, the National Council of Economic Education, and the Foundation of Teaching Economics (Klemme, 2002). Following the establishment of the Jump$tart Coalition, several states adopted the Coalition’s framework to promote financial literacy research and improve all public school financial literacy programs.

The Excellence in Economic Education Act

The Excellence in Economic Education Act (included in the No Child Left Behind Act) was proposed to increase students and teachers’ financial knowledge and evaluate financial efficiency (Beverly & Burkhalter, 2005). The goals of this act include: disseminating awards and grants to nonprofit organizations that focus on improving and increasing students and teachers’ financial knowledge, promoting ongoing research and quality practices of financial literacy, measuring the effect of financial literacy, and promoting collaborations among national, state, and community levels (U.S. Department of Education, 2012). Unfortunately, the progress
of the Excellence in Economic Education Act remains unknown because it has not been enacted.

**National Association of State Boards of Education**

The Financial Literacy and Education (FLE) Commission developed the National Strategy of Financial Literacy (2011) (Schuchardt et al., 2009). The FLE Commission developed a plan called the National Strategy for Financial Literacy (2006). Similar to the Excellence in Economic Education Act, the FLE Commission introduced a framework that focused on advocating for public awareness of available resources, developing effective strategies, collaboration between the nonprofit and private sectors, and promoting effective research evaluation and strategies for financial literacy programs. Overall, this strategy proposed a strategic framework that could be useful for organizations committed to financial literacy (FLE Commission, 2011).

**National Strategy for Financial Literacy**

The National Association of State Boards of Education (2006) had several objectives to improve financial literacy in the United States. One of the goals included that state boards must regularly monitor and evaluate financial literacy in their states (NASBE, 2006). The NASBE also recommends that financial literacy education should include K-12 grade students, thus encouraging that students of all ages should be able to attain financial education at an early age. Again, the National Strategy of Financial Literacy (2011) and the National Association of State Boards of Education (2006) sound promising; however, the effectiveness of these incentives remains largely unknown.
Chapter 3

Theoretical Framework

The purpose of this chapter is to present and explain the two theories guiding this study.

Financial Socialization: A Conceptual Model

The conceptual framework often used to study financial literacy is financial socialization. Financial socialization is one of the many learning concepts under the theories of socialization and posits that children’s knowledge and behaviors are transferred from their parents (Gutter & Garrison, 2008; Shim, Barber, Card, Xiao, & Serido, 2010; Spera & Matto, 2007). This transference helps develop youths’ knowledge, principles, and morals that guide their financial behaviors and welfare (Chowa, Despard, & Osei-Akoto, 2012; Lusardi et al., 2010; Sherraden, Johnson, Guo, & Elliott, 2011; Spera & Matto, 2007). A youth’s parents, communities, teachers, and the media are considered “socialization agents” (Shim et al., 2010, p. 1459; Spera & Matto, 2007, p. 551). As such, children’s financial behaviors and attitudes are influenced and modeled by their socialization agents (Chowa et al., 2012; Shim et al., 2010).

Youth frequently model their parents’ financial behaviors and attitudes because parents are often considered their primary socialization agent, especially when children view their parents as their main source of information (Danes, Huddleston-Casas, & Boyce, 1999; Webley & Nyhus, 2006). This could be due to the fact that parents often pass down what they consider as financially appropriate behaviors to their children (Danes & Haberman, 2007). Children then assimilate this new knowledge by demonstrating familiar (e.g., parental) financial attitudes and behaviors.

In spite of parents being youth’s primary socialization agent, youth are able to financially socialize outside of their family (Shim et al., 2010). This socialization typically occurs once
parental influence begins to decrease, as youths get older (De Goedge, Branje, & Meeus, 2009). Mandell (2009) identifies that high school financial education instructors can also be a primary financial socialization agent. The present study combines these concepts to measure whether a Money Management Skills for Young Adults class and the proctors increased students’ financial knowledge.

**Social Capital Theory**

Social capital theory is also an important framework for this study. Coleman (1988) postulates that social capital consists of interpersonal resources that empower youth. Interpersonal resources include youths’ positive relationships with their parents, strong relational ties with youths’ community, and peers’ support (Avery, 2010). For example, there is a positive impact on educational performances when family and children spent quality time together (Coleman, 1988). Social capital theory also explains that youth with higher social trust were more likely to share their ideas with others (Avery, 2010). Exchanging ideas allow youth to create meaning and purpose in their life (Burrow et al., 2010). Knowledge, therefore, gradually increases through social interactions between groups of people (Danes & Haberman, 2007). Youth continually absorb new information from their social environments (e.g., home or school) and process it in a way that makes sense to them (Greene, 1990). In contrast, youth’s financial knowledge is lower if they have fewer available resources (Johnson & Sherraden, 2007).

**Financial Socialization-Social Capital Theoretical Framework**

Institutional factors include social and psychological influences (e.g., familial resources and financial behaviors) (Adams, Nam, Williams-Shanks, Hicks, & Robinson, 2010; Sherraden, 1991; Sherraden, Peters, Wagner, Clancy, & Guo, 2012). As indicated, the primary focus of this
study is to measure students’ financial knowledge, developmental assets, and social support. The combined financial socialization-social capital theoretical framework helps conceptualize how students’ current external influences (e.g., parents, neighbors, friends, and schools) and internal influences (e.g., internal assets) affect or increase their financial knowledge (Chowa et al., 2012; Jorgensen & Savla, 2010; Sherraden et al., 2011; Shim et al., 2010).
Chapter 4

Literature Review

The purpose of this chapter is to review the existing body of literature on the financial literacy of elementary, high school, and college students. Financial literacy classes that have a financial component integrated in the curricula and students’ financial attitudes and behaviors are also reviewed. The final section outlines the gaps in the existing literature. This chapter does not review developmental assets and financial knowledge because there are no existing studies that review the relationship between the two.

Testing Financial Literacy

Different methods have been used to measure youths’ financial literacy. Multiple-choice tests were often the most common and preferred method in measuring youth financial literacy (Beverly & Burkhalter, 2005; Manton et al., 2006). Prior studies use self-reported measures as well; however, results were mixed because participants’ financial knowledge was actually lower than what they reported (Beverly & Burkhalter, 2005; Collins, 2010; Sherraden, 2010, Willis, 2009). Consequently, measuring financial literacy is difficult because there is not a universal definition for financial literacy and several studies use a “program output criteria such as the number of program participants, number of programs delivered, and number of educational materials distributed” (Lyons, Palmer, Jayaratne, & Scherpf, 2006, p. 210). Despite these discrepancies, an increasing number of studies report the importance of financial literacy and its effectiveness in increasing financial knowledge and positive financial behaviors (Huang et al., 2013; Lusardi et al., 2010; Sherraden et al., 2011).

Financial Literacy Studies

High School Students’ Financial Literacy
Three empirical studies on high school students and youth’s financial knowledge are selected for this literature review. The first study compared financial literacy among high school students in New Zealand, and used samples from Japan and the United States as a comparison group (Cameron, Calderwood, Cox, Lim, & Yamaoka, 2013). Cameron et al. (2013) surveyed 352 (final sample size was 335) high school students (from five high schools) from New Zealand using the Financial Fitness for Life – High Schools (FFFL-HS) Test, a demographic questionnaire, and a survey that measured financial risk tolerance. The FFFL-HS Test consists of questions from the following modules: (1) The Economic Way of Thinking; (2) Earning and Income; (3) Saving; (4) Spending and Using Credit; and (5) Money Management (Cameron et al., 2013). Results from the FFFL-HS Test were used to compare students from Japan and the United States (Cameron et al., 2013). First, their findings indicate that New Zealand high school students scored higher than United States students by 0.5 percentage points (mean score of 45.3%) (Cameron et al., 2013). Second, they also found that Japanese high school student scores were 12 percentage points higher than New Zealand students (Cameron et al., 2013). Overall, Cameron et al. (2013) found that New Zealand, Japan, and United States students have low levels of financial literacy (Cameron et al., 2013).

The National Longitudinal Survey of Youth of 1997 (NLSY97) included a sample of the United States’ youth population (Lusardi et al., 2010). The sample included 7,417 participants, aged 12 to 17 (Lusardi et al., 2010). They examined whether youth’s financial knowledge is associated with their experiences in school; therefore, they asked teachers whether youth were actively participating in their classes. Lusardi et al. (2010) used three financial literacy questions to measure youth’s financial literacy. The first and second questions were about interest rate and inflation and the third question was asked about risk diversification (Lusardi et
al., 2010). Findings indicated that 79% of the participants answered the interest rate question correctly, 54% answered the inflation question correctly, and 47% of the participants answered the risk diversification correctly (Lusardi et al., 2010). In addition, 37% of the participants answered, “do not know” when they did not know the answer to the question (Lusardi et al., 2010). This finding suggests that financially illiterate participants often answer “do not know” (Lusardi et al., 2010). Lusardi et al. (2010) had similar findings to prior studies, indicating that youth had low levels of financial literacy.

Scott’s study used six surveys from the Jump$tart Coalition for Personal Financial Literacy surveys to measure high school seniors’ financial literacy (Scott, 2010). The 1997 survey included 1,532 high school seniors; the 2000 survey included 723 high school seniors, the 2002 survey included 4,024 high school seniors; the 2004 survey included 4,074 high school students; the 2006 survey included 5,775 high school students; and the 2008 survey included 6,856 high school students. The 2008 survey consisted of 49 multiple-choice questions that included the following units: income, money management, savings and investing, and spending and credit (Scott, 2010). Students’ average score was high in 1997 (57.3%), but decreased in 2008 (48.3%) (Scott, 2010). In addition, Scott (2010) found that the passing score in 1997 was 47.2%; however, this score was lower in 2008, with 31% of the students passing. Similarly, Scott (2010) found that majority of the high school students had low levels of financial literacy.

**College Students’ Financial Literacy**

Chen & Volpe (2002) surveyed college students’ financial literacy using a large sample from different colleges and universities in the United States (n = 924). The sample included freshmen, sophomores, junior, and graduate students (Chen & Volpe, 2002). The researchers also queried whether there were differences in financial literacy between men and women and
possible reasons why these differences existed. Overall findings indicated that men scored significantly higher than women and those women had lower financial literacy (Chen & Volpe, 2002). Chen and Volpe (2002) found that one’s financial knowledge was related to education and experience. For instance, business majors were likely to score higher than students with other majors and students (Chen & Volpe, 2002). Interestingly, Chen and Volpe (2002) also found that women (74%) and men’s (68%) parents were their primary sources for financial knowledge.

**Financial Literacy Using Financial Product Components**

Another study looks at the use of a financial product component to. Financial product components are incentives that are likely to increase participants’ financial knowledge (Sherraden, 2010). An example of this program would be the SEED Initiative (Wheeler-Brooks, 2011). Sherraden et al.’s study (2011) examined the “I Can Save” (ICS) program, which included financial literacy programs and activities children. Sherraden et al. (2011) used a quasi-experimental design, with a treatment group (the ICS program), consisting of kindergarten and first graders ($n = 73$), a comparison group of second and third grade students ($n = 23$). Findings indicated that elementary students and participants in a financial literacy and savings program had higher levels of financial knowledge compared to the control group (Sherraden et al., 2011). Students’ mean of correct answers on the FFFL test was 55.2% (Sherraden et al., 2011). There were no statistical differences between the treatment and comparison groups on the money management unit (Sherraden et al., 2011).

Similarly, Huang et al. (2013) also examined whether a financial product was related to one’s financial knowledge (e.g., matched savings account). Huang et al. (2013) used data from the SEED for Oklahoma Kids, which comprised of mothers or caregivers and infants ($N =$
Findings indicate that 6% of the mothers with lower financial knowledge has an account while 22% of the mothers with higher financial knowledge has a matched savings account (Huang et al., 2013). Their findings indicate that financial products such as future endeavors for their children are major indicators of one’s financial knowledge (Huang et al., 2013).

**Gaps in Literature**

Despite the body of literature reviewed, there are still remaining gaps that need to be addressed. First, most studies measuring financial literacy used secondary data, indicating that there are no current studies that examine financial literacy. Secondly, when researchers measured financial literacy, they were not exploring the outcomes of a financial literacy program. For example, this study will collect current data as opposed to the three studies that measured financial literacy among high school students using aggregated secondary data (Cameron et al., 2013; Lusardi et al., 2010; Scott, 2010). This study will be the first to examine the effectiveness of a financial literacy class in Arkansas.

There is a dearth of studies on developmental assets and financial knowledge. Understanding the importance of students’ developmental assets will likely determine whether socialization agents such as teachers and peers can increase students’ financial knowledge. In addition, researchers will be able to examine whether developmental assets are important resources for high school students’ life course. This study will contribute to the literature by being the first to examine the correlation of students’ developmental assets and their financial knowledge. Since prior studies examined social support and students’ academic achievements, this study will also contribute to the literature by examining whether there is a correlation between social support and students’ financial knowledge.
Chapter 5

Methodology

This study had three objectives. First, this study evaluated the efficacy of the Money Management Skills for Young Adults class. This study specifically evaluated whether the class increased students’ financial knowledge in seven different financial units: (1) Financial Psychology, (2) Managing Credit, (3) Income, (4) Investing, (5) Savings, (6) Risk Management, and (7) Long-Term Planning. Second, this study examined youth’s developmental assets and its influence on financial knowledge. Finally, this study examined whether there was a positive relationship between students’ social support and financial knowledge.

Research Design

A pre-experimental one-group pretest and posttest research design was selected because this design allows researchers to evaluate how the dependent variable (e.g., financial knowledge) was before and after the intervention (e.g., the financial literacy class) (Rubin & Babbie, 2010). In addition, since this is a descriptive study, relationships between financial knowledge and developmental assets and financial knowledge and social support were examined.

Participant Recruitment

The sample included 18 lower-income high school seniors that attended Washington County public high schools in the following cities: Farmington, Fayetteville, Lincoln and Springdale. All students were enrolled in the EOA Youth IDA Program and completed the mandatory Money Management Skills for Young Adults financial literacy class. The target population consisted of lower-income high school seniors. Inclusion criteria for the sample included: (1) status as a senior high school student in one of the following high schools: Fayetteville, Farmington, Lincoln, Prairie Grove, or Springdale; (2) age 17 years or older; (3)
their family 2011 total household income was at or below the 200% federal poverty level; (4) students must have post-secondary plans after their high school graduation, as required by the Economic Opportunity Agency’s Youth IDA Program.

It should be noted that students participating in this study were selected because of their enrollment in the Youth IDA Program. This study, however, did not evaluate the effectiveness of the Youth IDA Program because the researcher did not have access to students’ bank statements and the researcher’s main goal was assessing the effectiveness of the class.

A MSW intern and an instructor from the University of Arkansas’ School of Social Work recruited students by going to schools for in-class presentations, organizing informational booths, passing out flyers and brochures, and theater advertisements. Informational emails were sent out to all high school counselors and teachers that informed the faculty the purpose of the program, eligibility guidelines, students’ responsibilities, and the duration of the program. The email also included the program’s guidelines and consent form (see Appendices A and B). High school counselors and teachers also asked their students to enroll in the program if they met the income eligibility guidelines. In addition, through the partnership with the University of Arkansas’ Upward Bound Program, several students were recruited into the program.

Sample Design

A nonprobability convenience sample was used for this study. This sampling design was chosen because random selection was not feasible because of low interest in the EOA’s Youth IDA Program. A stipulation required by the EOA was students’ had to complete the financial literacy class within a month after enrolling in the Youth IDA Program (see Appendix A).

Of the 23 recruited students, 18 were included in the final sample. Six students were excluded because of the following reasons: they did not meet the Youth IDA Program’s income
eligibility requirement \((n = 1)\) (see Appendix A), they were unsure about their post-secondary education plans \((n = 2)\), they could not attend the class due to transportation issues \((n = 2)\), and they were dropped due to non-commitment \((n = 1)\).

**Data Collection Procedures**

Data were obtained through the Money Management Skills for Young Adults class that students were required to take. Students were required to attend one of the following class sessions: November 10, 2012 (full session), December 4-5, 2012 (split session), December 15, 2012 (full session), February 23, 2013 (full session), or March 7-8, 2013 (split session). Classes were conducted at Fayetteville’s Agee-Lierly Life Preparation Services (ALLPS) campus in a small group setting. There were at least four to six students in attendance for each session. Classes were about six to eight hour sessions and were taught by at least two proctors. Split sessions were held to accommodate students’ schedules if they could not attend the full eight-hour session.

Before the initial session, students completed a nine-page Youth Questionnaire Survey that consisted of students’ demographic information, housing information and status, academic enrollment and post-secondary plans, a subscale from the Medical Outcomes Study Social Support Survey (MOS) (1991), and a Development Assets Profile (DAP) (2002) (see Appendix D). A $15 stipend was distributed to students after they completed the Youth Survey Questionnaire.

After the questionnaire was collected by one of the proctors, the Money Management Skills for Young Adults class began. Each student was given a Money Management Skills for Young Adults binder that included information about each unit. The class consisted of the following units:
1. Financial Psychology, which included a pretest and posttest. This unit was 45 minutes.

2. Money Management, which did not include a pretest and posttest. This unit was 15 minutes.

3. Banking Essentials, which did not include a pretest and posttest. This unit was 15 minutes.

4. Managing Credit, which included a pretest and posttest. This unit was 60 minutes.

5. Income, which included a pretest and posttest. This unit was 60 minutes.

6. Investment, which included a pretest and posttest. This unit was 75 minutes.

7. Investing in Real Estate, which included a pretest and posttest. This unit was 15 minutes.

8. Savings and Interest, which included a pretest and posttest. This unit was 30 minutes.

9. Insurance, which included a pretest and posttest. This unit was 60 minutes.

10. Long-Term Planning, which included a pretest and posttest. This unit was 45 minutes.

The seven units that included a pretest and posttest were measured in this study. Again, these units include: (1) Financial Psychology; (2) Managing Credit; (3) Income; (4) Investing; (5) Savings; (6) Risk Management; and (7) Long-Term Planning. Each unit’s pretests and posttests consisted of multiple choice, true and false, and short answer questions. Students were not allowed to look at their binders as they took their pretests and posttests. The procedure was
the same for students who attended the split sessions.

**Outcome Measures**

This section details the measurement tools used in this study. The selected tools are used to measure and operationalize students’ financial knowledge, students’ developmental assets, and students’ social support. Reliability and validity for each measurement tool will be reported.

**Money Management Skills for Young Adults Class**

Instructional Designer, Janet Wills MA, developed the Money Management Skills for Young Adults class. The main objective of this class was to teach high school seniors the importance of financial literacy. The class consisted of 10 units, but students were only tested for seven of the units. There were 12 questions in the Financial Psychology unit, 13 questions in the Money Management unit, 11 questions in the Income unit, 10 questions on the Investment unit, three questions in the Savings unit, 10 questions in the Insurance unit, and eight questions in the Long-Term Planning unit. Scores varied from 0 to 13 for each unit and the overall scores ranged from 0 to 67. See Appendices E to K for each unit’s pretest and posttest used.

Although the Financial Educators Council (2011) developed the tests, reliability and validity were not reported for the Money Management Skills for Young Adults class’ pretests and posttests. This study was the first to review the effectiveness of the Money Management Skills for Young Adults financial literacy class.

**Developmental Assets Profile**

The Developmental Assets Profile (DAP, 2002) was developed by the Search Institute to measure youth’s assets (Beckford et al., 2005). The DAP (2002) has eight categories that examined Support, Empowerment, Boundaries and Expectations, Constructive Use of Time,
Commitment to Learning, Positive Identity, Positive Values, and Social Competencies (Beckford et al., 2005; Lofquist, 2009). The eight categories can be separated as either an internal asset category or an external asset category (Lofquist, 2009). Internal assets included Commitment to Learning, Positive Values, Social Competencies, and Positive Identities (Beckford et al., 2005; Lofquist, 2009). External assets included Support Empowerment, Boundaries and Expectations, and Constructive Use of Time (Beckford et al., 2005; Lofquist, 2009). There is also the total assets category that combined internal and external assets (Beckford et al., 2005; Lofquist, 2009). Internal and external asset scores are categorized into four levels: Low = 0-14, Fair = 15-20, Good = 21-25, and Excellent = 26-30 (Lofquist, 2009). Total asset scores are also categorized into four levels: Low = 0-29, Fair = 30-40, Good = 41-50, and Excellent = 51-60 (Lofquist, 2009).

The Developmental Assets Profile (2002) reportedly has good reliability and validity. According to Haggerty, Elgin, & Woolley (2010), both internal and test-retest reliability are good; however, there is no reported statistical value. Criterion validity is reported and there is a significant correlation between two middle schools with different positive experiences (p < 0.01), which indicate that students with more assets score higher (Haggerty et al., 2010).

Social Support Survey

Social support questions were taken from the Medical Outcomes Support Survey (Sherbourne & Stewart, 1991). Students rated how often they had social support available to them by rating their answers on a 5-point scale (“None of the time”, “A little of the time”, “Some of the time”, “Most of the time”, and “All of the time”). Scores from the Likert-type scale range from 15-75, higher scores indicated higher social support (Sherbourne & Stewart, 1991). Sherbourne and Stewart (1991) reported that the MOS Social Support Survey is reported to have
good reliability (all alpha levels > 0.91). Construct validity was also supported (Sherbourne & Stewart, 1991).

**Dating Coding and Operational Definitions**

This section discusses the selected variables used in this study. Data obtained were entered in SPSS. Coding methods are also discussed in this section.

**Demographic Variables**

This study examined several demographic variables. First, students’ characteristics include age (measured at the time they attended the Money Management Skills for Young Adults class), whether students’ were female (0 = no; 1 = yes), and race. Race has five categories: Caucasian, African American, Asian/Asian American, Native American, and Other (Hispanic).

Secondly, housing information was also collected, which has two categories: housing accommodation (1 = alone; 2 = with one parent/guardian; 3 = with two parents/guardians; 4 = with a roommate; 5 = other type of living condition not listed), and housing status (1 = Live in a home that is being purchased or is owned by parent or guardian; 2 = Live with other people and your parents/guardians do not pay rent; 3 = Live with other people and your parents/guardians pay part of the rent; 4 = Live in a rental house/apartment; 5 = Live in public housing /Section 8 housing; 6 = Live in a shelter/non-permanent housing).

Next, employment and academic enrollment status were collected. Employment was categorized into three categories: employed, unemployed and seeking employment, and unemployed and not seeking employment. Current academic enrollment had five categories: high school, college, technical/vocational program, not enrolled at this time, and planning to enroll in a college or a technical/vocational program in the next 12 months. Finally, post-secondary academic plans had seven categories: technical/vocational program/certificate,
associate’s degree, Bachelor’s degree, Graduate degree, work until you have enough money to go back to school, and do not plan to go on with additional education/training.

**Dependent Variables**

The dependent variable was financial knowledge. Financial knowledge was operationalized as students’ increase in financial knowledge. Each question was coded as 0 if incorrect or 1 if correct. Overall pretest scores were calculated by adding all of the answers students got correct from their pretests. The same method was done to calculate students’ overall posttest scores. Students’ overall scores are used to determine whether the Money Management Skills for Young Adults class is effective in increasing students’ financial knowledge. All pretest and posttest scores were coded as continuous variables.

**Predictor Variables**

Developmental assets were also examined in this study. As indicated, there were two types of developmental assets: internal and external. Students’ internal assets scores were calculated by the adding the Commitment to Learning, Positive Values, Social Competencies, and Positive Identities subscales and dividing the score by four (Beckford et al., 2005). External assets scores were calculated by the adding the Support Empowerment, Boundaries and Expectations, and Constructive Use of Time subscales and dividing the score by four (Beckford et al., 2005). Internal and external assets were coded as continuous variables. Students’ internal and external assets were also categorized into four levels: Low = 0-14, Fair = 15-20, Good = 21-25, and Excellent = 26-30 (Lofquist, 2009), and were coded as categorical variables.

Students’ total developmental assets were calculated by adding the external and internal assets scores (Beckford et al., 2005). Students’ total developmental assets were coded as continuous scores. Students’ total developmental assets also had four levels: Low = 0-29, Fair =
30-40, Good = 41 – 50, and Excellent = 51-60 (Lofquist, 2009). Students with 31-50 assets were likely to succeed in the future (Bruyere, 2010) and children with 29 assets or less were not likely to succeed (Benson, 2007). Students’ level of assets was coded as categorical variables.

Social support was also examined in this study because it can be categorized as an external asset. Although social support has various definitions, previous studies measured social support as an individual’s “functional support” (Sherbourne & Stewart, 1991, p. 705). Functional support was defined as having “emotional support, instrumental support, guidance and feedback, appraisal support, and social companionship” (Sherbourne & Stewart, 1991, p. 705). Similarly, social support in the DAP (2002) defined support as having multiple support from their family, neighborhood, school, and community (Beckford et al., 2005). Therefore, social support was examined as a separate variable that was measured against students’ overall pretest scores from the Money Management Skills for Young Adults class.

Students’ social support scores were coded similarly as students’ DAP scores. Answers with “None of the time” were scored as a zero, questions that were answered with “A little of the time” were scored as one, questions that were answered with “Some of the time” were scored as two, questions that were answered with “Most of the time” were scored as three, and questions that were answered with “All of the time” were scored as four. Social support scores were calculated by adding up students’ responses to each question and were coded as continuous variables.

**Missing Data**

Most data from the 18 students were obtained. One set of data was excluded (5.6%) from the Financial Psychology. One student failed to complete Financial Psychology pretest and
posttest because of late attendance. For this reason, this set of data was excluded. Missing scores were coded as 99 and information that was not applicable were coded as 98.

**Data Analysis for Bivariate Findings**

This section outlines which statistical tests were used in the study. The minimum criterion of 0.05 was used for all significant tests.

**Paired Samples T-Test**

Paired samples t-test was selected to assess whether there were significant differences between students’ pretest and posttest scores (Rosenthal, 2012). In addition, paired samples t-test is the most appropriate test to use the same participants was tested twice (i.e., one during pretest and once during posttest). The overall posttest scores were calculated by summing all of the students’ pretest scores from each model. The same calculation was done for students’ posttest scores.

**Pearson’s Correlation**

Pearson’s correlation was the most appropriate test to use when both the dependent and independent variables are from an interval or ratio scale (Rubin & Babbie, 2010). Scores from students’ pretest scores and developmental assets were based on an interval scale.

**Ethical Considerations**

Ethical considerations are a primary concern in social work research (Rubin & Babbie, 2010). Several potential concerns in this study have been limited to promote student wellbeing. The research protocol, potential benefits and risks, consent forms, and confidentiality considerations of this study were reviewed and approved by the University of Arkansas’ Institutional Review Board.

**Informed Consent and Confidentiality**
Informed consent was obtain from all high school seniors and their parents and/or guardians, and they were assured that all sensitive information such as students’ Social Security numbers and family income would be kept confidential. Students’ names were replaced with a code number (e.g., #1, #2) to ensure that his or her identity is protected. Pretests and posttests from the Money Management Skills for Young Adults were stored and locked at the Economic Opportunity Agency (EOA) office and only the IDA Director and the MSW intern had access to them. All data collected from students’ information were kept locked in a file in Dr. Marcia Shobe’s office at the University of Arkansas.

Benefits and Risks

There were no risks involved in this study. The questionnaires used were related to students’ perceptions, experiences, and motivations in regard to the following areas: financial issues, academic information, and perceived social support within their family, schools, and community. Participation in this study was voluntary and students could refuse to participate or stop at anytime without consequences. For more information on student’s participation rights, see Appendix B.

Benefits of participation included assisting researchers and teachers to examine the effectiveness of financial literacy programs in Washington County public schools. Students’ participation also helped researchers identified current youth saving trends, motivations for increasing financial knowledge, and develop positive financial behaviors (Curley, Ssewamala, & Han, 2010; Mason, Nam, Clancy, Kim, & Loke, 2010; Elliott, 2009; Zhan & Grinstein-Weiss, 2007). Other personal benefits included $15 stipends for every completed survey and earning up to $1,000 in matched saving funds for their post-secondary education.
Chapter 6

Results

The purpose of this chapter is to report the results of the data analysis. This chapter is divided into two sections. The first section provides demographic findings of the sample. The second section reports the results of each research question.

Descriptive Findings

Among the 18 students participating in the study, 83.3% \((n = 15)\) were female and 16.7% \((n = 3)\) were male. Students’ ages ranged from 17-19 \((M = 17.6, SD = 0.62, n = 18)\). Of those who chose to report their race, ten students (55.6%) self-identified as Caucasians, one (5.6%) self-identified as African American, one (5.6%) self-identified as Asian, and six (33.3%) self-identified as being from another race. The six students who self-identified as being from another race were 66.7% Hispanic and 33.3% reported as non-Hispanic \((n = 12)\). Four students reported they were employed (22.2%), ten students (55.6%) reported they were unemployed and were seeking employment, and four students (22.2%) reported they were unemployed and were not seeking employment.

Student’s demographic information was not used in the analysis, but Table 1 presents the information to provide a clear representation of the sample. Students’ housing information and housing information is presented in Table 1. Other type of housing includes Section 8 housing.
Table 1

*High School Seniors’ Housing Academic Enrollment Status and Educational Plans*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Housing accommodation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with one parent</td>
<td>6</td>
<td>33.3</td>
</tr>
<tr>
<td>Living with two parents</td>
<td>10</td>
<td>55.6</td>
</tr>
<tr>
<td>Living with roommates</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Other type of housing</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Housing status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home purchased by parent</td>
<td>12</td>
<td>66.7</td>
</tr>
<tr>
<td>Living with other people</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Rental house/apartment</td>
<td>5</td>
<td>27.8</td>
</tr>
<tr>
<td><strong>Enrolled in High School</strong></td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td><strong>Educational Plans</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical/Vocational</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>10</td>
<td>55.5</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>3</td>
<td>16.7</td>
</tr>
<tr>
<td>Work</td>
<td>1</td>
<td>5.6</td>
</tr>
<tr>
<td>Unsure</td>
<td>1</td>
<td>5.6</td>
</tr>
</tbody>
</table>

*Note.* The student (*n* = 1) who reported work as their post-high school graduate plans indicated that the he or she will work until he or she has enough money saved to go back to school.
### Bivariate Findings

**Question 1:** Does the Money Management Skills for Young Adults class effectively increase students’ financial knowledge?

Table 2

*Mean, Mean Differences, and Standard Deviations for Pretest and Posttest Scores*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>Md</th>
<th>T-score</th>
<th>p-value</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>10.18</td>
<td>-1.65</td>
<td>-5.14</td>
<td>p &lt; .001*</td>
<td>.508</td>
</tr>
<tr>
<td>Post</td>
<td>11.82</td>
<td>(1.32)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>9.06</td>
<td>-2.44</td>
<td>-3.74</td>
<td>.002*</td>
<td>.860</td>
</tr>
<tr>
<td>Post</td>
<td>11.50</td>
<td>(2.77)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>10.11</td>
<td>-.056</td>
<td>-1.04</td>
<td>.918</td>
<td>.563</td>
</tr>
<tr>
<td>Post</td>
<td>10.17</td>
<td>(2.26)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Investing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>5.28</td>
<td>-2.44</td>
<td>-6.14</td>
<td>p &lt; .001*</td>
<td>.589</td>
</tr>
<tr>
<td>Post</td>
<td>7.72</td>
<td>(1.68)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Savings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>2.06</td>
<td>-.278</td>
<td>-1.57</td>
<td>.135</td>
<td>.206</td>
</tr>
<tr>
<td>Post</td>
<td>2.33</td>
<td>(.752)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>7.00</td>
<td>-1.17</td>
<td>-3.58</td>
<td>.002*</td>
<td>.360</td>
</tr>
</tbody>
</table>
### Table 2 Continued

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$Md$</th>
<th>T-score</th>
<th>$p$-value</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>4.56</td>
<td>-1.61</td>
<td>-5.72</td>
<td>$p &lt; .001^*$</td>
<td>.806</td>
</tr>
<tr>
<td>Post</td>
<td>6.17</td>
<td>(1.19)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>48.17</td>
<td>-9.67</td>
<td>-10.78</td>
<td>$p &lt; .001^*$</td>
<td>.992</td>
</tr>
<tr>
<td>Post</td>
<td>57.83</td>
<td>(3.80)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. $Md =$ Mean difference of each units’ pre and post-test scores. Paired standard deviations appear in parentheses below Mean differences. $^* p < .05$

Overall, the Money Management Skills for Young Adults Class increased students’ financial knowledge. Results indicated that students increased their financial knowledge in the following units: Financial Psychology, Managing Credit, Risk Management, and Long-Term Planning.
Question 2: Is there a relationship between students’ developmental assets and their financial knowledge and Question 3: Is there a relationship between students’ social support and their financial knowledge?

Table 3

*Correlation Between Knowledge, External, Internal, Total Assets, and Social Support*

<table>
<thead>
<tr>
<th></th>
<th>Knowledge</th>
<th>External</th>
<th>Internal</th>
<th>Total</th>
<th>Soc. Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>___</td>
<td>.328</td>
<td>.065</td>
<td>.235</td>
<td>.015*</td>
</tr>
</tbody>
</table>

*Note. *p < .05.

There were no significant correlations between students’ financial knowledge and their external, internal, and total assets. A correlation was found between social support and students’ financial knowledge.
Chapter 7

Discussion

The study examined high school seniors’ financial knowledge in four Washington County public schools. Specifically, this study measured whether students were able to increase their financial knowledge after they completed the Money Management Skills for Young Adults class. In addition, the study examined whether financial knowledge was correlated with students’ developmental assets and social support.

This chapter reviews the findings of the current study. Comparisons with previous studies that examined high school students are discussed. This chapter also discusses alternative explanations for the findings. Additionally, this chapter also reviews how financial socialization—social capital theoretical framework could possibly explain the findings of this study. Other areas discussed include the limitations and strengths of this study design and implications of theory building, direct practice, and policy implications.

Financial Knowledge

This study assessed whether students’ financial knowledge increased in the Financial Psychology, Managing Credit, Income, Investing, Savings, Risk Management, and Long-Term Planning module. Of the measured seven units, students scored significantly higher in the Financial Psychology, Managing Credit, Investing, Risk Management, and Long-Term Planning posttests after they completed the class. Conversely, results suggested that there were no significant differences between pretests and posttest scores in the Income and Savings units.

The overall class was efficacious and succeeded in increasing students’ financial knowledge ($p < .001$). However, students’ scores were significantly higher on certain units compared to other units. One reason might be because students conceptualize financial concepts
differently. McCormick (2009) asserts that financial literacy programs are successful for adults, but youth and adults have a different understanding of financial concepts. Children and youth may not find adult-financial concepts applicable or relevant to them (e.g., 401k accounts and taxes) (McCormick, 2009). For example, one question that most students missed on the Savings pretest was, “What is the rule of 72?” Several students expressed they have never heard of this rule; hence, students could not relate to complex financial concepts. Financial concepts such as spending behaviors and financial lifestyles were more relatable to students because they were more applicable to students.

**Developmental Assets and Social Support**

The relationship between students’ financial knowledge (e.g., students’ pretest scores) and their developmental assets were also examined. This assessed whether their socialization agents and internal capabilities shaped students’ current financial knowledge. There was no significant correlation found between students’ developmental, external, and internal assets and students’ current financial knowledge.

Interestingly, students \((n = 6)\) with low developmental assets (scores ranged from 0-29) had score variations from 42 to 59 on their overall pretest scores (scores ranged from 0 to 67). Students \((n = 11)\) with moderate developmental assets (scores ranged from 30 to 40) had score variations from 39 to 59. One student with good developmental assets (scores ranged from 41-50) scored a 50 on the overall pretests. This finding implies that assets varied among students. Students who scored higher on their posttests possibly had a wide range of asset levels compared to students who scored lower.

Support is an external asset (Beckford et al., 2005; Lofquist, 2009). This study examined social support and findings indicate that there was a correlation between financial knowledge and
social support ($p < .05$). Students ($n = 16$) with moderate to high social support scores (ranged from 40 to 50) had high to moderate pretest scores (ranged from 40 to 50). Students ($n = 2$) with lower social support scores (ranged from 13 to 23) had low to moderate pretest scores (ranged from 20 to 40). This finding suggests that students’ level of social support is directly related to students’ ability to manage or understand financial concepts.

**Relationship of Current Findings and Previous Studies**

Findings were somewhat inconsistent with previous literature. Since this study measured different financial concepts and data collection methods, it is difficult to determine whether this financial literacy class was consistent with previous findings. First, Scott (2010) used secondary data to measure students’ financial knowledge. The current study only measured students’ financial knowledge from the Youth IDA Program; therefore this study cannot determine whether findings from the current study are consistent with findings from previous studies. Second, Cameron et al. (2013) used a 60% benchmark for financial adequacy and they reported that students scored adequately or poorly in their five units. The results in the current study may not be comparable, but the Money Management for Young Adults Class was able to increase students’ overall financial knowledge, indicating that at least 99.2% of the variance in scores is likely attributed to the class. Lastly, Lusardi et al. (2010) reported that 47% students answered risk diversification (e.g., investments) incorrectly, indicating that students’ financial knowledge did not increase in that unit. This study, however, found the opposite. Students’ scored higher in their posttests in the Risk Management unit, indicating that at least 60% of the variance in students’ scores is likely attributed to the class. Students often scored higher on questions regarding money. This study found a significant difference between students’ posttest and pretest scores on the Managing Credit unit ($p < .05$). As suggested, students were likely to score
higher on topics that they could relate to.

**Relationship of Current Findings and Theories**

Why was social support correlated with financial knowledge? One explanation could be the socialization process that financial socialization-social capital theoretical framework presented. This framework explained that students with more support and/or socialization agents (e.g., the class) were likely to have higher financial knowledge. Financial socialization and additional social support increased students’ financial knowledge. Second, despite measuring for short-term financial knowledge, findings in this study supported that having a financial-based product and/or incentive class increased class attendance and financial literacy (Sherraden, 2010). For instance, students enrolled in the Youth IDA Programs were likely more motivated in developing positive financial behaviors and attitudes (Chowa et al., 2012; Elliott, Destin, & Friedline, 2011; Sherraden, 2010). Finally, findings implied that schools that included financial curricula were likely to increase financial knowledge (Lusardi et al., 2010).

**Limitations**

There were several limitations in this study. The sample size was very small \(n = 18\), which affected generalizability (Royse, 2011; Rubin & Babbie, 2010). In addition, correlations with a small sample size were unreliable because a minimum of 30 participants was needed. Since this was a one-group pretest-posttest design, this study cannot determine whether other external factors could have influenced the pretest and posttest results (Rubin & Babbie, 2010).

**Strengths**

There were also several limitations in this study. First, student participation was 100%. Second, questions on the Money Management Skills for Young Adults pretest and posttest were
comparable. Although reliability was not attested, using comparable tests indicated that the tests measured what they were intended to measure. This was especially important for this study because it could explain whether the financial literacy class was effective for high school students. In addition, this study is the first pretest and posttest research design to examine the effectiveness of a financial literacy class in the state of Arkansas. Instead of examining the relationship between developmental assets and academic achievements, this study is the first study to examine the relationship between developmental assets and financial knowledge.

**Implications for Theory Building**

Financial socialization-social capital theoretical framework was built on the idea that students learn through interrelated systems (Bruyere, 2010). In this case, socialization and/or interactions between individuals and their different systems provide significant meanings, or stories, behind those interactions. Findings in this study implicated that financial knowledge was influenced from the sources they place significant meanings on (e.g., social support) (Chowa et al., 2012; Shim et al., 2010). It is imperative to understand the importance of financial socialization because it allows researchers to examine how multiple biological systems (e.g., parental-environmental interaction) impacted the individual system with multifaceted lens (Chowa et al., 2012).

**Implications for Policy Practice**

A number of public and federal policies have emphasized the need for financial literacy programs in public schools educational curricula (Hutson, 2010; Johnson & Sherraden, 2007; McCormick, 2009; Perry, 2008, Scott, 2010). One policy implementation would be to require financial education to be taught in K-12 schools. This would increase additional resources for low-income students (Sherraden et al., 2011). As indicated, financial literacy should begin at a
young age so students can effectively retain financial knowledge throughout their adulthood (Beverly & Burkhalter, 2005; McCormick, 2009; Lusardi et al., 2010; Sherraden et al., 2011). Several high school curriculums have integrated financial literacy-based programs in their schools so students can enroll in them at an early age to foster positive financial behaviors and appropriate money management skills (Grinstein-Weiss, Wagner, & Ssewamala, 2006; Lusardi et al., 2010; Sherraden et al., 2011).

The second policy recommendation is to incorporate more matched savings programs for lower-income students (Sherraden et al., 2011). Although this study did not examine whether students’ enrollment in the Youth IDA Program increased their financial knowledge, Sherraden (2010) found that financial literacy programs that incorporated a financial product component (e.g., matched savings programs) were likely to increase financial knowledge. Lower-income students could become financially capable if they are able to accumulate their own wealth and assets through matched savings programs such as IDAs or CDAs while developing financial skills (Johnson, Adams, & Kim, 2010). In essence, there needs to be new public policies and additional funding for all matched savings programs and financial literacy programs to enhance financial wellbeing and financial knowledge (Huang et al., 2013; McCormick, 2009; Sherraden et al., 2011).

**Implications for Direct Practice**

Financial literacy programs are much more effective if parents and teachers are involved. Although findings of this study cannot determine whether parental involvement increased financial knowledge, evidence from students’ socialization agents suggested that students learned financial concepts through their parents and/or guardians. The Saving for Education, Entrepreneurship, and Downpayment (SEED) Initiative (SEED) programs, for example, enrolled
youth and their parents. Parents and youth were able to increase their financial knowledge through this program (Sherraden et al., 2011). Parental involvement also allows youth to feel encouraged in planning for their financial endeavors as their social support increases.

Social workers and school boards should work together to organize financial literacy classes into the school curricula (Beverly & Burkhalter, 2005). Sherraden et al. (2011) propose that teachers also influenced the success of financial literacy programs. In this case, social workers and teachers should collaborate on integrating experiential teaching methods. Experiential teaching methods were a variety of teaching methods that were used to stimulate and engage students, which were more effective and successful in financial knowledge retention (as cited in Johnson & Sherraden, 2007; Sherraden, 2010). Students were able to develop critical thinking skills. Most importantly, students learn better when they can apply the materials they learned to the real world (Johnson & Sherraden, 2007).

**Future Research**

Due to the small sample size, future studies should include a larger sample that includes a diverse sample. Since this was a pre-experimental study, a control group should be used to compare results on the dependent variable (Rubin & Babbie, 2010). In addition, random assignment should be used to increase generalizability.

The universal effectiveness of financial literacy programs remains widely unknown. First, youth still demonstrate low levels of financial literacy even after completing a financial literacy class. In addition, high school students continue to report that they are not able to retain their financial knowledge (Mandell & Klein, 2007). Therefore, further research should continue evaluating students’ financial knowledge in multiple waves to determine whether their knowledge was retained. This would also examine whether students are able apply their
financial knowledge into the real world (Danes & Haberman, 2007).

Since this was the first study to examine developmental assets, further research should be explored to determine its impact on financial knowledge. Although findings were not significant, students with low developmental assets did have lower levels of financial knowledge than students with a fair amount of developmental assets. Future studies might want to focus whether students’ relationships and interactions within their community and family have changed their financial attitudes and behaviors over the years. This allows researchers to examine how current economic trends and one’s financial situations influence one’s motivations to increase his or her financial knowledge.

**Conclusion**

Although this was a short-term study, the present study contributed to the growing literature of financial literacy and asset-building programs. First, this study used a unique integrated theoretical framework to understand how interpersonal socialization agents influenced financial behavior and attitudes (Shim et al., 2010; Spera & Matto, 2007). Rather than focusing on parental and additional influences, this study attempted to explore whether a one-time financial literacy class increased students’ financial behavior. This study was also the first to evaluate a financial literacy class in Arkansas. As indicated, the Money Management Skills for Young Adults class increased students’ posttest scores, indicating that the overall class was effective in increasing students’ financial. Although there were no statistically significant differences in two of the seven units, the class was an overall success. This finding promoted the need for more financial literacy programs implementations in the state of Arkansas. Findings in this study also should not be over-analyzed because there are still skepticisms about the overall effectiveness of financial literacy programs (Sherraden, 2010; Willis, 2009).
There were no significant correlations between developmental assets (external and internal). Findings indicated a correlation between students’ social support and their perceived financial knowledge ($p < .05$). This finding implied that more communities should promote community asset building programs to increase students’ social capital. The ability to develop positive relationships with others and the community allowed students to realize the importance of financial knowledge as they live in an increasingly changing economy.
References


Appendix A

IRB Approval of Study

September 14, 2012

MEMORANDUM

TO: Marcia Shobe
    Kameri Christy
    Alishia Ferguson

FROM: Ro Windwalker
    IRB Coordinator

RE: PROJECT MODIFICATION

IRB Protocol #: 12-04-664

Protocol Title: Youth individual Development Accounts: Empowerment through Education

Review Type: ☑ FULL IRB

Approved Project Period: Start Date: 09/14/2012 Expiration Date: 05/15/2013

Your request to modify the referenced protocol has been approved by the IRB. This protocol is currently approved for 150 total participants. If you wish to make any further modifications in the approved protocol, including enrolling more than this number, you must seek approval prior to implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

Please note that this approval does not extend the Approved Project Period. Should you wish to extend your project beyond the current expiration date, you must submit a request for continuation using the UAF IRB form “Continuing Review for IRB Approved Projects.” The request should be sent to the IRB Coordinator, 210 Administration.

For protocols requiring FULL IRB review, please submit your request at least one month prior to the current expiration date. (High-risk protocols may require even more time for approval.) For protocols requiring an EXPEDITED or EXEMPT review, submit your request at least two weeks prior to the current expiration date. Failure to obtain approval for a continuation on or prior to the currently approved expiration date will result in termination of the protocol and you will be required to submit a new protocol to the IRB before continuing the project. Data collected past the protocol expiration date may need to be eliminated from the dataset should you wish to publish. Only data collected under a currently approved protocol can be certified by the IRB for any purpose.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.
Appendix B

Program Guidelines for Youth IDA Matched Savings Program

**IDA Savings Program participants agree to:**

- Successfully complete the Youth IDA program by spending your IDA Savings Account funds and IDA Match Funds by January 31, 2014.

- Complete the **Financial Education** course within 1 month after entering the Youth IDA program. Failure to complete the course within this timeframe may result in removal from the program.

- Set-up your personal savings account at a **participating bank** within 45 days of entering the IDA program. I understand that my bank statement will be mailed to EOA, which will review it and create an IDA matched savings account statement. Then EOA will mail the original bank statement and IDA account statement to me at the address I specify. Failure to open your IDA savings account within 45 days may result in removal from the program.

- Make a deposit of at least **$10 per month** in his/her IDA account. Failure to deposit at least $10 during any 3 (consecutive or non-consecutive) months while in the program will result in removal from the program.

- Make no more than **2 unauthorized withdrawals** while participating in the IDA program. An "unauthorized withdrawal" is a withdrawal from the IDA that has not been approved by EOA for one of the approved asset purchases. The match money on unauthorized withdrawals is forfeited.

- Submit to EOA an “Authorized Withdrawal Form,” with appropriate documentation attached, at least **10 working days** prior to the date for which an authorized withdrawal is needed.

**IDA Savings Program participants understand that authorized withdrawals are allowed for the following purposes only:**

- For the participant’s cost of attending an accredited vocational or technical training institution, community college, 4-year college or university.

**IDA Savings Program participants further understands that:**

Authorized withdrawals can only be made after:

- **6 months** has passed beginning with the month in which the participant’s account is opened, and
- the participant has completed the entire Financial Education course, and
- the participant has followed the **program guidelines** as outlined in this document, and
If the participant fails to abide by the program guidelines outlined in this document, provides false or misleading information to EOA, or received match funds under false pretenses, EOA and the University of Arkansas (UA) Youth IDA Program Staff may terminate the participant’s participation in the program immediately, or specify different program guidelines as conditions for continued participation in the program, at EOA and UA’s sole discretion. If participation is terminated, all match money will be forfeited.

I understand and agree to the program guidelines of the Youth IDA Matched Savings Program.

_________________________________________  __________________________
Participant Signature                          Date

_________________________________________
Name (please print)                           Social Security Number

_________________________________________
Participant’s Parent/Guardian Signature       Date

_________________________________________
Name (please print)
Consent Form to Participate in an IDA Program

I understand that EOA of Washington County’s program is part of a Youth IDA study being evaluated by the University of Arkansas. I understand that the purpose of this project is to (a) provide post-high education and training match funds to high school seniors, and (b) study the effects of savings-based strategies.

I agree to participate in this study and in EOA of Washington County and the University of Arkansas program activities affiliated with the Youth IDA program. I also understand that EOA may participate in similar studies conducted by other reputable organizations or institutions of higher learning.

As part of my participation in the study, I agree to assist in the evaluation by sharing certain information (collected through surveys or interviews). I understand that all such information will be kept confidential. The information I provide today will be part of any evaluation. I also understand that I may be contacted at a later time either by mail, telephone, e-mail or in person. I agree to provide requested information to any interviewer representing EOA at that interview time. I have the right to demand to see proof of agreement and participation with EOA by the interviewer who contacts me.

I understand that EOA will never use my name in, or attach my name to any report or written summary originating from information in the database, interviews, or focus groups without written consent. EOA may only use pictures of me with my written consent.

I give permission to EOA of Washington County to submit personal and financial information, (including information from my financial institution), that is collected in the agency’s IDA computer information system, to authorized research organizations for evaluation. I agree to provide all personal and financial information requested by EOA or an organization working with it.

I understand that EOA will be using the information to learn about and analyze savings behavior, and that the analyses may be printed in journals and other publications for funding agencies, policymakers, and the general public.

I understand that EOA will store all data in a locked file cabinet to which only EOA will have access.

I understand that I am participating of my own free will and I can drop out of the demonstration at any time.

Print Name ___________________________ Date: ___________
Signature of Participant: _____________________________

I agree to let EOA use my name and/or picture in any informational or promotional pieces about this IDA program.
Signature _____________________________ Date __________________

If participant is under the age of 18, please include:

Name of parent or legal guardian: _____________________________ Date: __
__________________________________

Signature of parent or legal guardian:
Appendix D

Youth Questionnaire Survey

YOUTH SURVEY QUESTIONNAIRE

CODE: ______________________

Below are a series of questions we wish to ask you regarding demographics, social support, household food and nutrition, and day-to-day choices you make. Please let us know if you have any questions regarding the survey.

Please circle the response to each question that best describes you or your situation.

1. What is your gender:
   a) Male
   b) Female

2. When is your birth date: Month _____ Day _____ Year _____

3. What is your race:
   a) African American
   b) Asian/Asian American
   c) Caucasian
   d) Native American
   e) Other ______________________

4. What is your ethnicity:
   a) Hispanic
   b) Non-Hispanic

5. Do currently live:
   a) Alone
   b) With one parent/guardian
   c) With two parents/guardians
   d) With a roommate(s)
   e) Other type of living situation not listed

6. What is your housing status at this time? Do you:
   a) Live in a home that is being purchased or is owned by parent or guardian
   b) Live with other people and your parents/guardians do not pay rent
   c) Live with other people and your parents/guardians pay part of the rent
   d) Live in a rental house/apartment
   e) Live in public housing/Section 8 housing?
   f) Live in a shelter/non-permanent housing

7. Other than you, are there any children (18 years and under) living in the household? Please include foster or adopted children.
   a) Yes
   b) No

7a. If you answered yes to the previous question, how many children are living in the home?

     ______________________

8. What is your employment status:
   a) Employed
   b) Unemployed and seeking employment
   c) Unemployed and not seeking employment

8a. If you answered employed to the previous question, how many hours do you work a week?

     ______________________
YOUTH SURVEY QUESTIONNAIRE

9. What is your parent(s)/guardian(s) employment status (circle all that are applicable)
   a) Employed full-time (36 hours per week or more)
   b) Employed more than full-time (working more than one job or overtime)
   c) Full-time student (12 credit hours or more)
   d) Part-time student (6 credit hours or less)
   e) Employed part-time (less than 36 hours per week)
   f) Unemployed and seeking employment
   g) Unemployed and not seeking employment
   h) Unknown/not applicable

10. If you have two parent(s)/guardian(s), what is the other individual’s employment status (circle all that are applicable)
   a) Employed full-time (36 hours per week or more)
   b) Employed more than full-time (working more than one job or overtime)
   c) Full-time student (12 credit hours or more)
   d) Part-time student (6 credit hours or more)
   e) Employed part-time (less than 36 hours per week)
   f) Unemployed and seeking employment
   g) Unemployed and not seeking employment
   h) Unknown/not applicable

11. Were you born:
   a) In the United States
   b) In another country

ACADEMIC INFORMATION

12. Are you currently:
   a) Enrolled in high school
   b) Enrolled in college
   c) Enrolled in a technical/vocational program
   d) Not enrolled in school at this time
   e) Planning to enroll in college or a technical/vocational program in the next 12 months future

13. If you are enrolled in school, what is your current grade point average (GPA)?

14. What are your educational plans after graduating from high school:
   a) Technical/vocational certificate/program
   b) Associate’s degree (2-year degree)
   c) Bachelor’s degree (4-year degree)
   d) Graduate degree
   e) Work until you have enough money to go back to school
   f) Do not plan to go on with additional education/training
   g) Unsure

14a. If you do plan on obtaining additional education/training, what area/discipline (e.g. business, English, welding) will you pursue?
**YOUTH SURVEY QUESTIONNAIRE**

**INSTRUCTIONS:** People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Please circle one number on each line.

<table>
<thead>
<tr>
<th>Statement</th>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>28. Someone you can count on to listen to you when you need to talk</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. Someone to give you information to help you understand a situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. Someone to give you good advice about a crisis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. Someone to confide in to talk about yourself or your problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. Someone whose advice you really want</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. Someone to share your most private worries or fears with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. Someone to turn to for suggestions about how to deal with a personal problem</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. Someone who understands your problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36. Someone to help you if you were confined to bed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37. Someone to take you to a doctor if you needed it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>38. Someone to prepare your meals if you were unable to do it yourself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39. Someone to help with daily chores if you were sick</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>40. Someone who shows you love and affection</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41. Someone to love you and make you feel wanted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42. Someone who hugs you</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>
**YOUTH SURVEY QUESTIONNAIRE**

**INSTRUCTIONS:** Below is a list of positive things you might have in yourself, your family, friends, neighborhood, school, and community. For each item that describes you **now or within the past 3 months**, check if the item is true:

Not at all or rarely  | Somewhat or Sometimes | Very or Often | Extremely or Almost Always
---|---|---|---

If you do not want to answer an item, leave it blank. Please try to answer all items as best you can.

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<tr>
<td>43.</td>
<td></td>
<td></td>
<td></td>
<td>Stand up for what I believe in.</td>
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<tr>
<td>44.</td>
<td></td>
<td></td>
<td></td>
<td>Feel in control of my life and future.</td>
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<td>45.</td>
<td></td>
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<td></td>
<td>Feel good about myself.</td>
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<td>46.</td>
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<td>Avoid things that are dangerous or unhealthy.</td>
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<td>47.</td>
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<td>Enjoy reading or being read to.</td>
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<td>48.</td>
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<td></td>
<td>Build friendships with other people.</td>
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<td>49.</td>
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<td>Care about school.</td>
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<td>50.</td>
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<td>Do my homework.</td>
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<td>51.</td>
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<td>Stay away from tobacco, alcohol, and other drugs.</td>
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<td>52.</td>
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<td>Enjoy learning.</td>
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<td>53.</td>
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<td>Express my feelings in proper ways.</td>
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<td>54.</td>
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<td></td>
<td>Feel good about my future.</td>
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<td>55.</td>
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<td></td>
<td>Seek advice from my parents.</td>
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<td>56.</td>
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<td>Deal with frustration in positive ways.</td>
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<tr>
<td>57.</td>
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<td></td>
<td></td>
<td>Overcome challenges in positive ways.</td>
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<td>58.</td>
<td></td>
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<td></td>
<td>Think it is important to help other people.</td>
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<td>59.</td>
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<td>Feel safe and secure at home.</td>
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<td>60.</td>
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<td>Plan ahead and make good choices.</td>
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<td>61.</td>
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<td>Resist bad influences.</td>
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<td>62.</td>
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<td>Resolve conflicts without anyone getting hurt.</td>
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<tr>
<td>63.</td>
<td></td>
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<td>Feel valued and appreciated by others.</td>
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<td>64.</td>
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<td>Take responsibility for what I do.</td>
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<td>65.</td>
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<td>Tell the truth even when it is not easy.</td>
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<tr>
<td>66.</td>
<td></td>
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<td></td>
<td>Accept people who are different from me.</td>
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<td>67.</td>
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<td>Feel safe at school.</td>
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<td>68.</td>
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<td>Actively engaged in learning new things.</td>
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### YOUTH SURVEY QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at All or Rarely</th>
<th>Somewhat or Occasionally</th>
<th>Very or Often</th>
<th>Extremely or Almost Always</th>
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**I HAVE...**

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Appendix E

Financial Psychology Pre and Post Test

1. What is motivation?
   a. The drive to do something.
   b. Drive to do nothing.
   c. Lack of energy.
   d. None of the above.

2. Motivation is related to one’s desire for money?
   True
   False

3. The way you spend money does not affect your lifestyle?
   True
   False

4. How do your spending habits affect your saving habits?  How are they related?
   If you spend all of your money, you have nothing left to save. If you save, you are covered for financial emergencies.

5. It is important to know what type of spender you are and why?
   So you can modify your spending habits or you can plan the rest of your life around your spending habits.

6. Your lifestyle choices affect your dreams.
   True
   False

7. Your lifestyle choices affect your finances.
   True
   False

8. How are goals and dreams related?
   It is easier to reach goals that are tied to dreams and passions because you will keep working on them even when you face obstacles.

9. What do goals have to do with finances?
   Goals help you plan for the long-term and you are more successful in reaching your goals if you manage your finances around them.

10. My dreams and goals affect my financial independence in life.
    True
    False
11. My personal emotions can be affected by my financial situation.
   True
   False

12. Not having enough money to pay bills can crease the following emotion.
   a. Contentment
   b. Joy
   c. Stress
   d. Excitement
Appendix F

Managing Credit Pre and Post Test

1. What is credit?
   a. An arrangement for future payment of a loan or purchase.
   b. Purchasing an item with cash.
   c. Purchasing an item with EFT from your bank account.
   d. None of the above.

2. Using a debit card is the same as using a credit card.
   True
   False

3. Using a credit card will have no lasting effects on my personal finances later in life.
   True
   False

4. If you make a purchase on your credit card for $550 and pay it off in 6 months, why do you pay more in the end of your purchase?
   You must pay interest on that $550 for the entire 6 months it takes to pay it back.

5. Why is it important to have a good credit score or grade?
   So you can purchase big things you won’t have enough cash for such as a car or house. If you have a good credit score, you can get a lower interest rate.

6. Is taking out credit at your favorite store to shop considered a good debt?
   No
   Yes

7. Taking out student loans to finance education is considered bad debt.
   True
   False

8. What is identity theft?
   When someone uses your personal identifying information to commit fraud or other crimes, usually for personal gain.

9. How can you protect yourself from identity theft?
   Keep social security number and other identifying information private. Only give out when necessary. Shred any materials that have personal information on them: bank statements, medical records.
10. Anyone can get a great car loan if they have a job.
   True
   False

11. If you have bad credit, you will get a low interest rate on your car loan.
   True
   False

12. What are four things lenders look for in a qualified application for a home loan?
   a. Credit, cash, equity, and income
   b. Credit, equity, assets, and debt to income ratio
   c. Equity, cash report score, and debt
   d. None of the above

13. What does it mean if the applicant is considered high-risk?
   They might not have the ability to repay, they might not have lived in the area very long, not have had their current job very long, or have a history of financial problems.
Appendix G

Income Pre and Post Test

1. What is a job?
   a. Something you do because you love it.
   b. **A place you work to make a living.**
   c. A career.
   d. None of the above.

2. What is a career?
   a. Something you do because you have to.
   b. **Work one does because it is a passion that earns them money.**
   c. A job.
   d. None of the above.

3. When is it financially smart to switch careers?
   a. **When a person can cover monthly expenses to take advantage of a good job opportunity.**
   b. When a person feels like it is a good opportunity.
   c. When they are tired of dealing with their boss.
   d. None of the above.

4. Resumes and job applications are the same.
   True
   False

5. Why is it important to stand out on a resume?
   Because you will be one of the many job applicants.

6. A resume is used to get a job and a job application is used for a career.
   True
   False

7. It is important to conduct a background research about a company before going to an interview.
   True
   False

8. What should you say when a potential employer asks you to identify weaknesses in an interview?
   a. **Point out an actual weakness but make sure you state it in the most positive way.**
   b. Tell them you do not have any weaknesses.
   c. Tell them all your weaknesses; it’s good to be honest.
   d. None of the above.
9. What is a growing industry?
   Industries with the largest projected employment growth.

10. What is a shrinking industry?
    Industries that have the largest wage and salary employment decline.

11. Federal income tax pays for your retirement.
    True
    False

12. What is net income?
    a. The amount of money one receives before tax and payroll deductions.
    b. The amount of money one received after tax and payroll deductions.
    c. Money on one’s paycheck.
    d. None of the above.
Appendix H

Investing and Investing in Real Estate Pre and Post Test

1. What is investing?
   *Purchasing things that will make money for you.*

2. What is compound interest?
   *Interest paid on interest.*

3. What is opportunity cost?
   a. *The cost of passing up the next best choice when making a decision.*
   b. The cost of not passing up the next choice when making a decision.
   c. Making a decision.
   d. None of the above.

4. What is a typical stock market transaction?
   a. *You to Broker to Electronic Exchange to Broker to You*
   b. Broker to Electronic Exchange to Broker to You
   c. Electronic Exchange to Broker to You
   d. None of the above.

5. What does NYSE stand for?
   a. New York Subway Enterprise
   b. New Young Staff Employees
   c. *New York Stock Exchange*
   d. None of the above

6. What is an IRA?
   a. *This is an Individual Retirement Account, designed for a person to set aside money each year towards retirement.*
   b. A tool for the wealthy.
   c. This is a savings account.
   d. None of the above.

7. What is the difference between a Roth and a traditional IRA?
   *Roth – purchased with money you have already paid taxes on.*
   *Traditional IRA – purchased with pre-tax money.*

8. What are three benefits and three drawbacks of owning a home?
   *Benefits: (1) tax benefits – can deduct the interest on the mortgage from your taxes; (2) home could increase in value while you are living in it and paying on it and your net worth will increase; (3) your monthly housing cost stays the same for the entire life of your mortgage.*
Drawbacks: (1) you are responsible for all maintenance costs; (2) the house could decrease in value and you will lose money; (3) if you want to move, you have to sell. If you are just renting and to move, you need to only notify your landlord.

9. Land can be a good investment if you don’t need income from it right now and want a long-term investment.
   True
   False

10. You should never invest in real estate. It is just too much trouble.
    True
    False
Appendix I

Savings and Interest Pre and Post Test

1. What is the rule of 72?
   a. Dividing the interest you receive by an investment into the principal.
   b. **Dividing the interest you receive on an investment by 72 to determine how long it will take to double the investment.**
   c. Dividing the interest you receive on an investment by 72 to determine how long it will take to break even.
   d. None of the above.

2. What expenses are best met by money in a savings account?
   a. Six month’s living expense.
   b. Money for retirement.
   c. Money you need to pay your car insurance in two months.
   d. **Both a and c.**

3. It is stupid to put your money in a savings account at a bank or credit union because the interest rates are so low.
   True
   False
1. What is insurance?
   a. Something you need to buy but will never use.
   b. **Protection in case something or someone is damaged, hurt, or stolen.**
   c. A career path.
   d. None of the above.

2. Why is it important to have insurance?
   To provide financial compensation when you have an accident or illness or to pay you for something that is damaged, destroyed, or stolen. It is one important form of financial protection.

3. What is health insurance?
   Health insurance helps pay medical bills in the hospital, clinic, or doctors’ office. Lack of health insurance and consequent high medical costs are a leading cause of bankruptcy.

4. What is automobile insurance?
   Covers damage to your car in case of an accident or other causes (e.g., hail damage or fallen tree limb). Pays medical expenses for you and anyone in your car. The liability coverage on auto insurance pays for the medical bills and damage to another car or person if you are at fault.

5. What is an insurance premium?
   a. **It is the amount you pay for your insurance policy.**
   b. It is the amount the insurance company pays for any damage or a claim.
   c. The out-of-pocket expense you pay on a claim.
   d. The coverage limit on a policy.

6. What is a deductible?
   a. It is the amount you pay for an insurance policy.
   b. It is the amount the insurance company pays for any damages or a claim.
   c. **The out-of-pocket expense you pay for a claim.**
   d. The coverage limit on a policy.

7. What are coverage limits?
   a. It is the amount you pay for an insurance policy.
   b. It is the amount the insurance company pays for any damages or a claim.
   c. The out-of-pocket expense you pay for a claim.
   d. **The maximum amount the insurance company pays on a claim.**
8. What is an insurance claim?
   Written request (on the insurance company’s form) for payment for damage or illness you incur that is covered by insurance policy.

9. What are two things you can do to reduce risk while driving?
   (1) Don’t text; (2) Don’t talk on cell phone; (3) Drive speed limit; (4) Don’t drive under the influence.

10. An insurance claim is a written or verbal request for payment on something that is covered in an insurance policy.
    True
    False
Appendix K

Long-Term Planning Pre and Post Test

1. What is negative cash flow?
   a. Cash inflow is larger than cash outflow.
   b. **Cash outflow is larger than cash inflow.**
   c. Cash outflow is less than normal.
   d. None of the above.

2. What is positive cash flow?
   a. **Cash inflow is larger than cash outflow.**
   b. Cash outflow is larger than cash inflow.
   c. Cash outflow is less than normal.
   d. None of the above.

3. What is a personal financial plan?
   A written plan that sets forth financial goals. It includes income and expenses, plans to increase income, decrease expenses and put money into savings and have money to invest.

4. What is net-worth?
   **Total value of assets less than the total sum of liabilities.**

5. What is the leading cause of divorce?
   a. **Money**
   b. Unhappiness
   c. Sadness
   d. None of the above

6. Why is it important to be open about money in relationships?
   **So you can agree on common goals and work toward them. So you can work together to solve financial problems. If one person is hiding financial problems from the other and they come out, those problems can destroy the relationship.**

7. What is a will?
   a. Allows the court to decide where the assets of the deceased to go without their input.
   b. **Empower the individual to decide where the assets go after their death.**
   c. An actor that starred in Independence Day.
   d. None of the above.
8. What is a living trust?
   a. A vehicle that allows assets to be passed to heirs without going through probate.
   b. A vehicle that does not allow assets to be passed to heirs without going through probate.
   c. A savings account for wealthy investors.
   d. None of the above.