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Saving strategies: decisions and sacrifices low-income parents make to secure a better future for their families

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SAVING STRATEGIES:

DECISIONS AND SACRIFICES LOW-INCOME PARENTS MAKE TO SECURE A BETTER FUTURE FOR THEIR FAMILIES

by

Jan Leiann Losby

An Abstract

Of a thesis submitted in partial fulfillment
of the requirements for the Doctor of
Philosophy degree in Social Work
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The University of Iowa

August 2008

Thesis Supervisor: Associate Professor Salome Raheim

ABSTRACT

INTRODUCTION. Although seldom a mainstream topic in social work, the financial functioning of individuals and families plays a central role in well-being. The time is right to better understand the workings of low-income families, especially in this uncertain economic climate. Matched savings program called Individual Development Accounts (IDAs) provide a context for investigating how low-income parents save and accumulate assets. IDAs offer a unique means for a systematic study of the saving strategies used by low-income individuals and how the decision to save may create hardships for themselves and their families.

There is still a pressing need for more research that can help clarify parental saving strategies, the factors facilitating or impeding saving, and the potential hardships low-income savers face. Of critical importance to the field is research that helps to better understand what sacrifices low-income parents make when they have made the decision to secure a better future for their families.

METHODS. The sample is 150 savers from a statewide matched savings program. This study is a secondary analysis of telephone survey and administrative data. Bivariate and multivariate statistical tests were conducted to test six hypotheses. The variables of interest are saving strategies, saving supports, and hardships.

RESULTS. Parents who have a history of saving use significantly more helpful saving strategies than respondents without a saving history. Parents who have a history of saving experience less severe hardship than parents who do not have a history of saving. Also, married parents experience fewer hardships than non-married parents. Minority parents experience significantly less intense saving supports than non-minority parents. There was not a relationship between the number of helpful saving strategies and the age of the saver. A relationship was not found between the saver’s age or number of children and the number of hardships experienced.

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CERTIFICATE OF APPROVAL

PH.D. THESIS

This is to certify that the Ph.D. thesis of

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To Doug Meloche—my love, my husband. I thank you.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

Although seldom a mainstream topic in social work, the financial functioning of individuals and families plays a central role in well-being. Social work has a historic commitment to address the basic needs of vulnerable persons and to enhance their well-being as exemplified by the work of Jane Addams in settlement houses and by social workers helping families create personal budgets. It may be likely that future social welfare policies and services will become increasingly intertwined with the financial health of low-income families. Social workers can play a key role in this dialogue. Thus, it is timely to better understand the exact workings of the low-income family unit, especially in this uncertain economic climate.

In the last 20 years in the United States, there has been an ever increasing wealth gap. One of the most striking features of the U.S. wealth distribution is the degree to which wealth is concentrated in the top 5 percent of the population. Current estimates indicate that the richest 1 percent owns nearly one-third of the total wealth in the U.S. economy and those in the top 5 percent hold more than half of the total wealth. At the other extreme, at least 15 percent of the households have zero or negative net worth or no assets at all (Caner & Wolff, 2004).

The consumption-spending culture of the United States is quite pervasive. Total consumer debt topped over $2 trillion for the first time in 2003 when the average American household carried debt equivalent to nearly 18 percent of disposable income—twice the percentage of 10 years ago (Federal Reserve, 2007). In 2007, total bankruptcies (business and non-business) exceeded 801,269 and non-business filings accounted for the vast majority (775,344) of the cases (Administrative Office of the United States Courts, 2007). Americans save less than their counterparts in the rest of the industrialized world.

For example, across the 27 member states of the European Union the personal savings rate was 10.6 percent in the last quarter of 2007 (EuroStat, 2008) and Americans had a personal savings rate near zero (U.S. Department of Commerce, 2007).

The root of this frenetic consumption in American culture is longstanding. The term "conspicuous consumption" was first introduced by Norwegian American economist and sociologist Thorstein Veblen in his 1899 book *The Theory of the Leisure Class*. Veblen used the term to depict the behavioral characteristic of the nouveau riche, a class emerging in the 19th century as a result of the accumulation of wealth during the Second Industrial Revolution. In this context, the application of the term is applied to members of the upper class who use their enormous wealth to manifest social power—both real and perceived. Conspicuous consumption describes the lavish spending on goods and services acquired mainly for the purpose of displaying wealth or attaining/maintaining social status. Also according to Veblen, "invidious consumption," a necessary corollary, is the term applied to the consumption of goods and services for the deliberate purpose of inspiring envy in others (Dugger, 2006; Veblen, 1899). Applying the work of Veblen can help make sense of today's American society. Conspicuous consumption and invidious consumption can be considered contributing factors to behavioral disorders such as compulsive spending and are major contributors to personal bankruptcies resulting from the abuse and mismanagement of credit.

Assuming debt is a common practice in all economic sectors in the United States—government and corporations, not just private households. For decades Americans enjoyed the benefits of consuming more than was produced and borrowed from the future to make-up the shortfall with unprecedented ratios of domestic and foreign debt increasing much faster than national income. Two decades ago the United States was the world's largest creditor; now it is the world's largest debtor—$9 trillion gross national debt was owed by the General Fund in 2007. These are dramatic facts, with significant long-term implications for the currency, international economic power, and relative standard of living. The growth of debt and the lack of corporate investment have had pronounced effects on competitiveness on the U.S. economy. In 2006, trade performance produced an $836 billion merchandise trade deficit, the largest negative trade balance in history (U.S. Department of Commerce, 2007). Diminishing savings levels and escalating debt have the potential for disastrous implications, not just for individual families or communities, but for the entire nation.

American families are attempting to work in a different kind of economy, where the labor markets are less stable, job security and benefit packages are slim, wages are low, and millions are without health care coverage. Although people in most socio-economic categories face financial challenges and suffer as a result of negative financial behaviors in today's economy, those with low incomes are especially vulnerable. They lack accumulated wealth, financial skills, and access to affordable and trustworthy financial services. Low-income people are frequently exploited by predatory lenders often stripping away what meager equity they possess. They are often unable to meet their basic needs of housing, food, and medical care (Sherman, 2006).

This economic environment raises the challenge of how to help families lead reasonably stable and satisfying lives on relatively modest incomes. In the early 1990s, U.S. social policy for the poor was about to change as a result of a social work professor. The idea proposed was that instead of focusing welfare policy on income transfers and consumption (as the U.S. had historically done through such programs as income support, rental assistance, and food assistance), the focus should to be on savings, investment and asset accumulation. The idea has been summarized by the term "stakeholding" which suggests that poor people, if they are to overcome their poverty—must have a stake in the system (i.e., holding assets). Rather than having short-term fixes, the proposition is that true asset-building tools are necessary for long-term economic and social well-being (Sherraden, 1991).

Asset-Based Welfare Policy

Financial assets increase economic security and provide opportunities for economic development. Home-mortgage interest tax deductions, 529 College Savings Accounts, Individual Retirement Accounts (IRAs), and 401(k)s are all examples of asset-based policies—however, these programs primarily benefit middle- and upper-income households and leave out the poor (Howard, 1997; Seidman, 2001; Sherraden, 2000). Many of these asset-based policies operate through the tax system by providing tax benefits on assets such as homes, investments, and retirement accounts. Annually the U.S. spends over $300 billion on asset-building tax breaks or incentives with over 90 percent of these expenditures going to households with annual incomes over $50,000 (Boshara, 2005).

Unfortunately, individuals living in or near poverty are challenged to meet their basic expenses and still have money available to save. Few institutionalized mechanisms support saving and asset accumulation for low-income individuals (Beverly & Sherraden, 1999; Sherraden, 1991). These tax benefits exclude the poor since they have little or no tax liability and are unlikely to own investment assets. In addition, asset limits in most means-tested programs serve as disincentives for the poor to save and accumulate assets (i.e., a person's public assistance benefits are reduced or eligibility is lost if assets fall above a certain level).

Development economics has long considered saving as central to long-term improvement in the well-being of the poor in non-industrialized countries (Besley, 1992; Deaton, 1992). Until recently the importance of saving and asset accumulation for the poor in industrialized countries was overlooked (Sherraden, 1991). In the late 1980's, three important works examined how the poor could be included in asset-subsidy policies. Friedman (1988) proposed changes to public assistance to encourage development beyond subsistence. Haveman stated that "transfer payments are necessary but not sufficient" to escape poverty (1988, p. 149). Sherraden (1988) critiqued the subsistence model and proposed Individual Development Accounts (IDAs) as a step toward a development model.

In the early 1990s, IDAs were introduced by Michael Sherraden, a social work professor at Washington University in St. Louis, who suggested that (1) saving and asset accumulation depends not only on personal preferences but also on institutional structures and incentives, and (2) assets may have a wide range of positive psychological, social, and economic impacts in addition to deferred consumption and increased productive capacity. IDAs were thus conceived as an asset building program designed for people with low incomes, providing subsidies through matches rather than through tax breaks. IDAs are based on the idea that all people should have access, through the tax code or through direct expenditures, to the structures that subsidize homeownership and retirement savings of higher-income families. IDAs reward the monthly savings of working-poor families who are trying to buy their first home, pay for post-secondary education, or start a small business—assets that promote long-term well-being and financial self-sufficiency (Sherraden, 1988, 1991; Sherraden, et al., 2005).

Individual Development Accounts encourage saving among the poor by offering them 1:1, 2:1, 3:1 or higher matches for their own deposits—for every dollar a person saves this one dollar is matched by $1, $2, or $3 (depending on the designated match rate). IDA programs are implemented by economic development and community-based organizations in partnership with a financial institution that holds the deposits. People who pass an income eligibility means test make monthly deposits into insured, interest-bearing savings accounts over a specified period of time, usually less than 36 months. Participants receive monthly statements from the bank and from the IDA program. Participants are required to complete comprehensive financial education classes and workshops pertaining to their asset goal (i.e., home buying, going into business, pursuing technical training or a college degree). IDA programs often provide social support for asset accumulation by offering services such as peer group meetings, individual case management, and financial counseling. When participants reach their savings goal (typically $1,000—though that amount varies by program), the funds they withdraw from the IDA savings accounts are matched by public-private sources (Sherraden, 1991).

Individual Development Accounts have emerged as a promising tool that enables low-income families to save, build assets, and enter the financial mainstream (Sherraden, 1991). Similar to 401(k) plans, IDAs make it easier for low-income families to build their financial assets. Research has documented that low-income people can save and the saving opportunities and supports have increased for low-income people through IDAs (Beverly & Sherraden, 1999; Sherraden, 1991; Schreiner et al., 2001). Populations that have benefited from participation in IDA programs include the working poor, current and former welfare recipients, youth in disadvantaged urban and rural schools (Sherraden, 1990, 1991; Center for Social Development, 2006), and refugees (Hein, 2006). IDAs also operate in Canada, the United Kingdom, African nations, and most recently in China (Grinstein-Weiss & Irish, 2007).

To date, an estimated 50,000 people in the U.S. are currently saving in IDAs (Schreiner & Sherraden, 2007). Even though IDAs are not widely available in the U.S. since most of the current initiatives are small local programs, there are some states and coalitions working to expand IDA programs to more communities. IDA programs in their current form are costly to administer because they are intensive, community-based programs still in a "demonstration phase." The estimated cost of operating an IDA program ranges from $45-$61 per participant each month (Grinstein-Weiss & Irish, 2007; Schreiner, 2002, 2004, 2005). A large-scale national IDA policy would centralize and ideally make the operations more efficient by achieving economies of scale.

IDA programs in the U.S. have proliferated over the last decade. IDAs are funded primarily by public sources (i.e., federal and state dollars) followed by private contributions from charitable foundations and financial institutions. IDAs have been supported by federal and state legislation and appropriations. IDAs were included in the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Some form of IDA legislation has been passed in 35 states, as well as in Washington, D.C. and Puerto Rico. Thirty states have included IDAs in their Temporary Assistance for Needy Families (TANF) plans which exclude counting IDAs as assets for the purpose of qualifying for public assistance benefits. Also at the federal level, the Assets for Independence Act (AFIA) of 1998 was passed by Congress which authorized a five-year, $125 million demonstration project (Miller & Gruenstein, 2002). Since 1998, federal funding has continued for this initiative. Annually, public funding for IDAs totals approximately $225 million; roughly $185 million provided by the federal government and the remainder by states (Boshara, 2005; Grinstein-Weiss & Irish, 2007).

Purpose of the Dissertation

While the study of asset holding is growing today, it has been notably neglected in most academic fields. Individual Development Accounts provide a context for investigating how low-income parents save and accumulate assets. Historically, there have been few institutionalized mechanisms that support saving and asset accumulation by low-income individuals. Now IDAs offer a unique means for a systematic study of the saving strategies used by low-income individuals and how the decision to save may create hardships for themselves and their families.

Even though the number of studies addressing saving has grown in recent years, there is still a pressing need for more research that can help clarify parental saving strategies, the factors facilitating or impeding saving, and the potential hardships low-income savers face. This dissertation addresses three broad research questions:

1. What are the strategies low-income parents use to save?
2. What supports and barriers do low-income parents who are trying to save experience?
3. Does the act of saving create hardships for low-income parents?

This dissertation research is particularly relevant to the field of social work. As a profession, social workers have a long history of advocating for improvements in social welfare programs and have a particular concern for those who live outside of the economic and social mainstream. For these reasons, IDAs offer a unique opportunity at both the practice and policy level. At the practice level, social workers need to be aware of the existence of IDA programs as a tool available for their low-income clients. At the policy level, social workers need to be familiar with how asset-building social policy strategies are different from consumption-oriented interventions.

Contributions of This Dissertation to the Literature

While the number of studies addressing assets has grown in recent years, there is still a need for more research that can help clarify parental saving strategies, the factors that facilitate or impede saving, and the potential hardships low-income parents face because they choose to save in order to secure a better future for their families. Of critical importance to the field is research that helps to better understand how low-income parents secure the economic well-being of their family—What choices and/or sacrifices do they make? What strategies do they use to make ends meet? Low-income parents encounter factors that make saving difficult and make saving easy—what are these factors?

This dissertation adds to the literature by both making a uniquely new contribution and by building on previous research. Both areas are described below.

New Contributions: Voluntary Saving and Hardship

This dissertation makes a substantial contribution to the literature by examining whether the voluntary act of saving affects the ability of low-income parents to meet the basic needs of their families. What sacrifices do low-income parents make or hardships do they experience in the hope that their futures will be better? How do low-income parents meet their basic daily living needs such as housing, food, transportation, clothing, and medical care while trying to save?

A considerable amount of research on dramatic reductions in family incomes leading to pressures and strains often called "economic stress"—such as income losses due to depression, inflation and recession, unemployment, divorce, and large scale changes in the size and structure of the labor force—has been conducted.[1] However, very little work has been done to examine whether voluntary savers experience hardship. Do families who have made the decision to tighten their budgets and set aside money for savings experience hardships? Even though there is criticism that there is no single, accepted measurement of material hardship, understanding how families struggle with economic shortfalls provides a valuable picture of family well-being. A great deal can be learned from examining the hardships experienced by low-income families who make the voluntary decision to save in an IDA.

Specifically, this dissertation extends the work of previous research by including an entirely new set of questions designed to gauge a parent's "level of hardship" (i.e., number of hardships experienced and their severity) while they are saving. The author added a series of questions to the survey instrument to determine if respondents were having problems in: having a place to live, having working utilities, having enough food, having a telephone, having enough money to buy clothing, having medical care, and having reliable transportation. This addition allows the author to assess whether IDA savers experience hardship and if this hardship varies by personal characteristics.

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[1] See Caplovitz, 1979, 1981; Conger & Elder, 1994; Duncan, Volk & Lewis, 1988; Elder & Caspi, 1988; Heffernan & Heffernan, 1986; Hogarth, Krein & Rettig, 1981, 1984; Kelvin & Jarrett, 1985; Keyssar, 1986; Krein, Hogarth & Rettig, 1983; Rettig, 1982); Morgan, 1991; Turkington, 1986; Voydanoff, 1984; Voydanoff & Donnelly, 1988; Wilhelm & Ridley, 1988a, 1988b.

Building and Expanding On Previous Research

This dissertation replicates the measures used in Moore et al.'s research (Moore et al., 2000; Moore et al., 2001; Moore-McBride et al., 2003). The measures used in Moore's research were adopted by the author to gather the data used in this dissertation. These items relate to categories of saving strategies and saving barriers and supports. Despite the comprehensive nature of Moore et al.'s research study and its groundbreaking importance, the researchers acknowledged that there were three weaknesses with the research design. First, program staff administered the surveys allowing for "social desirability" bias; second, program staff were given a choice among three methods of data collection (face-to-face, telephone surveys, or group interviews); and third, financial saving information was self-report rather than based on administrative data records—presenting a potential bias of recall (Moore et al., 2001, p.8).

This dissertation expands the work of Moore et al.'s (2000) in several important ways. First, this dissertation corrected the three weaknesses in the previous research (i.e., program staff administered surveys, different methods were used to collect the data, and financial saving information was self-report). In this dissertation's research, data were collected by interviewers who were non-staff members. All data were collected through a single method—telephone survey. Financial information was obtained only through administrative records.

Second, based on the author's familiarity with an IDA program and speaking with funders, program managers, and staff, the decision was made to add additional measures of certain variables. For example, for saving strategies related to generating more income, "getting a second job" was added. For saving strategies related to reducing consumption, "use income tax return for savings" and "using direct deposit" were added. Additional items were included to measure barriers to saving to include "money goes to buy food;" "money goes to buy clothing;" "money goes to transportation such as car repairs, car payments, car insurance, paying people for rides, or public transportation;" and "money goes to housing such as paying rent or mortgage."

As outlined above, this dissertation adds several important new data elements and builds on existing research both to refine our knowledge of the issues and to expand our understanding into new areas. This dissertation will help inform the field about the exact choices low-income parents make to meet their basic living expenses while still trying to put money aside.

Definitions

Some definitions of common terms used in this field and in this dissertation:

Assets are defined as resources kept through time; the stock of wealth in a household (Sherraden, 1991, p. 5). The concept of assets encompasses far more than financial assets as cash or durable goods. The use of assets—human, physical, social or financial—produces income. The chief asset of most people—especially low-income people—is **human capital** which refers to an individual's skills, knowledge, experience, creativity, motivation, and health (Sherraden, 1991, p. 5).

Asset building or **asset accumulation** refers to "strategies that promote long-lasting saving and investment, in contrast to income and consumption" (Schreiner et al., 2001, p. 7). The term "saving" is often used interchangeably with asset building or asset accumulation.

Hardship or material hardship is defined as when an individual either fails to meet his or her needs or is at risk of failing to meet his or her needs such as inability to pay utility bills or rent, insufficient food or failure to go to the doctor or dentist when needed, or lack of material possessions such as clothing (Mayer & Jencks, 1989, p. 89). Hardship and material hardship are used interchangeably in this paper.

Income is defined as "the inflow of resources to a household in a given period of time excluding reimbursable inflows from loans" (Schreiner et al., 2001, p. 7).

Saving is defined as an increase in resources kept through time. That is, saving is an increase in assets. The act of saving produces savings or assets (Sherraden, 1991, p. 5).

Organization of Dissertation

A review of the theoretical and empirical literature relevant to this dissertation follows in Chapter 2. The methods and results are presented in Chapter 3 and 4, respectively. A discussion of the results, contributions of the dissertation to the literature, the limitations, the implications for social work policy and practice, and ideas for future research are in Chapter 5.

CHAPTER 2

REVIEW OF LITERATURE

This chapter reviews key propositions and empirical evidence of theories of saving strategies, saving supports, and material hardship. In this review of the asset-building literature, three bodies of work are reviewed: (a) What are the specific strategies people use to save?, (b) What factors act as facilitators or impediments to saving?, and (c) How does saving affect a low-income parent's ability to meet basic daily living needs? At the end of this chapter, this dissertation's hypotheses are stated. A review of the theoretical and empirical literature provides a rationale regarding why certain variables are considered germane to the analysis and provides evidence to support specific hypotheses.

Theoretical Framework for This Dissertation

While it is often advantageous to have a single theory that ties all of the research questions together, the scope of this dissertation prohibits that. The theoretical framework for this dissertation is three-pronged—saving strategies, saving supports, and material hardship. In this section the theory behind how people actually go about saving (i.e., how do they successfully set aside money) is presented followed by factors that help or hinder saving. Finally, the work related to gauging material hardship is presented. At the end of this sub-section, an overview of the theoretical framework is provided and depicted in a diagram.

Theories of Saving Strategies

One important component of the theoretical framework for this dissertation is the theory of how people actually go about saving—how do they successfully set aside money? The best-known theory related to saving strategies is the behavioral life-cycle hypothesis (BLCH) proposed by Shefrin and Thaler (1988, 1992; see also Thaler, 1990;

Thaler & Shefrin, 1981). They developed the behavioral life-cycle hypothesis, which allows for the possibility of both a short-term and a long-term focus. They believe that individuals have instincts to be both planners who are concerned with lifetime utility and doers who are focused on the present. Thaler and Shefrin also suggest that individuals practice “mental accounting” (i.e., people have different propensities to save in distinct categories of accounts). For example, people may think differently about funds in a retirement account than funds in a cash reserve for emergencies (Thaler & Shefrin, 1981).

This BLCH model has four key propositions. First, the BLCH emphasizes that people have difficulty resisting temptations to spend. Second, the model suggests that people create their own incentives or constraints to help them save. For example, individuals develop operating rules such as restricting borrowing to certain purchases, paying off credit card bills every month, or choosing to save a certain amount each month. Individuals also use “precommitment constraints,” techniques such as payroll deduction that make it difficult to choose current pleasure at the expense of future pleasure (Maital, 1986; Maital & Maital, 1994; Shefrin & Thaler, 1988 as cited in Beverly, Moore, & Schreiner, 2001). Third, the model proposes that individuals classify economic resources into separate “mental accounts”—current income, current assets, or future income. The temptation to spend resources is expected to vary by account (Shefrin & Thaler, 1992). The authors suggest that individuals are likely to spend money designated as current income but are unlikely to spend money designated as future income (i.e., individuals spend future income by borrowing). Finally, Shefrin and Thaler argue that the source and amount of resources received determines how resources are earmarked (1992).

Building on the behavioral life cycle hypothesis, Beverly et al. (2001, 2003) propose a framework of saving and asset-accumulation strategies. These scholars assumed that asset accumulation occurs in three “stages.” First, individuals must consume less than their incomes by reallocating existing resources from consumption to saving and/or by increasing resource inflows. Second, resources may be converted from some easy-to-spend form (e.g., cash) to a more difficult-to-spend form (e.g., resources in a bank account). Finally, individuals must maintain their savings by resisting pressure to withdraw funds. These stages are: (1) reallocation (or saving), (2) conversion (or depositing), and (3) maintenance.

Beverly et al. (2001, 2003) also proposed that there are two broad types of saving strategies—psychological and behavioral. Psychological strategies are grounded in self-imposed rules about making deposits and maintaining assets. They are mental "tricks" that reduce the deliberation to save and maintain assets. Behavioral strategies represent efforts to change economic actions, especially efforts to control consumption and methods of making deposits and withdrawals.

Combining the two types of strategies together with the three stages of asset accumulation results in six strategy groups: (1) psychological saving strategies (e.g., mentally designating earnings from a second job as savings); (2) behavioral saving strategies (e.g., reducing consumption); (3) psychological depositing strategies (e.g., viewing deposits into savings as obligatory); (4) behavioral depositing strategies (e.g., arranging for direct deposit of paychecks into savings accounts); (5) psychological strategies for maintaining assets (e.g., adopting rules regarding the uses of savings); and (6) behavioral strategies for maintaining assets such as choosing an account that has penalties for withdrawals (Beverly et al., 2001, 2003). These are summarized in Table 1.

Table 1 Stages of Asset Accumulation and Types of Saving Strategies

Stages of Asset Accumulation	**Types of Saving Strategies**	
	Psychological	**Behavioral**
Reallocation	• Set & mentally focus on a saving or asset goal • Use mental accounting • Seek encouragement for saving	• Increase efficiency • Reduce consumption • Increase income • Sell assets • Increase debt • Postpone income in order to receive lump-sum payment • Monitor resource flows
Conversion	• View deposits into savings accounts as obligatory	• Make savings deposits first • Arrangement for automatic transfers to savings accounts • Store money informally
Maintenance	• Adopt simple rules regarding the uses of savings	• Choose financial services that increase the costs of withdrawals

Source: Beverly, S., Moore, A., & Schreiner, M. (2001). *A framework of asset-accumulation stages and strategies* (Working Paper No. 01-1). St. Louis, MO: Washington University, Center for Social Development.

Theory of Saving Supports

The tenets of both economic and socio-psychological theories of savings influenced Sherraden's development of a theory called, an **institutional theory of asset accumulation**. His theory purports that institutional supports for saving—social, cultural, and personal norms regarding saving and spending; encouragement to save from family, friends, and IDA staff;[2] and expectations regarding the feasibility and outcomes

[2] It is interesting to note that Sherraden considers encouragement from people as part of institutional support whereas other social support theories would consider this "informal support." "Informal support" is usually provided by friends, relatives, neighbors, or peers, while "formal support" is comprised of the services provided by professionals belonging to institutions such as schools, churches, social service agencies (see Cohen & Willis, 1985; Gottlieb, 1983; Lin & Ensel, 1989; Willis, 1991).

of an approved asset purchase—are all essential ingredients of a savings program. According to this institutional approach, people make choices based on their own preferences, but their choices are shaped by rules and norms of institutions. Sherraden's theory shows how the economic and the socio-psychological reinforce each other (Beverly & Sherraden, 1999; Sherraden, 1991).

The institutional theory of asset accumulation suggests that institutional factors greatly influence an individual's ability to save (Sherraden 1991). In particular, five variables have been identified that appear to contribute to an individual's saving and asset accumulation: access, information, incentives, facilitation, and expectations (Sherraden, 1991; Beverly & Sherraden, 1999; Sherraden, Schreiner & Beverly, 2003). Individuals with *access* to institutionalized mechanisms such as IDAs are more likely to have higher rates of saving than those who lack access. *Information* refers to the extent to which people understand the process and rewards of saving. The more thoroughly people understand the process, the more likely they are to be engaged in saving. *Incentives* increase the likelihood that people will save. Individuals who are provided with saving *facilitation* which makes it easier for them to save, such as direct deposit, will more likely increase their willingness to save. People who have specific savings *expectations* (i.e., goals) are more likely to save more than those who do not have savings expectations (Sherraden, 1990, 1991; Sherraden et al., 2003).

Sherraden's theory of asset accumulation emphasizes the role of institutions—formal and informal socioeconomic relationships, rules, policies, and incentives (1988, 1990, 1991). Sherraden developed propositions regarding attitudinal and behavioral effects of asset holding related to greater household stability, increased long-term planning and thinking, increased effort in maintaining and enhancing assets, increased human capital development, increased risk taking, and greater personal efficacy and self-esteem. According to Sherraden, "asset accumulations are primarily the result of institutionalized mechanisms involving explicit connections, rules, incentives, and subsidies" (1991, p. 116).

Sherraden (1991) makes a distinction between income and assets in terms of economic resources accumulation and highlights the importance of assets rather than income and level of consumption. Assets are important because they can bring security to its owners, especially in times of hardship or economic stress. People use income to cover day-to-day necessities while assets often include income, power, and independence (Oliver & Shapiro, 1995, p.32). Having control over economic resources can change people's cognitive maps and enhance their life chances. Assets can bring not only income, but also a stake and position in the society for the owners.

Sherraden (1991) suggests that assets may have a wide range of positive personal and social effects on well-being beyond consumption. Sometimes this component of the theory is called "asset effects." As Sherraden stated, "Simply put, people think and behave differently when they are accumulating assets, and the world responds to them differently as well" (1991, p. 148). These effects may include greater future orientation, improved household financial stability, greater focus and specialization, a foundation for risk-taking, increased personal efficacy, increased social influence, increased civic participation and enhanced welfare of children (Zhan & Sherraden, 2002).

Beverly and Sherraden (1999) hypothesized that institutions—formal and informal socioeconomic relationships, rules, and incentives—influence saving and asset-accumulation processes. Based on the institutional theory of asset accumulation, IDAs were developed as a policy initiative that could help provide low-income people with the opportunity to save money (Sherraden, 1990, 1991). The emphasis on institutions suggests that the institutional characteristics of saving opportunities (i.e., supports) may shape the saving and asset-accumulation strategies used by individuals.

Theory of Material Hardship

In addition to the theories of saving strategies and saving supports, the work related to understanding material hardship is a critical aspect of this dissertation. The ability of families to meet their most basic needs is an important measure of economic stability and well-being. While poverty thresholds are used to evaluate the extent of serious economic deprivation, the income a family needs to secure safe and decent-yet-modest living standards offers a broader measure of economic welfare. As noted by one group of researchers, measuring material hardship gets at the issue of "what does it mean to be poor" by examining families' living conditions and the extent to which they can meet their basic needs (Federman et al., 1996).

In this context, **hardship** means when an individual either fails to meet his or her needs or is at risk of failing to meet his or her needs (Mayer & Jencks, 1989, p. 89). Measures of material hardship have been portrayed as "making more sense" to the public and policymakers than the official poverty statistic. The official, federal poverty statistic has been characterized as abstract and as providing a less concrete sense of the living conditions of the poor and non-poor (Ouellette, Burnstein, Long, & Beecroft, 2004).

This area of research is based loosely on the theoretical work of Maslow's hierarchy of needs, theory of motivation (1954, 1970). Maslow argued that human nature is the continuous fulfillment of inner needs, beginning with those of a basic physiological character and progressing to self-actualization. Maslow believed human needs form a hierarchy of eight distinct levels. Individuals must first satisfy needs at lower levels of the hierarchy before they seek satisfaction of higher level needs. Levels 1 thorough 4 refer to "deficiency needs." Levels 5 through 8 refer to "growth needs." Each lower level must be met before moving to the next higher level. An individual is ready to move on to the growth needs if and only if the deficiency needs are met.

Scholars examining material hardship borrowed from Maslow's first two levels—physiological needs (level 1) and safety needs (level 2). According to Maslow, level 1 has the basic biological needs including everything necessary for survival such as oxygen, water, nourishment, and sleep. Level 2 has the needs to be safe, secure, and free from physical and emotional harm such as shelter, protection, emotional security, and living in a safe area (Maslow, 1954, 1970).

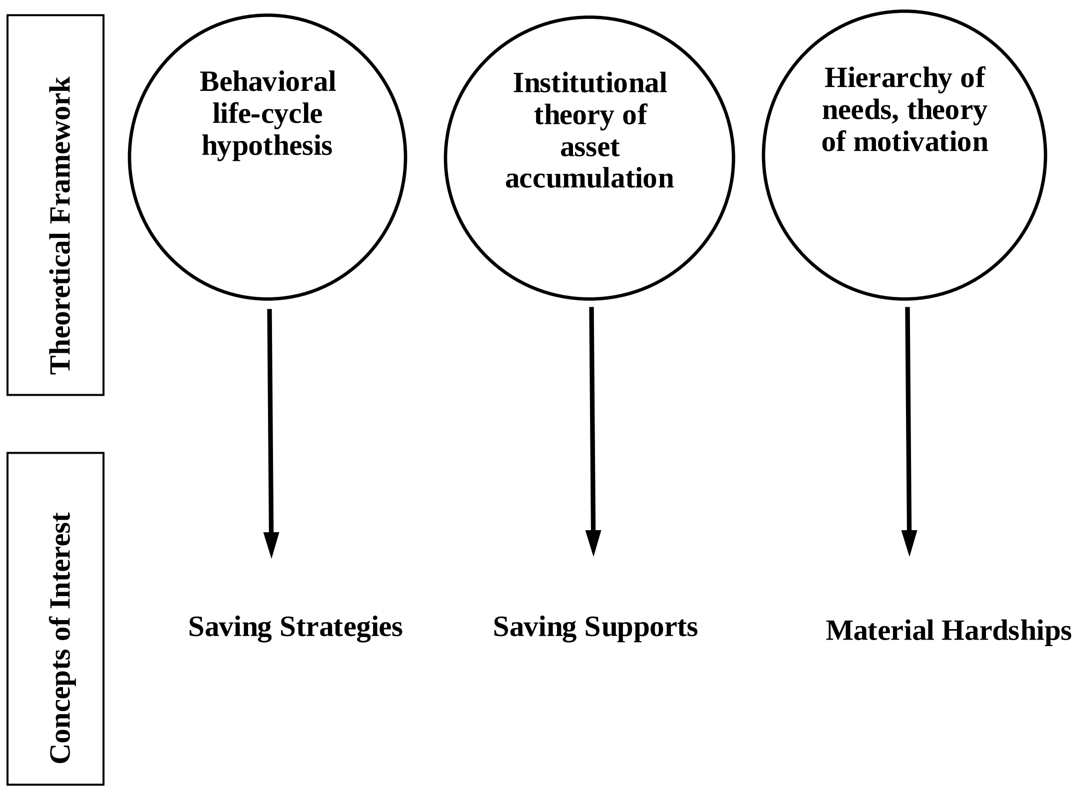
The parallels to Maslow's work are obvious when looking at the hardship indexes being used by researchers. Most hardship indexes define material hardship in terms of three basic needs: food insecurity, housing insecurity, and the inability to afford basic utilities such as gas, electricity, or a telephone (Bauman, 1998; Beverly, 1999; Danziger et al., 2000; Edin & Lein, 1997; Federman et al., 1996; Lerman, 2002; Mayer & Jencks, 1989; Rector, Johnson, & Youssef, 1999; Short & Shea, 1995). Other researchers sometimes include additional types of indicators in their definition of material hardship such as, unmet medical need, housing safety, housing overcrowding, and the presence of essential durable goods in a household such as a stove and refrigerator (Bauman, 1998; Beverly, 1999; Danziger et al., 2000; Edin & Lein, 1997; Mayer & Jencks, 1989; Rector et al., 1999; Short & Shea, 1995).

Linking the Reviewed Theories to This Dissertation

As stated earlier, it is often ideal to have a single theory to point to that addresses all of a study's research questions. However, the research questions for this dissertation do not lend themselves to this. The theoretical framework for this dissertation is three-pronged—saving strategies, saving supports, and material hardship. While there are three theories influencing this dissertation, it is possible to identify some common elements across the theories. The underlying assumption about human behavior is similar for each of these theories. First, people are viewed as active, change makers—not simply entities reacting to their environment. Second, people are rational, though they do not always act rationally. Third, people are influenced by social, cultural, and personal norms.

This section of the chapter offers an overview of the theoretical framework. In this effort, Figure 1 illustrates which concepts are drawn from each of the three theories.

Figure 1 Theoretical Framework and Concepts of Interest



Based on the author's understanding of the theories of saving strategies as described in the behavioral life-cycle hypothesis, specific ideas were selected for investigation. People create their own incentives or constraints to help them save. For example, individuals develop operating rules such as restricting borrowing to certain purchases, paying off credit card bills every month, or choosing to save a certain amount each month. The concept of interest is the notion that people have and use discrete, unique saving strategies.

From the institutional theory of asset accumulation, the idea of looking at external factors to facilitate or impede saving is suggested. This theory purports that institutional supports for saving—social, cultural, and personal norms regarding saving and spending; encouragement to save from family and friends; and expectations regarding the feasibility and outcomes of an approved asset purchase—are all important considerations (Beverly & Sherraden, 1999; Sherraden, 1991). The presence or absence of these factors can be considered supports or barriers depending on how they affect the saver.

The theoretical work of Maslow's hierarchy of needs and his theory of motivation purport that human nature is affected by the continuous fulfillment of inner needs, beginning with those of a basic physiological character and progressing to self-actualization (1954, 1970). The ability of families to meet their most basic needs is an important measure of economic stability and well-being. Measuring material hardship gets at the issue of "what does it mean to be poor" by examining families' living conditions and the extent to which they can meet their basic needs (Federman et al., 1996). Examining the issue of hardship is directly tied to meeting basic needs of food, housing, clothing, medical care, and basic utilities such as gas, electricity, or a telephone.

Empirical Evidence

This section presents empirical evidence related to areas highlighted in the previous theoretical section relating to (1) saving strategies, (2) saving supports, and (3) material hardship. This dissertation is also interested in understanding the role that demographic characteristics may play related to use of specific saving strategies, perceived supports, and the level of hardship experienced. Thus, in each of these areas, research examining the role of personal characteristics is discussed.

Research Related to Specific Saving Strategies

Of critical importance to this dissertation is the research that examines the issue of how people save—specifically what saving strategies they use. As noted by Beverly et al. (2001, 2003), there are two broad categories of strategies to set aside money: those used to find or create resources that may be allocated to savings and those used to resist temptations to spend. Scholars have devoted some attention to strategies used by low-income households to set aside money for savings. There is some literature regarding strategies used to cover infrequent or unanticipated expenses or to cope with budget shortfalls. Though not directly linked to household saving efforts, this research helps identify how low-income families try to make do on limited resources.

Research about strategies to cope with unexpected budget shortfalls is relevant to saving because both actions require finding extra or creating new financial resources. Varcoe (1990) surveyed 934 households in California about the methods they used to meet unexpected expenses. Forty-four percent used their regular savings, nearly 30 percent indicated that they did without new clothes or entertainment, 22 percent used emergency savings, 14 percent borrowed money from a bank or credit union, 11 percent postponed paying bills, and 8 percent borrowed from family or friends. Rhine and Toussaint-Comeau (1999) surveyed 194 middle-income households in Chicago and they found that in the previous five years 29 percent of the families had experienced a financial set back such as unemployment, large increases in living expenses, death or illness of a family member. To cope with these situations, 20 percent used existing savings, 16 percent asked family, friends, or social organizations for money, 16 percent postponed paying bills, and 13 percent reduced consumption. In 1996, Bond and Townsend surveyed 210 primarily Hispanic households in Chicago and found that 64 percent experienced a financial setback within the previous five years. Multiple strategies were used by households—59 percent used existing savings; 46 percent reduced consumption; 32 percent asked family, friends, or social organizations for money; and 31 percent postponed paying bills.

Using data from four releases of the Federal Reserve Board’s Survey of Consumer Finances, researchers Bird, Hagstrom, and Wild examined credit card use among the poor (1997). From 1983 to 1995 they found that the percentage of poor households using credit cards to cover expenses rose from less than 20 percent to almost 40 percent. Romich and Weisner (2000) conducted 42 in-depth interviews with low-income families in Milwaukee and found that they used the following strategies to save money: increasing work hours, cooking inexpensive meals, being more vigilant about collecting child support payments, borrowing money from relatives, and conserving energy to reduce utility payments. They also found families would make their rent or child care payments in advance so that money went to its intended bill.

Several studies explicitly set out to identify strategies used by low-income households to resist spending temptations. These are: postponing check cashing (Finn, Zorita, & Coulton, 1994); giving money to trusted individuals to avoid spending it (Caskey, 1997); and choosing not to have an ATM card (Caskey, 1997).

The work of Edin and Lein (1997) documented income and consumption patterns among single mothers. They interviewed 165 single mothers who were working but not currently receiving welfare (whom they call "wage-reliant") and 214 single mothers who were currently receiving welfare, some of whom were working in the formal or informal labor market (called "welfare-reliant"). Their research has drawn attention to the ways in which poor mothers balance time, work, and resources from friends, relatives and others to balance a family budget. An important conclusion from this work was that entering the labor force involves costs which make the comparison of the well-being of working and non-working mothers more problematic than has been evident from earlier research. A second conclusion was that the nature of single mothers' "survival strategies" strongly influences their ability to substitute work for public assistance.

In a qualitative data collection effort at an IDA experimental research site, Sherraden et al. (2005) interviewed 59 IDA participants and 25 controls and found that people adopted psychological and behavioral strategies to save money. People most often reduced consumption in an effort to save money. Drawing on in-depth interviews with nine African American women who were participating in an IDA program, Shobe and Christy-McMullin (2005) found women used their tax refunds each year for savings and deposited money into savings accounts when cashing child support checks.

Using survey and in-depth interview data from nearly 2,000 American families, Caplovitz (1979) identified four types of adjustments in financial management that families make—increasing income, reducing consumption, increasing the efficiency of resource use, and assuming debt. The most common saving strategy was reducing consumption, followed by increasing efficiency, and increasing income. Assuming more debt was relatively uncommon.

Caplovitz's four categories of saving strategies—increasing income, reducing consumption, increasing the efficiency of resource use, and assuming debt—were later adopted by researchers examining the saving behaviors of IDA participants (Moore et al., 2000; Moore et al. 2001; Moore-McBride, Lombe, & Beverly, 2003; Sherraden et al., 2005).

Moore and colleagues conducted a cross-sectional survey of IDA participants to understand the strategies that low-income people use to save money. The researchers found that the most common strategies for saving money for IDA deposits were changes in consumption behavior—particularly using existing resources more efficiently and reducing consumption quality or quantity. Seventy percent shopped more carefully for food, 68 percent ate out less, and 64 percent spent less on leisure activities (Moore et al., 2000; see Table 2).

Table 2 Saving Strategies

Saving Strategy	Percent
Using resources more efficiently	
Shop more carefully for food	70%
Eat out less often	68%
Buy used clothing	55%
Reducing consumption	
Spend less on leisure	64%
Spend less on cigarettes or alcohol	34%
Postpone doctor or dentist visits	17%
Generating income	
Work more hours	29%
Sell items	12%
Assuming debt	
Postpone paying bills	16%
Borrow from family and friends	7%
Borrow from credit	3%

Source: Moore, A., Beverly, S., Schreiner, M., Sherraden, M., Lombe, M., Cho, E., Johnson, L., & Vonderlack, R. (2001). *Saving, IDA programs, and effects of IDAs: A survey of participants. Downpayment on the American Dream Policy Demonstration: A national demonstration of Individual development accounts*. St. Louis, MO: Washington University, George Warren Brown School of Social Work, Center for Social Development.

A significant component of this dissertation is the role that demographic characteristics may play in the various saving strategies people pick. A great deal of research has been conducted examining personal characteristics as the independent variables and saving rates (how much is saved) as the dependent variable—but this "saving rates" literature is not reviewed in this dissertation since this is not the dependent variable of interest. However, there is some literature that looks specifically at demographic characteristics as the independent variable and saving strategies as the dependent variable.

When examining how demographic characteristics are associated with saving strategies, Moore et al. found several interesting findings (2001). Four saving strategies—buy used as opposed to new clothing, spend less on leisure, postpone doctor and/or dentist visits, and postpone paying bills—had demographic characteristics that were statistically significant. The researchers also found that having a history of saving made a difference in which strategies were selected. The results are presented in Table 3.

Table 3 Saving Strategies and Description of Participants Who Used That Strategy

Buy used as opposed to new clothing:
- Participants in the lowest income were more likely than those with monthly incomes between $1,000 and $1,500 and those with monthly incomes greater than $2,000.
- Participants who did not save during their IDA participant were more likely than those who saved a regular amount each month.

Spend less on leisure:
- Older participants were less likely to use this strategy.
- Participants with high-school degrees were more likely to use this strategy than those with less than a high school degree.
- Participants saving for home purchase and microenterprise were significantly less likely than those who were not saving for these goals.
- Participants who saved regularly before joining an IDA program were less likely to use this strategy than those who saved extra money, but those who saved a regular amount each month during their IDA participation were much more likely to use this strategy than those who did not save during their IDA participation.

Postpones doctor and/or dentist visits:
- Participants living with a spouse or partner were more likely to use this strategy than those living alone.
- Participants with more children were less likely to postpone medical care.
- Participants with less than a high school degree were less likely to use this strategy.
- Participants who planned to use their IDAs to purchase or repair homes were less likely to use this strategy.
- Those who did not save before joining an IDA program were more likely to use this strategy than were those who saved a regular amount each month.

Postpones paying bills:
- Older participants were more likely to use this strategy.
- Participants with monthly incomes less than $1,000 were more likely to use this strategy than were those with income between $1,500 and $2,000.
- Participants saving for home purchase and home repair were less likely to use this strategy.

Source: Moore et al. (2001). *Saving, IDA programs, and effects of IDAs: A survey of participants. Downpayment on the American Dream Policy Demonstration: A national demonstration of Individual development accounts*. St. Louis, MO: Washington University, George Warren Brown School of Social Work, Center for Social Development.

Personal Characteristics and Saving Strategies

Research has shown that savers compare alternative courses of action by weighing the evidence and considering the multiple interacting variables in order to make a judgment about their course of action (Rettig, 1993). This dissertation considers the personal characteristics of **age** as an important predictor of which strategies are used to save. Regarding the age of the saver, Weigel (1988) reported that older compared to younger adults were more likely to analyze the problem, seek information, and talk with family members. Strumpel (1976) reported that older persons were more likely to modify saving goals as time passed. Titus, Fanslow, and Hira (1989) found older financial managers were less likely to engage in planning behaviors but age was not a significant determinant of actual implementing behaviors.

In addition, the **level of income** has been found to be related to the use of specific saving strategies. Annual income has been found to be related to women's preferences for household production activities (e.g., growing vegetables in a garden rather than purchasing them at a grocery store). Adults in higher income families preferred to spend less time in household production activities (Hiatt & Godwin, 1990). Given the research of Voydanoff and Donnelly (1988), it is important to consider the effect of **marital status** on saving strategies. The presence or absence of another source of income (i.e., a spouse) may influence which strategies are selected by a saver.

Research Related to Saving Supports

Another area of research that has particular relevance to this dissertation is the issue of saving supports. Beverly and Sherraden (1999) hypothesized that institutions—formal and informal socioeconomic relationships, rules, and incentives—influence saving. When testing the positive and negative role of institutions in saving these can be called saving supports and saving barriers. Moore et al. (2001) found several important findings when examining the perceived saving supports and barriers experienced by savers. The researchers grouped the supports/barriers under different categories—social, psychological, economic, and institutional (Table 4). Supports included the specific features of the IDA themselves such as, having a secure account (98 percent), having a match rate (95 percent), and adequate interest rate (85 percent). Seventy percent reported that they had family and friends who encouraged them to save. Participants also reported that economic circumstances negatively affected their ability to save. Eighty-two percent agreed that most of their money went for necessities, and 55 percent reported that it was hard to resist temptations to spend money.

Table 4 Saving Supports and Barriers

Saving Supports	Percent Agree
Institutional (Psychological)	
Want to save for goal	99%
Institutional (IDA features)	
IDA account seems secure	98%
Like financial institution	97%
IDA match rate is adequate	95%
Like rules regarding withdrawals	92%
IDA earns enough interest	85%
IDA classes help saving	85%
Institutional (Social)	
Family/friends encourage saving	70%
Saving Barriers	**Percent Agree**
Institutional (Economic)	82%
Most money goes for necessities	
Institutional (Psychological)	55%
Hard to resist temptations to spend money	45%
Cannot save enough to make a difference	14%
Saving takes too long; goal too far away	5%
Saving is not that important	
Institutional (Social)	38%
Family/friends often ask for money	
Institutional (IDA features)	22%
Worry about losing government benefits	

Source: Moore et al. (2001). *Saving, IDA programs, and effects of IDAs: A survey of participants. Downpayment on the American Dream Policy Demonstration: A national demonstration of Individual development accounts*. St. Louis, MO: Washington University, George Warren Brown School of Social Work, Center for Social Development.

Personal Characteristics and Supports

One focus of this dissertation is to better understand the role that personal characteristics play in perceived supports experienced by a saver. Specifically race/ethnicity, income, education, and age are discussed relative to saving supports.

Research shows that there are **racial** differences among savers. Minority groups, particularly African Americans, were likely to own fewer assets than whites (Oliver & Shapiro, 1995; Shapiro, 2001). Minorities are more likely to be "unbanked" than non-minorities (Helfin & Patillo, 2002; Schreiner et al., 2001). Being "unbanked" means not having an established relationship with a financial institution (i.e., not having a checking/savings account) which leads to not having access to information provided through financial institutions which may lead to the accrual of assets. Grinstein-Weiss and Wagner (2006) in their IDA research found that institutional variables (such as the IDA match rate and monthly savings target) appear to matter more for African-American than non-minorities. Research suggests strong financial, emotional, and social ties exist within the kin and social networks of African American families (Helfin & Patillo, 2002; McAdoo, 1978; Stack, 1974). Once a person established a level of financial stability, s/he often relinquished these limited savings to help someone in the kin network. These researchers found that African Americans often relinquished limited savings to help other family members and felt obligated to provide such assistance. Thus, this helping behavior may limit their ability to save.

The literature suggests that income, education, and age may be important factors to consider. In terms of the role of **income**, researchers (Chang, 1994; Hefferan, 1982) found income to be positively associated with the decision to save. Chiteji and Hamilton (2000) argued that having siblings or parents who are poor significantly reduced the possibility of saving. These siblings or parents may request financial assistance from the saver, thus reducing their own available income to set aside for personal savings.

Because low-income families are more likely than higher-income families to have poor siblings or parents, this factor presents a saving challenge.

Education has been examined as powerful predictor of perceived saving supports and barriers. Shelton and Hill's study (1995) found that educational status was related to positive budgeting behavior among low-income people. Michael (1975) argued that households with more educated family members were expected to be more efficient consumers because of greater access to knowledge and ideas. Rettig and Danes (1994) found that more highly educated people were more likely to engage in cognitive decision making processes. This suggests that external factors such as barriers and supports might play a role in their decision making. Education was shown to have a powerful effect in other research as well (Godwin & Carroll, 1986). Regarding the **age** of the saver, older adults were more likely to analyze the problem, seek information, and talk with family members than younger adults. Research suggests that the age of the saver is an important factor to examine (Danes & Rettig, 1993b; Strumpel, 1976; Titus et al. 1989; Weigel, 1988).

Research Related to Saving and Material Hardship

Scholars have examined the positive effects of saving and asset accumulation. Yadama and Sherraden (1996) found that savings and house values had significant positive effects on attitudes and behaviors such as educational aspirations for children, prudence, efficacy, future orientation, and connectedness. Shobe and Page-Adams (2001) highlight the independent and mediating role of future orientation and suggest that assets may help people first shape hopes and plans, which in turn lead to positive social and economic outcomes. Shobe and Christy-McMullin (2005) found that asset building encourages hope, security, independence, self-efficacy, a future orientation, and confidence.

Likewise, it is equally important to understand the potential hardships associated with saving. There has been a considerable amount of research on dramatic reductions in family incomes leading to pressures and strains often called “economic stress” (Conger & Elder, 1994; Elder & Caspi, 1988). Studies have examined family adjustments to significant income losses due to depression (Duncan, Volk & Lewis, 1988; Heffernan & Heffernan, 1986; Turkington, 1986; Keyssar, 1986), inflation and recession (Caplovitz, 1979, 1981; Hogarth, Krein & Rettig, 1981, 1984; Krein, Hogarth & Rettig, 1983; Rettig, 1982), unemployment (Kelvin & Jarrett, 1985; Voydanoff & Donnelly, 1988; Wilhelm & Ridley, 1988a, 1988b), divorce (Morgan, 1991), and large scale changes in the size and structure of the labor force (Voydanoff, 1984).

However, very little work has been done to examine whether voluntary savers experience hardship. Do families who have made the decision to tighten their budgets and set aside money into savings experience hardships? Specifically, some research has been done on the general topic of potential negative consequences of saving for low-income parents and the more specific topic of how low-income parents are meeting their basic daily living needs such as housing, food, transportation, clothing, and medical care while saving. In Moore et al. a general question was asked of IDA savers *Overall, how positively or negatively has your IDA affected you?*—responses were overwhelmingly positive. No one reported that the overall effect of IDA participation was somewhat or very negative. In a separate series of questions, when prompted, 3 percent noted that they had more problems with family members and 3 percent had problems with neighbors since they had an IDA (2000, 2001).

In borrowing from another field—material hardship among the poor—it is possible to examine if savers may experience hardships. Understanding the challenges families face when they have limited income and resources will inform the IDA field. In the author’s previous research (Fraker, Nixon, Losby, Prindle, & Else, 1997; Losby & Robinson, 2002; Nixon, Kauff, & Losby, 1999), the question of hardship was tied to welfare recipients who lost their cash benefits due to non-compliance with rules. Even though the sample for the dissertation did not consist of welfare recipients, the author believes that there is applicability to this population given several similarities. First, both welfare recipients and IDA participants are low-income. Second, due to their limited income both populations may struggle to meet their basic needs. Third, economic stress was made potentially more dire for both groups through their situations (i.e., welfare recipients did not have their cash benefits and the IDA participants made the decision to set money aside for their savings).

In the literature, the research on material hardship has largely been conducted to supplement existing income-based poverty measures by providing descriptive information on how low-income families are doing (Beverly, 1999, 2000; Mayer, 1997; Mayer & Jencks, 1989; Rector, et al., 1999). Historically, poverty and well-being in the U.S. have been assessed using income-based measures (i.e., by applying the official poverty thresholds to income data reported in surveys). In theory, income-based measures capture a household's ability to purchase the goods and services that it needs. That is, income is a measure of a household's resources that can be used to meet its needs allowing for differences in individual tastes and preferences.

However, some scholars believe using income as a proxy for total family resources or well-being may misrepresent what is actually available to a household for the purpose of meeting its basic needs (Beverly, 1999; Edin & Lein, 1997; Mayer & Jencks, 1989, 1993; Rector et al., 1999). These researchers contend that a family's living conditions are shaped by more than current income, and households may experience different living standards for reasons not explained by current income. Income losses and economic stress lead families to initiate various managerial adjustment strategies (Conger & Elder, 1994; Rosenblatt, 1990). Research suggests that families who are in need generally experience multiple hardships and this is especially true for low-income families (Ouellette et al., 2004). There seems to be an additive effect at work—so that low-income families rarely experience a single hardship, but rather multiple hardships.

Increasingly, policy research and program evaluations have incorporated material hardship measures into their analyses, both to look at whether programs and policies affect specific dimensions of hardship and the overall level of material hardship experienced by families. In a synthesis of findings from “welfare leavers” studies, Acs and Loprest (2001) found that some studies show an increase in food and housing-related hardships after leaving welfare, while others found a decline or no change in material hardship after exiting welfare. Edin and Lein (1997) found that working mothers experience higher levels of material hardship than those who receive welfare assistance. This occurs despite the fact that working mothers earn wages and have more regular income.

Danziger et al. (2000), using the Women’s Employment Survey (WES) conducted in 1997 and 1998 with a random sample of single mothers who were welfare recipients in an urban Michigan county, concluded that although employed women experience higher levels of financial well-being, they still experience material hardship, albeit at somewhat lower levels than women who do not work every month. Other researchers have used measures of material hardship to examine the extent to which families transitioning off welfare are able to meet basic needs (Polit et al., 2001; Sherman, Amey, Duffield, Ebb, & Weinstein, 1998).

Despite their growing popularity, measures of material hardship are not without weaknesses and limitations. Most importantly, despite recent efforts to further the understanding of material hardship and its measurement, a common definition of material hardship does not exist, nor is there a standard approach to its measurement. More specifically, since there is no commonly agreed upon standard of material need that applies to everyone, researchers have used somewhat different definitions and measurement approaches. Material hardship measurement is also vulnerable to criticisms about the role played by individual choice and preferences. Because of personal preferences, people may choose to not consume specific goods or services that others may consider necessities. For example, people may report that they have not eaten on a particular day or are hungry because they have chosen to use their limited resources to purchase other goods and services (Ouellette et al., 2004).

The relationships between income, expenditures, consumption, and material hardship are complex and changes in income may not result in similar changes in the distribution of material hardship (Mayer & Jencks, 1993). The premise is that the level of a family's hardship increases when the household suffers from multiple problems rather than a single condition (Rector et al., 1999). While each of the measures included in a hardships index reflects a single hardship, examining only one living condition at a time may underestimate the extent to which families forego other basic needs (Federman et al., 1996). For example, households with limited resources may make trade-offs among basic needs (e.g., food vs. needed medical care) or choose different allocations of goods and services to make ends meet (Edin & Lein, 1997).

<u>Personal Characteristics and Material Hardship</u>

Research has been done to examine how hardship levels vary by personal characteristics. The research related to marital status, number of children, age, education, race, and income is summarized below.

Of particular interest is the effect of **marital status** on hardship. Researchers used the 1996 Survey of Income and Program Participation (SIPP) data, conducted by the U.S. Census Bureau, which contains an Adult Well-Being Topical Module and wide variety of economic and demographic information on panels of respondents over a period of several years, contacting sample members every four months (Ouellette et al., 2004). All of the basic needs hardships (i.e., housing, electricity, telephone, dentist, and food) were significantly more prevalent among households headed by single adults than among households headed by married couples. The difference found between married-couple and single-adult households could not be attributed solely to income.

There appears to be a "marriage benefit" that is quite pervasive. Other studies have found that married couples have less material hardship than households with a couple that cohabitates, even when controlling for income (Bauman, 2002). Even within income groups, married couple households tended to experience markedly fewer hardships than households headed by single parents. In all income groups, married couple households were less likely to experience material hardship (Lerman, 2002).

Research has been conducted that looks at the **number of children** and the **age** of the saver and their relationship to hardship. Ross and Huber (1985) found a negative correlation between age and economic hardship. They found that young couples experience more economic hardship largely because they have lower earnings and income and more children to support than do older couples. Families with many young children are most likely to "worry all the time" about meeting their bills, whereas childless couples and couples with grown children report less financial worry (Campbell, Converse, & Rodgers, 1976). Other researchers purport that young adults with children experience the most hardship (Easterlin, 1987; Ouellette et al., 2004; Preston, 1984; Rector et al., 1999). Families with children who have low incomes experienced basic needs and food security hardships more often than their counterparts with higher incomes and assets. Mirowsky and Ross (1999) found that economic hardship increases with the number of children in the household. Mayer and Jencks (1989) found that, holding constant the ratio of income to the poverty line, an increase in family size increased the expected number of hardships.

People with more **education** and skills are likely to find it easier to meet their own and their families' basic needs. According to economic theory, education increases the prudent, informed, and effective management of income and wealth (Michael, 1975). Education reduces a family's economic hardship net of their income and number of children (Ross & Huber, 1985). Research shows that greater education reduces the association between low income and economic hardship (Ross & Huber, 1985). Education also reduces the effect of low income on increases in hardship over time, partly by reducing the association of low income with increases in physical impairment (Mirowsky & Hu, 1996).

Another important personal characteristic is **race**. Using 2003 Survey of Income and Program Participation (SIPP) data, Sherman (2006) found that 31 percent of Latino and 28 percent of African-American families with children experienced at least one of three hardships—overcrowded housing, hunger or the risk of hunger, or lack of needed medical care—in the 12 months before the data were collected. This rate was double the comparable rate for non-Latino white families with children (14 percent). Sherman found that these rates of hardship are considerably higher among families living in poverty: 53 percent for Latino families, 45 for African-American families, and 40 for non-Latino white families.

Income has also been examined. Research has shown that families who have low incomes (less than 100 percent of the federal poverty level) and limited assets (less than $100 in savings or checking accounts) experienced basic needs and food security hardships more often than their counterparts with higher incomes and assets (Ouellette et al., 2004). In another study, Long (2003) examined difficulties meeting basic needs for food, housing, and health care. Long used the 1997 and 1999 National Survey of America's Families which provided nationally representative data on the economic, health, and social characteristics of children and adults in almost 45,000 U.S. families. Of particular relevance to this study, the survey over-sampled families with income below 200 percent of the federal poverty level in order to provide detailed information on the low-income population. Long found difficulties obtaining food, housing, and health care. Over 40 percent of all adults in the sample reported food, housing, or health care hardship over the past year. The health care hardship includes both a lack of insurance

(22 percent) and unmet need for health care (19 percent). While adults at all income levels reported hardship, hardship was more concentrated among low-income adults. Nearly three-quarters of low-income adults reported some type of hardship, well above the 31 percent reported by the moderate- and higher-income adults (Long, 2003).

Linking the Reviewed Research to This Dissertation

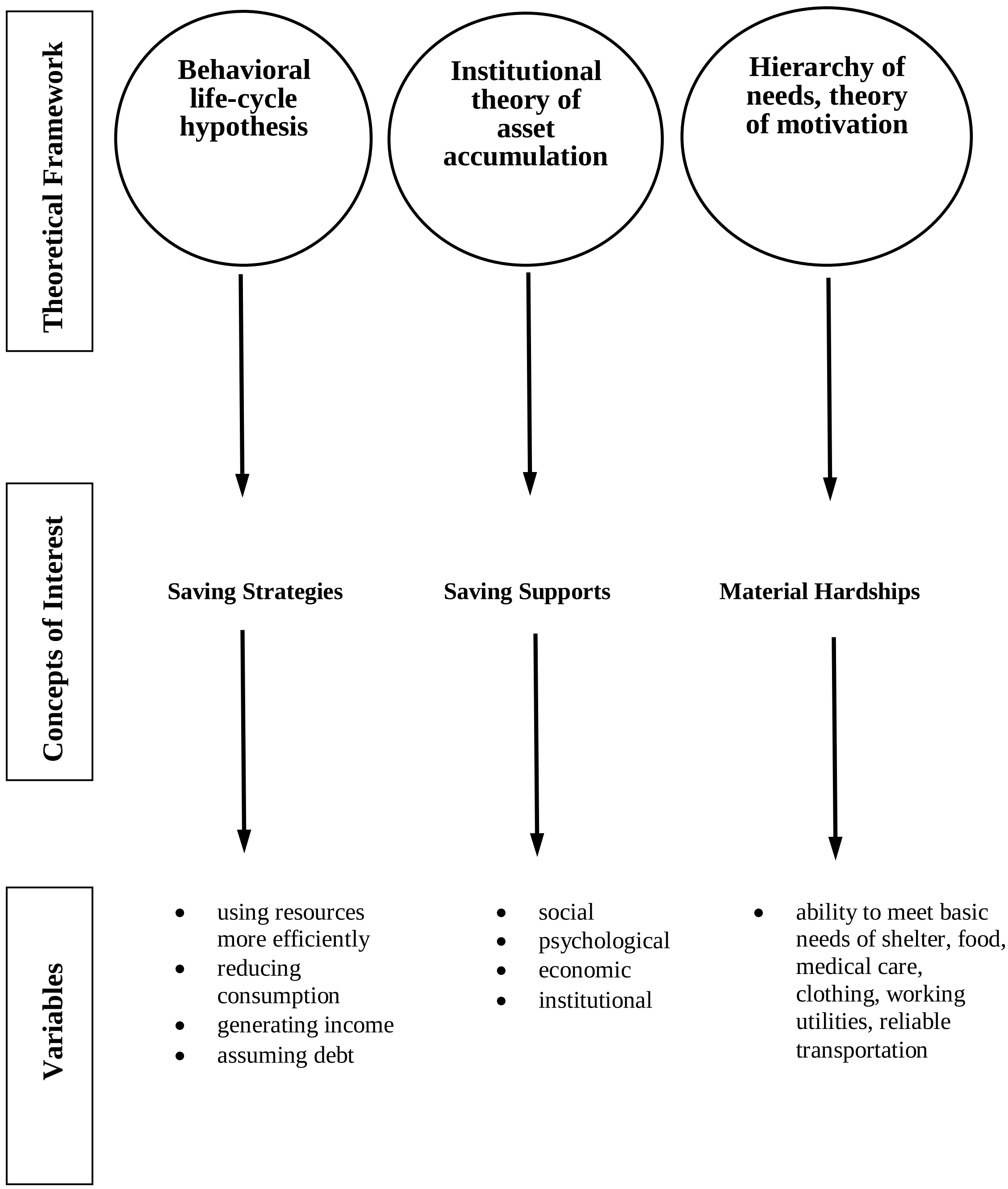
As discussed, the theoretical framework for this dissertation is three-pronged—saving strategies, saving supports, and material hardship. In this effort, Figure 2 illustrates which concepts and ultimately which variables are drawn from each of the three described theories.

Based on the author's understanding of the theory of saving strategies as described in the behavioral life-cycle hypothesis (Shefrin & Thaler, 1988, 1992) and the work of Beverly et al. (2001, 2003), specific variables were identified as being important for investigation. The concept of interest is that people do in fact use particular saving strategies. Caplovitz (1979) who refined the idea of financial management into four discrete saving strategies—increasing income, reducing consumption, increasing the efficiency of resource use, and assuming debt.

From the institutional theory of asset accumulation, the idea of looking at external factors to facilitate or impede saving is suggested. This theory purports that institutional supports for saving—social, cultural, and personal norms regarding saving and spending; encouragement to save from family and friends; and expectations regarding the feasibility and outcomes of an approved asset purchase—are all important considerations (Beverly & Sherraden, 1999; Sherraden, 1991). The presence or absence of these variables or factors can be considered supports or barriers depending on how they affect the saver. Moore et al. (2001) found several interesting findings when examining the perceived saving supports and barriers experienced by savers. The researchers grouped the supports/barriers under different categories—social, psychological, economic, or institutional.

The theoretical work of Maslow's hierarchy of needs and his theory of motivation purport that human nature is affected by the continuous fulfillment of inner needs, beginning with those of a basic physiological character and progressing to self-actualization (1954, 1970). Income losses and economic stress lead families to initiate various managerial adjustment strategies (Conger & Elder, 1994; Rosenblatt, 1990). Research suggests that families who are in need generally experience multiple hardships and this is especially true for low-income families (Ouellette et al., 2004). Examining the issue of hardship is directly tied to meeting basic needs of food, housing, clothing, medical care, and basic utilities such as gas, electricity, or a telephone.

Figure 2 Theoretical Framework, Concepts, and Variables



Hypotheses

In this section the six hypotheses are stated with a summary of the rationale drawn from the reviewed literature (the full discussion appeared earlier in the literature review of this chapter). To place these hypotheses in context, the three research questions guiding this dissertation are provided:

1. What are the strategies low-income parents use to save? Related sub-questions are: Are certain personal characteristics associated with specific saving strategies? Does a history of saving affect which saving strategies are used? Hypothesis #1 and #2 fall under this research question.

2. What supports and barrier do low-income parents who are trying to save experience? A related sub-question is: Are there different saving supports and saving barriers experienced by participants based on personal characteristics? Hypothesis #3 falls under this research question.

3. Does the act of saving create material hardships for low-income parents? A related sub-question is: Are there different levels of hardship among participants? Hypothesis #4, #5, and #6 fall under this research question.

Hypothesis #1

The older the saver, the significantly more helpful saving strategies will be used, controlling for income and marital status.

The rationale for this hypothesis: Research has shown that savers compare alternative courses of action by weighing the evidence and considering the multiple interacting variables in order to make a judgment about their course of action (Rettig, 1993). The author hypothesizes that the age of the saver makes an important difference in this process. The perceptions of the head-of-household about the situation and his/her own human and economic resources are important factors in arriving at judgments about the course of action to take (Danes, 1993). Weigel (1988) reported that older adults were more likely to analyze the problem, seek information, and talk with family members. Based on previous research, this dissertation considers the personal characteristics of age as an important predictor of which strategies are used to save (Danes & Rettig, 1993b; Strumpel, 1976; Titus et al. 1989). For these reasons it is hypothesized that the older the saver will use more helpful strategies because they are more likely to identify the true state of their financial situation and make adjustments. The literature supports the use of income and marital status as control variables.

Hypothesis #2

Parents who have a history of saving will use significantly more helpful saving strategies than parents without a saving history.

The rationale for this hypothesis: Having a pattern of saving makes a difference in selected saving strategies. People who have saved successfully before using certain strategies are likely to use these strategies again and are likely to use strategies that worked successfully for them. This hypothesis is supported by previous research (Furnham, 1985; Moore et al., 2001; Schreiner et al., 2000, 2001, 2002) and the tenets of socio-psychological theories of saving which purports that individual preferences change in response to economic and social variations and that social norms and interactions shape preferences (Cohen, 1994; Duesenberry, 1949; Furnham, 1985).

Hypothesis #3

Minority parents will experience significantly less intense saving supports than non-minority parents, controlling for income, education, and age.

The rationale for this hypothesis: Research shows that there are racial differences among savers. Minority groups, particularly African Americans, were likely to own fewer assets than whites (Oliver & Shapiro, 1995; Shapiro, 2001); be “unbanked” (Helfin & Patillo, 2002; Schreiner et al., 2001); and institutional variables have different associations with savings (Grinstein-Weiss & Wagner, 2006). Research also suggests strong financial, emotional, and social ties exist within the kin and social networks of African American families (Helfin & Patillo, 2002; McAdoo, 1978; Stack, 1974). Researchers found that African Americans often relinquished limited savings to help other family members and felt obligated to provide such assistance. For these reasons the author hypothesizes that minority savers experience less intense saving supports than non-minority savers. Based on the reviewed literature, income, education, and age are treated as control variables.

Hypothesis #4

Married savers will experience significantly fewer hardships than non-married savers, controlling for income, education, and race.

The rationale for this hypothesis: Research has shown that married couple households have less material hardship than households with a couple that cohabitates, even when controlling for income and education (Bauman, 2002; Lerman, 2002; Ouellette et al., 2004). The differences between married couple and single-adult households cannot be attributed solely to income (Ouellette et al., 2004). Even within income groups, married couple households tend to experience markedly fewer hardships than households headed by single parents. There is a clear "marriage benefit" that this hypothesis intends to prove. The control variables for this hypothesis—income, education, and race—are selected based on the literature.

Hypothesis #5

The younger the saver with many children, the significantly more hardships will be experienced, controlling for income and education.

The rationale for this hypothesis: Ross and Huber (1985) found a negative correlation between age and economic hardship. They found that younger couples experience more economic hardship largely because they have lower earnings and income and more children to support than do older couples. Families with many young children are most likely to "worry all the time" about meeting their bills, whereas childless couples and couples with grown children report less financial worry (Campbell et al., 1976). Families with children who have low incomes experienced basic needs and food security hardships more often than their counterparts with higher incomes and assets. Mirowsky and Ross (1999) found that economic hardship increases with the number of children in the household. Other researchers purport that young adults with children experience the most hardship (Easterlin, 1987; Ouellette et al., 2004; Preston, 1984; Rector et al., 1999). The control variables for this hypothesis—income and education—are selected based on the literature.

Hypothesis #6

Parents with a history of saving will experience significantly less severe hardship than parents without a history of saving.

The rationale for this hypothesis: Having a history of saving makes a difference in selected saving strategies. People who have saved successfully before using certain strategies are likely to use these strategies again and are likely to use strategies that worked successfully for them. It is hypothesized that people who have saved successfully before will likely adopt helpful saving strategies (i.e., ones that enable them to save and ones that are not harmful) and thus will experience less severe hardship. This hypothesis is supported by previous research (Conger & Elder, 1994; Furnham, 1985; Moore, Beverly, Schreiner, et al., 2001; Rosenblatt, 1990; Schreiner et al., 2000, 2001, 2002).

CHAPTER 3

METHODOLOGY

In this chapter, the methodology of this study is presented. These specific topics are: design, IDA program setting, data sources, sample, measures, and data analysis plan.

Design

This is a repeated cross-sectional study. This study is a secondary analysis of survey and administrative data. Two samples of randomly selected Michigan IDA participants were surveyed by telephone at two different points in time. Survey 1 was conducted in October 2002 and Survey 2 was conducted October 2003. In addition to the survey data, program administrative data were used to obtain participant demographic characteristics and program participation variables.

Description of IDA Program Setting

Data for this study were collected from participants in a voluntary statewide IDA program operated in Michigan. The data were available from the Institute for Social and Economic Development (ISED). ISED was selected by Michigan as the external program evaluator for three years (2001-2004). The author, as an employee of ISED, was the project manager for these evaluations. ISED's work consisted of a telephone survey of participants, administrative data using the agency-maintained Management Information System (MIS), and a process study documenting the operating structure of the program.

The Michigan IDA Partnership (MIDAP) was created in 2000 to develop a statewide IDA program in Michigan. MIDAP is both the name of the IDA program and the name of the partnership. MIDAP is a partnership between the State of Michigan Family Independence Agency (FIA) and the Council of Michigan Foundations (CMF). MIDAP is administered by CMF and governed by an advisory committee comprised of the founding agencies, key IDA stakeholders in the state, and national experts on IDA programs and policies. MIDAP contracts with local organizations to serve as IDA program sites and regional coordinating organizations (RCOs). At the time of the study, there were 56 program sites and 5 RCOs.

The participants in this study meet the same eligibility requirements as all of the MIDAP participants and had the same “program exposure.” Eligibility requirements were: (a) lived in the geographic area of the local IDA program (very often this was a county or city designator), (b) earned income through employment or self-employment, (c) earnings were less than 200 percent of Health and Human Services (HHS) federal poverty level,[3] and (d) be at least 18 years of age. Participants were still eligible if they later had an increase in income and no longer fell below the poverty line. In terms of IDA program requirements, the minimum monthly average deposit was $20. Participant savings up to $1,000 were matched by $2 for education and small business and $3 for homeownership for every dollar saved by the participant. This results in a total matched withdrawal of up to $2,000 to $3,000. The saving period was from 6 to 36 months. Participants were required to attend 12 hours of general financial literacy classes and 8 hours on a separate asset-specific training (i.e., homeownership, microenterprise, or education/training).

Data Sources

MIDAP is a typical IDA program and is representative of other IDA programs across the nation. For this reason it is an ideal source of data for this study. There are two data sources—participant telephone survey data and participant administrative data (called Management Information System for IDAs or MIS IDA).

[3] The study participants enrolled in 2001 and 2002. In 2001, the HHS federal poverty level for a family of 4 was $17,650. In 2002, the HHS federal poverty level for a family of 4 was $18,100 (U.S. DHHS, 2001, 2002).

The self-report survey data is the source of data for “participant saving strategies,” “support and barrier for saving,” and “hardships.” The administrative data provides the personal demographic characteristics of the respondents (see Table 5).

Table 5 Data Categories and Data Sources

Data Category	Data Source
Self-Report Data	
Saving strategies	Telephone survey
Supports for saving	Telephone survey
Barriers for saving	Telephone survey
Hardships	Telephone survey
History of saving	Telephone survey
Administrative Data	
Demographic variables	MIS IDA

Survey Data

The existing data set comes from two annual IDA program evaluation studies (Losby & Robinson, 2003, 2004). The data set has only been used for basic descriptive analyses and minimal bivariate analysis to conduct sub-group analyses to describe varying saving levels. The data set is a rich source of information to answer more sophisticated research questions using multivariate analysis.

Telephone interviews were conducted in October 2002 and October 2003 with two different samples. A 70 percent response rate was achieved for each survey effort. Surveys were completed by interviewers employed, trained, and supervised by the University of Iowa Social Science Institute (now called the Survey Unit at the Law, Health Policy & Disability Center at the University of Iowa, College of Law). All survey questions were asked over the telephone using a CATI (computer-assisted telephone interviewing) system. The interview lasted on average 18 minutes (with a range of 13 to 37 minutes) and respondents received a $10 money order for completing the interview.

The author (as employed by ISED) designed, piloted, and revised the telephone questionnaire. The same questionnaire was used in 2002 and 2003. Each survey contained the same core items with a few specific items added to address the unique perspective of current participants, successful participants, and unsuccessful participants on their experiences in the IDA program. The questionnaire was based on an existing IDA survey prepared by Moore et al. (2000) at Washington University, Center for Social Development for the American Dream Demonstration (ADD). The survey consists primarily of close-ended questions with a few open-ended items. Items from the ADD survey included questions about saving strategies, barriers and supports to saving, the positive and negative effects of having an IDA, self-confidence, impact on children, and impact on spouse/partner, and customer satisfaction. New items related to hardship (specific details described in a later section of this chapter).

<u>Survey Instrument Reliability and Validity</u>

Reliability can be expressed in terms of stability, equivalence, and consistency. Consistency check, commonly expressed in the form of Cronbach Coefficient Alpha, is a popular method (Cronbach, 1951). Generally speaking, the higher the Alpha, the more reliable the test is. However, there is not a commonly agreed upon cut-off. Usually, 0.7 and above is acceptable (Nunnally, 1978).

Cronbach's alpha was computed for each scale—strategies, supports, and hardships—following multiple random imputation of missing data. Alpha was computed using all items on each scale overall. Table 6 reports the overall Cronbach's alpha for each of the three scales. The results show the Alpha's range from .79 to .84—all well within the acceptable range.

Table 6 Internal Consistency (Cronbach's Coefficient Alpha) Reliabilities (N=150)

Variable	Overall Alpha Value
Strategies	.81
Supports	.79
Hardships	.84

As stated earlier, the specific items on saving strategies and saving supports were based on an existing IDA survey prepared by Moore et al. (Moore et al., 2000; Moore et al., 2001). As such the items have face validity. In terms of content validity, the items prepared by Moore at al., were developed and reviewed by a team of experts in the field who worked on the project.

In developing the seven items measuring hardships, the author based the items on the author's familiarity with the literature and from expert advice from a scholar on MIDAP's advisory council. Given the lack of a definitive measure of material hardship, the scale is likely imperfect but it provides a valuable measure of a concept that is difficult to identify with precision or objectivity. As Long (2003) stated, individuals make different choices in allocating scarce budgetary resources in light of similar baskets of material needs, leading to different interpretations and descriptions of the same circumstances.

The items measuring hardship are pulled directly from Mayer and Jencks' (1989) and Beverly's (2000, 2001a, 2001b) research. In their research, their measures closely embody the central concern of poverty policy—the degree to which families are able to meet their basic needs. Mayer and Jencks introduced a set of questions designed to directly assess the degree to which families experienced financial problems and budget shortfalls. They measured material hardship as the number of problems reported in the prior year—such as having difficulty buying food, being unable to pay the rent or afford a place to stay, getting evicted, having utilities turned off, living in dilapidated housing, being without health insurance, and having unmet medical or dental needs. Mayer and Jencks argued that these measures were more than just another way of assessing the well-being of low-incomes families. Beverly (2001a) proposed that indicators of material hardship should assess consumption of the following goods and services: food, housing, utilities, medical, clothing, and consumer durables (preferably as retrospective measures). Consistent with their research, the author used retrospective assessments of experiences of deprivation rather than prospective evaluations of the likelihood of future hardship.

Administrative Data

MIS IDA (Management Information System for IDAs) contains participant demographic information, family variables, sources of income, saving/deposit amounts over time, and withdrawals. MIS IDA is the information system developed by the Center for Social Development at Washington University in St. Louis specifically to track and manage IDA participation and accounts. MIDAP has used this participant data collection system since 2001.

This information is provided by the program participants during enrollment and assessment interviews and recorded in paper files. This information is then entered electronically into MIS IDA by MIDAP program staff. The master data file is then compiled by combining the individual site program files.

Procedures for Human Subjects Protection

Both telephone surveys and letters to respondents received IRB and Human Subjects approval for both data collection efforts. All necessary documentation was obtained before data collection began. The actual telephone surveys were completed by interviewers employed, trained, and supervised by the University of Iowa Social Science

Institute (now called the Survey Unit at the Law, Health Policy & Disability Center at the University of Iowa, College of Law).

The administrative data obtained through MIS IDA was secured through the participant's Release of Information form when they agreed to participate in the voluntary Michigan IDA Partnership program.

Sample

The sample for this study is 150 IDA participants. Of the 150 sample members at the time of data collection 97 were current participants (i.e., participants who completed the 12 hours of financial education training and whose savings accounts were currently open) and 53 were graduates (i.e., participants who completed the 12 hours of financial education training, 8 hours of asset specific training, successfully saved and reached their saving goal and acquired their asset).

The Michigan IDA participant sample was stratified based on three categories of participant program status: (1) current participants, (2) graduated participants, and (3) unsuccessful participants.[4] Sample members were randomly selected from a pool of eligible program participants who met the specific selection criteria for each survey effort. Through chance alone, seven individuals (or 4.6 percent of the sample) completed a survey in both October 2002 and October 2003. This issue is discussed in the limitations section of Chapter 5. The specific sampling numbers are reported in Table 7.

[4] Unsuccessful participants saved but voluntarily withdrew from the program or who were removed from the program for violating program rules. These 50 people were excluded from the analysis since they did not have a very long saving period.

Table 7 Sampling Frame for Survey 1 and Survey 2

	Survey 1 Sampling Frame: October 2002
653	Total Michigan IDA population as of June 2002
263	Met selection criteria—current participants only
142	Random sample drawn
100	Completed telephone surveys (97 current participants and 3 graduates)
	Survey 2 Sampling Frame: October 2003
1,063	Total Michigan IDA population as of June 2003
365	Met selection criteria—graduates and unsuccessful participants only
142	Random sample drawn
100	Completed telephone surveys—50 graduates and 50 unsuccessful participants.

Participants in MIDAP were both self-selected (they chose to participate based on expected benefits) and program-selected (based on geography, income level, earned income source, and age). Individual program sites were responsible for recruitment efforts in their own communities—they posted fliers in social service agencies, they provided information to welfare case workers so that they could refer people to the IDA program, and newspaper articles.

Measures

The dependent variables are **saving strategies (STRATPO)**, **saving supports (SUPSUM), hardships (HARDSUM** and **HARDSEV)**. All of these dependent variables are continuous. Each of these variables and how they were measured is described below.

The saving strategies appear to be both potentially helpful and harmful behaviors. Even though it is not possible to determine definitively if a particular strategy harmed or helped someone, it is possible to make an informed judgment. For example, it would appear that “shop for food more carefully,” “eat out less often,” or “sell clothing or other items to raise money” are not potentially harmful saving strategies, while potentially harmful strategies may include "borrow from family or friends," "postpone going to the doctor or dentist," "postpone paying bills," and "borrow using a credit card." These appear to be behaviors that may set the family back in terms of saving (since they are basically incurring more debt or delaying medical/dental care). To make the overall scale positive saving strategies, it was decided that these four seemingly negative strategies would be reverse scored so that the variable **STRATPO** is a measure of helpful saving strategies (Table 8).

Table 8 Saving Strategies (Dependent Variable): Reverse Score and Summed Scores

Variable	Operational Definition
Helpful Saving Strategies STRATPO (Summed score; 14 items; range 0-14: continuous)	Saving strategies (keeping score as is yes=1/no=0): • get a second job • work more hours at one job • sell clothing or other items to raise money • spend less on movies and other leisure activities • spend less on cigarettes or alcohol • shop for food more carefully • eat out less often • buy used clothing instead of new clothing • use direct deposit into my savings account • use my income tax return for savings Reverse score these (yes=0/no=1): • borrow from family or friends • postpone going to the doctor or dentist • postpone paying bills • borrow using a credit card

The author decided to create a variable of saving supports (Table 9). **SUPPSUM** was created by reverse scoring the barriers and summing the scores across all 18 items. For example, if a person strongly agreed with the statement "your family and friends ask you for money" previously this would be scored a "4" now it is a "1." All barriers were scored so that disagreement was now an indicator of this item not being a barrier. This variable represents the intensity of saving supports experienced—the higher the score the greater the amount of support.

Table 9 Saving Supports (Dependent Variable)

Variable	Operational Definition
Summed Saving Supports SUPPSUM (Summed score; 18 items; range 18 to 72; continuous)	Strongly disagree=1, disagree=2, agree=3, strongly agree=4: • Your family or friends encourage you to save • You like the financial institution (bank or credit union) you used for your IDA • Your IDA account seemed secure • The match rate for your IDA was adequate • Your IDA earned enough interest • You liked the rules about taking money from your IDA • The IDA classes helped you to save • You want to save for a certain goal <u>Reverse scored strongly disagree=4, disagree=3, agree=2, strongly agree=1:</u> • Saving isn't that important to you • Saving takes too long; the goal is too far away • Your family and friends often ask you for money • Most of your money goes to buy food • Most of your money goes to buy clothing • Most of your money goes to transportation such as car repairs, car payments, car insurance, paying people for rides, or public transportation • Most of your money goes to your housing such as paying rent or your mortgage • It is hard to resist temptations to spend money on non-essential items that aren't related to food, clothing, transportation, or housing • You could save a little but not enough to make a difference • You are worried about losing your government benefits if you save too much

The author decided to create two composite variables (Table 10). **HARDSUM** is a summed measure (the total number of hardships experienced by the respondent) and **HARDSEV** is a summed measure (the total number of severe hardships).

Table 10 Hardships (Dependent Variable)

Summed score of number of hardships HARDSUM (7 items; range from 0 to 7; continuous)	<u>Recode to 1=yes and 0=no:</u> If responded not a problem at all=0, a slight problem, a moderate problem, or a serious problem=1. • Having a place to live • Having working utilities (lights, heat, water) • Having enough food • Having a telephone • Having enough money to buy clothing items • Having medical care • Having reliable transportation
Summed score of severity of hardships HARDSEV (7 items; range from 0 to 21; continuous)	If responded not a problems at all=0, a slight problem=1, a moderate problem=2, a serious problem=3 add each together for a total: • Having a place to live • Having working utilities (lights, heat, water) • Having enough food • Having a telephone • Having enough money to buy clothing items • Having medical care • Having reliable transportation

The independent variables are demographic characteristics—age (ratio), marital status (categorical), race/ethnicity (categorical), education (categorical), monthly income adjusted for family size (continuous), and number of children (continuous). All of these demographic variables were collected at the time of enrollment. History of saving (categorical) was collected during the telephone interview. The independent variables and their operational definitions appear in Tables 11.

Table 11 Independent Variables

Variable	Operational Definition
Age AGE (ratio)	Year of birth
Marital status MARSTAT (categorical)	Single, never married Divorced or separated Married Widowed <u>For analysis categories collapsed into two:</u> Married Non-Married
Race/Ethnicity RACE (categorical)	White/Caucasian Black/African American Hispanic or Latino American Indian <u>For analysis categories collapsed into two:</u> Non-minority Minority
Education ED (categorical)	Less than high school High school/GED Some college 2-year college degree 4-year college degree
Monthly income INCOME (continuous)	Dollar amount of monthly income from all sources (adjusted for family size)
Number of children in household CHILDNM (continuous)	Number of children in household
Saved before IDA (had a history of saving) SAVHIST (categorical)	Did not save If had extra money, saved some of it Saved regular amount each month <u>For analysis categories collapsed into two:</u> Did not save Saved

For this research, age, marital status, race, education, and income are treated as control variables for some of the hypotheses. Age, income, and number of children are treated as continuous variables. The categories for marital status were collapsed into two categories—married and not-married—as suggested by the literature. For race, the categories were also collapsed into two categories—minority and non-minority—as suggested by the literature. However for education, all categories were kept and one category (less than high school) was treated as a dummy variable. This decision was based on the author's understanding of the literature which stated that it was important to examine incremental increases in educational attainment.

Data Analysis Plan

In this section the three research questions and their associated hypotheses are described. Under each hypothesis the rationale, specific variables, and data analysis tests are described. First, a brief summary of the general data analysis approach is presented.

General Data Analysis Approach

The specific data preparation and analysis activities include:

Data Set Preparation and Variable Creation. Basic data preparation, data cleaning, and identifying outliers was conducted by the author for the previous MIDAP program evaluations for the two separate data sets (Losby & Robinson, 2003, 2004). However, for those program evaluations the two surveys were treated separately. No data merging or analysis had been conducted using the combined data set of 200 cases. Thus, the first step in the data analysis plan was to combine the two data sets and exclude the 50 non-relevant cases of unsuccessful IDA participants. For this analysis, some new variables were created by collapsing categories and creating summed items (see Tables 8-11).

Missing Data. Some of the cases in the sample contained missing data—respondents either intentionally did not answer the question or the question was inadvertently skipped by the interviewer. For this research, missing data were treated with list-wise deletion, resulting in various sample sizes for individual questions.

Univariate Analyses. Frequency distributions and central tendencies analyses were conducted for all variables in the combined data set.

Bivariate Analyses. Analyses were conducted to calculate means for continuous-level variables, proportions for dichotomous variables with Yes/No responses, and counts for categorical responses. Chi-square tests were conducted for comparisons of subgroup counts (categorical data). ANOVA (t-test) analyses were conducted for comparisons of subgroup means and proportions (continuous data).

Multivariate Analyses and Control Variables. Linear least squares regression was used with continuous-level dependent variables. Age, marital status, race, education, and income were treated as control variables for some of the hypotheses. As described in the literature review (Chapter 2), these variables have been proven to have some effect, and the author wished to control for their effect when conducting statistical tests. The specific control variables are listed under each hypothesis in the next section.

Data Analysis Plan for Each Hypothesis

Under each hypothesis the independent, dependent variables are listed, if controls are used these are indicated as well, and finally the data analysis tests are noted.

Hypothesis 1: The older the saver, the significantly more helpful saving strategies will be used, controlling for income and marital status.

Independent variable: Age of saver

Control variables: Income, marital status

Dependent variable: Helpful saving strategies (STRATPO)

Statistical test: Linear least squares regression

Hypothesis 2: Parents who have a history of saving will use significantly more helpful saving strategies than parents without a saving history.

Independent variable: History of saving before joined IDA (SAVHIST)

Dependent variable: Helpful saving strategies (STRATPO)

Statistical test: ANOVA (independent samples t-test)

Hypothesis 3: Minority parents will experience significantly less intense saving supports than non-minority parents, controlling for income, education, and age.

Independent variables: Race

Control variables: Income, education, age

Dependent variable: Intensity of saving supports (SUPPSUM)

Statistical test: Linear least squares regression

Hypothesis 4: Married savers will experience significantly fewer hardships than non-married savers, controlling for income, education, and race.

Independent variable: Marital status

Control variables: Income, education, race

Dependent variable: Number of hardships (HARDSUM)

Statistical test: Linear least squares regression

Hypothesis 5: The younger the saver with many children, the significantly more hardships will be experienced, controlling for income and education.

Independent variable: Number of children, age of saver

Control variables: Income, education

Dependent variable: Number of hardships (HARDSUM)

Statistical test: Linear least squares regression

Hypothesis 6: Parents with a history of saving will experience significantly less severe hardship than parents without a history of saving.

Independent variable: History of saving before joined IDA (SAVHIST)

Dependent variable: Severity of hardships (HARDSEV)

Statistical test: ANOVA (independent samples t-test)

CHAPTER 4

RESULTS

In this chapter the statistical results are presented. First, descriptive statistics are provided for the participants involved in the study. Next, the bivariate and multivariate results are presented for the hypotheses. All data were analyzed using SPSS.

Descriptive Analyses

Frequency tables are used to describe gender, race, marital status, education, employment, savings goal, and whether the participant lived in an urban or rural setting (Table 12). Age, the number of children in the household, the number of adults in the household, monthly income, the number of positive saving strategies, number of saving supports, the average hardship severity, and the number of hardships experienced are presented with their respective means, standard deviations, minimums, and maximums (Table 13).

Nearly 90 percent of the respondents are women and live in urban areas (73 percent). The average age at enrollment was 34 and 52 percent are white and 41 percent are African American. Forty-three percent are single and 64 percent have an education beyond high school/GED. On average, respondents have 1.82 children. Almost all of the respondents are working (94 percent) either part-time or full-time with an average monthly income of $1,601. Most people were saving to buy a house (62 percent).

Table 12 Demographic Characteristics of Survey Respondents (N=150)

Variable	Frequency (n)	Percent (%)
Gender		
Women	134	89%
Men	16	11%
Marital status		
Single, never married	64	43%
Married	44	30%
Divorced or separated	40	27%
Widowed	2	1%
Race/Ethnicity		
White/Caucasian	78	52%
Black/African American	62	41%
Hispanic or Latino	6	4%
American Indian	4	3%
Education		
Less than high school	27	18%
High school/GED	27	18%
Some college	53	35%
2-year college degree	25	17%
4-year college degree	18	12%
Employment status		
Full-time employment	84	56%
Part-time employment	57	38%
Not working	9	6%
Place of Residence		
Urban	109	73%
Rural	41	27%
Savings Goal		
Buy a house	93	62%
Microenterprise	34	23%
Education/Training	21	14%
Home repair [a]	2	1%

[a] In the first months of the IDA program, home repair was a permissible savings goal—it was later removed as an option.

Table 13 Central Tendencies for Continuous Variables

	N	Min.	Max.	Mean	Std. Deviation
Demographic Variables					
Age	150	20	55	34.33	7.279
Number of children in household	150	1	5	1.82	1.062
Number of adults in household	148	1	4	1.5	0.702
Monthly income	147	$236	$2,800	$1,601	$716
Dependent Variables					
Number of helpful saving strategies	150	4	12	7.63	1.732
Intensity of saving supports	150	43	71	56.03	6.401
Hardship severity	150	0	15	2.43	2.615
Number of experienced hardships	150	0	7	2.58	1.512

The continuous dependent variables of interest show normal distributions and the values fall within the accepted range for the minimum and maximum (see bottom half of Table 13). In Tables 14 to 16, the frequency distributions for helpful saving strategies, saving supports, and hardships are presented for these dependent variables.

On average, parents use 7.63 helpful saving strategies (on a scale of 0 to 14). As shown in Table 14, the savings strategies most commonly used by the respondents are “shopping for food more carefully” (79 percent), “eating out less often” (73 percent), and “spending less on movies and other leisure activities” (70 percent). Few parents used harmful saving strategies such as using credit cards or borrowing from friends and family.

Table 14 Frequencies for Saving Strategies

Variable	Frequency (n)	Percent (%)
Saving Strategies Used [a]		
shop for food more carefully	119	79%
eat out less often	109	73%
spend less on movies and other leisure activities	105	70%
buy used clothing instead of new clothing	72	48%
use my income tax return for savings	67	45%
spend less on cigarettes or alcohol	46	31%
work more hours at one job	43	29%
postpone going to the doctor or dentist *(-)*	29	19%
use direct deposit into my savings account	27	18%
postpone paying bills *(-)*	18	12%
sell clothing or other items to raise money	9	6%
borrow from family or friends *(-)*	8	5%
get a second job	7	5%
borrow using a credit card *(-)*	6	4%

[a] *(-)* = that this is a negative or harmful saving strategy.

On average, parents experience a saving support intensity of 56.03 (with a permissible range from 18 to 72). As shown in Table 15, respondents reported that the saving supports associated with the IDA itself were the most common—“IDA account seemed secure” (98 percent), “the match rate for your IDA was adequate” (95 percent), and “liked the rules about taking money from your IDA” (92 percent).

Table 15 Frequencies for Saving Supports

Variable	Frequency (n)	Percent (%)
Saving Supports Experienced While Saving [a]		
Your IDA account seemed secure	147	98%
The match rate for your IDA was adequate	143	95%
You like the rules about taking money from your IDA	138	92%
You like the financial institution (bank or credit union) you used for your IDA	137	91%
You want to save for a certain goal	132	88%
Your family or friends encourage you to save	115	77%
The IDA classes helped you to save	113	75%
Your IDA earned enough interest	92	61%
Most of your money goes to transportation such as car repairs, car payments, car insurance, paying people for rides, or public transportation	73	49%
It is hard to resist temptations to spend money on non-essential items that aren't related to food, clothing, transportation, or housing	64	43%
You could save a little but not enough to make a difference	54	36%
Most of your money goes to buy food	54	36%
Your family and friends often ask you for money	47	31%
Most of your money goes to your housing such as paying rent or your mortgage	46	31%
Saving takes too long; the goal is too far away	36	24%
Most of your money goes to buy clothing	32	21%
Saving isn't that important to you	19	13%
You are worried about losing your government benefits if you save too much	18	12%

[a] Italic print indicates that these are barriers.

Parents experience 2.38 hardships (on a scale of 0 to 7) and with a severity score of 2.43 (on a scale of 0 to 21). As shown in Table 16, the hardships most frequently experienced by the respondents are “having enough money to buy clothing items” (45 percent), “having medical care” (40 percent), and “having reliable transportation” (32 percent).

Table 16 Frequencies for Hardships

Variable	Frequency (n)	Percent (%)
Hardships Experienced While Saving [a]		
Having enough money to buy clothing items	68	45%
Having medical care	60	40%
Having reliable transportation	48	32%
Having a place to live	22	15%
Having enough food	21	14%
Having a telephone	20	13%
Having working utilities (lights, heat, water)	14	9%

[a] If sample member responded “slight problem,” “moderate problem,” or “serious problem” this means the person experienced this hardship.

Bivariate and Multivariate Analyses

Bivariate and multivariate results for the specific hypotheses are presented in this section.

Hypothesis 1 Results

The older the saver, the significantly more helpful saving strategies will be used, controlling for income and marital status.

A linear least squares regression is used to test whether age has any impact on the number of helpful saving strategies (while controlling for income and marital status). The method of least squares, also known as regression analysis, is used to model numerical data obtained from observations by adjusting the parameters of a model to get an optimal fit of the data. The best fit is the model for which the sum of squared residuals has its least value, a residual being the difference between an observed value and the value given by the model. The β coefficients that are part of the output of linear regression analyses are very useful, as they indicate the magnitude of the relationship between each independent variable and the dependent variable. The results are shown in Table 17.

R-square is 0.044 suggesting that age, marriage, and monthly income explain only 4.4 percent of the variability in the number of helpful saving strategies. Age is not significantly related at the .05 significance level to the number of saving strategies. The results indicate that only marriage is significantly related to the number of savings strategies (β = 0.666; p = .034). Therefore, the null hypothesis cannot be rejected.

Table 17 Linear Regression for the Number of Helpful Saving Strategies

Model		β	Std. Error	Beta	t	Sig.
1	(Constant)	7.264	0.742		9.792	<.001
	Married	0.666	0.308	0.174	2.141	.034*
	Age	0.018	0.019	0.075	0.932	.353
	Monthly Income	<0.001	<0.001	-0.114	-1.397	.165
	R^2 = 0.044					

*p<.05 **p<.01 ***p<.001

Hypothesis 2 Results

Parents who have a history of saving will use significantly more helpful saving strategies than parents without a savings history.

An independent samples t-test is used to test whether a history of saving has any impact on the number of helpful saving strategies. The independent samples t-test compares the mean scores of two groups on a given variable. It is used to determine if the mean of some outcome variable is significantly different between two independent groups. The results are shown in Table 18.

The independent samples t-test suggests that there is a significant relationship at the .05 significance level between saving history and the number of helpful saving strategies employed by the participants [t(148) = -3.990; p = <.001] when equal variances were assumed (pooled estimate). A significant difference was also found between saving history and the number of helpful saving strategies [t(107.65) = -3.998; p = <.001] when equal variances were not assumed (separate estimate). Parents who do have a history of saving use more helpful saving strategies than parents who do not have a history of saving (8.03 strategies compared with 6.91 strategies). The null hypothesis can be rejected.

Table 18 Difference in the Number of Helpful Saving Strategies by Participants' Saving History

Saving History	N	Mean	Std. Deviation
No	53	6.91	1.644
Yes	97	8.03	1.655

Hypothesis 3 Results

Minority parents will experience significantly less intense saving supports than non-minority parents, controlling for income, education, and age.

A linear least squares regression is used to test whether minority status has any impact on the intensity of saving supports of the parents. The parents who are not white are classified as a minority. The results are shown in Table 19.

R-square is 0.255 suggesting that age, monthly income, education, and minority status account for 25.5 percent of the variation in the intensity of saving supports. Minority parents typically have less intense saving supports than the non-minority parents (β = -5.754; p = <.001). Parents with a 2-year college degree have significantly less intense saving supports than parents who have less than a high school education (β = -3.246; p = .048). The null hypothesis can be rejected as it is found that minority parents do have less intense saving supports than non-minority parents.

Table 19 Linear Regression for Intensity of Saving Supports by Minority Status

Model		β	Std. Error	Beta	t	Sig.
1	(Constant)	61.151	2.828		21.621	<.001
	Age	-0.032	0.066	-0.036	-0.482	.630
	Monthly Income	0.001	0.001	0.045	0.597	.552
	High School/GED	-2.568	1.556	-0.155	-1.65	.101
	Some College	-1.037	1.372	-0.078	-0.756	.451
	2-Year College	-3.246	1.625	-0.19	-1.998	.048*
	4-Year College	-2.532	1.783	-0.129	-1.42	.158
	Minority	-5.754	0.945	-0.451	-6.089	<.001***
	$R^2 = 0.255$					

*p<.05 **p<.01 ***p<.001

Hypothesis 4 Results

Married savers will experience significantly fewer hardships than non-married savers, controlling for income, education, and race.

A linear least squares regression is used to test whether being married has any impact on the number of hardships that the participants have experienced. The participants are broken down into two groups, those who responded identifying themselves as married, and those who responded identifying themselves as single, divorced or separated, and widowed. The results are shown in Table 20.

The R-squared estimate is 0.198, suggesting that income, education level, minority status, and marriage status account for 19.8 percent of the variation within the number of experienced hardships. The results indicate that the participants who were married experience fewer hardships than non-married participants (β = -1.350; p = <.001). However, minority parents experience more hardships than non-minority parents (β = 0.508; p = .031).

The null hypothesis can be rejected, as it was found that the participants who were married experienced significantly fewer hardships than participants who were not married.

Table 20 Linear Regression for the Number of Hardships by Marital Status

Model		β	Std. Error	Beta	t	Sig.
1	(Constant)	1.709	0.392		4.365	<.001
	Monthly Income	<0.001	<0.001	0.120	1.517	.131
	High School/GED	0.195	0.397	0.051	0.492	.624
	Some College	-0.648	0.348	-0.206	-1.864	.064
	2-Year College	-0.741	0.419	-0.183	-1.767	.079
	4-Year College	-0.707	0.453	-0.153	-1.560	.121
	Minority	0.508	0.232	0.168	2.185	.031*
	Married	-1.350	0.273	-0.408	-4.949	<.001***
	$R^2 = 0.198$					

*p<.05 **p<.01 ***p<.001

Hypothesis 5 Results

The younger the saver with many children, the significantly more hardships will be experienced, controlling for income and education.

A linear least squares regression is used to test whether age or the number of children in the household has any impact on the number of hardships that the participants have undergone (while controlling for income and education). Results are shown in Table 21.

R-square is 0.061 suggesting that education, income, age, and number of children account for only 6.1 percent of the variation in the number of experienced hardships. None of the variables significantly impact the number of experienced hardships at the .05 level. Therefore, the null hypothesis cannot be rejected because the saver's age and number of children are not found to impact the number of experienced hardships.

Table 21 Linear Regression for the Number of Experienced Hardships by Age and Number of Household Children

Model		β	Std. Error	Beta	t	Sig.
1	(Constant)	0.32	0.745		0.43	.668
	Monthly Income	7.15E-06	0	0.003	0.038	.970
	High School/GED	0.732	0.415	0.187	1.763	.080
	Some College	-0.025	0.367	-0.008	-0.068	.946
	2-Year College	0.194	0.431	0.048	0.451	.652
	4-Year College	0.146	0.473	0.032	0.31	.757
	Age	0.028	0.018	0.134	1.581	.116
	Number of Children in Household	0.067	0.127	0.047	0.525	.602
	R^2 =0.061					

*p<.05   **p<.01   ***p<.001

Hypothesis 6 Results

Parents with a history of saving will experience significantly less severe hardship than parents without a history of saving.

An independent samples t-test is used to test whether a history of saving has any impact on the severity of experienced hardships. The results are shown in Table 22.

The independent samples t-test suggests that there is a significant relationship at the .05 significance level between saving history and the severity of experienced hardships [t(148) = 2.904; p = .004] when equal variances were assumed (pooled estimate). A significant difference was also found between saving history and the severity of hardship [t(73.229) = 2.529; p = .014] when equal variances were not assumed (separate estimate). People who have a history of saving experience less severe hardship than people who do not have a history of saving (1.98 compared with 3.25 on a severity scale of 0 to 21). The null hypothesis can be rejected.

Table 22 Difference in the Severity of Hardship by Participants' Saving History

Saving History	N	Mean	Std. Deviation
No	53	3.25	3.328
Yes	97	1.98	2.01

Post-Hoc Analysis

After examining the results for hypothesis 3, the author decided to conduct an additional test to better understand the association between saving supports and race. A chi-square test of saving support by race was conducted. As shown in Table 23, minority parents do report significantly greater barriers than non-minority parents in several areas. More minority than non-minority parents (65 percent compared with 38 percent) reported that most of their money goes toward transportation costs (χ^2 = 11.355, df = 1, p = .001). More minority than non-minority parents (69 percent compared with 46 percent) report that it is hard to resist temptations to spend money on non-essential items (χ^2 = 8.739, df = 1, p = .003). A significantly greater number of minority than non-minority parents (79 percent compared with 59 percent) have family and friends asking them for money (χ^2 = 7.095, df = 1, p = .006). Also, more minority than non-minority parents (74 percent compared with 53 percent) believe that they cannot save enough to make a difference (χ^2 = 6.499, df = 1, p = .008).

In terms of saving supports, minority and non-minority parents are fairly similar. Most sample members believe that the features of the IDA program itself (i.e., having a savings goal, rules, match rate, and secure account) act as supports. However, there is one exception. More minority than non-minority parents (79 percent compared with 51 percent) believe that their IDA earns enough interest (χ^2 = 11.709, df = 1, p = .001).

Table 23 Saving Support by Race

	Saving Support			
Race	Yes (%)	No (%)	χ^2	*p-value*
	Most of money goes to transportation			
Non-minority Minority	38% 65%	62% 35%	11.355	.001***
	IDA earned enough interest			
Non-minority Minority	51% 79%	49% 21%	11.709	.001***
	Hard to resist temptations to spend money on non-essential items that aren't related to food, clothing, transportation, or housing			
Non-minority Minority	46% 69%	54% 31%	8.739	.003**
	Family and friends often ask for money			
Non-minority Minority	59% 79%	41% 21%	7.095	.008**
	Could save a little but not enough to make a difference			
Non-minority Minority	53% 74%	47% 26%	6.499	.010**
	Most of money goes to housing			
Non-minority Minority	61% 78%	39% 22%	5.137	.023*
	Worried about losing government benefits if save too much			
Non-minority Minority	82% 93%	18% 7%	3.810	.050*
	Saving isn't that important			
Non-minority Minority	82% 93%	18% 7%	4.098	.043*
	Saving takes too long; the goal is too far away			
Non-minority Minority	72% 81%	28% 19%	1.575	.209
	Like financial institution used for IDA			
Non-minority Minority	95% 90%	5% 10%	1.168	.280
	IDA classes helped you to save			
Non-minority Minority	75% 82%	25% 18%	1.028	.311
	Family or friends encourage to save			
Non-minority Minority	76% 82%	24% 18%	.857	.354
	Most of money goes to buy clothing			
Non-minority Minority	76% 82%	24% 18%	.806	.369

Table 23—continued

Saving Support				
Race	Yes (%)	No (%)	χ^2	*p-value*
Most of money goes to buy food				
Non-minority	62%	38%	.427	.513
Minority	67%	33%		
IDA account seemed secure				
Non-minority	97%	3%	.264	.608
Minority	99%	1%		
Like the rules about taking money from IDA				
Non-minority	93%	7%	.057	.811
Minority	94%	6%		
The match rate for IDA was adequate				
Non-minority	97%	3%	.002	.967
Minority	97%	3%		
Want to save for a certain goal				
Non-minority	100%	0%	--	--
Minority	100%	0%		

*p<.05 **p<.01 ***p<.001

Summary of Results

Parents who have a history of saving use significantly more helpful saving strategies than respondents without a saving history. Parents who have a history of saving experience less severe hardship than parents who do not have a history of saving. Also, married parents experience fewer hardships than non-married parents. Minority parents experience significantly less intense saving supports than non-minority parents. There was not a relationship between the number of helpful saving strategies and the age of the saver. A relationship was not found between the saver's age or number of children and the number of hardships experienced.

CHAPTER 5

DISCUSSION

In this chapter, a discussion of the results, contribution of the dissertation to the literature, limitations, implications for social work policy and practice, and ideas for future research are presented.

Discussion of Results

In this first section, the findings are discussed in general terms taking into consideration the three theories that form the framework for this dissertation. Next, the findings are discussed in more detail with possible interpretations provided. There is some content overlap between these two sections.

Results in View of the Theoretical Framework

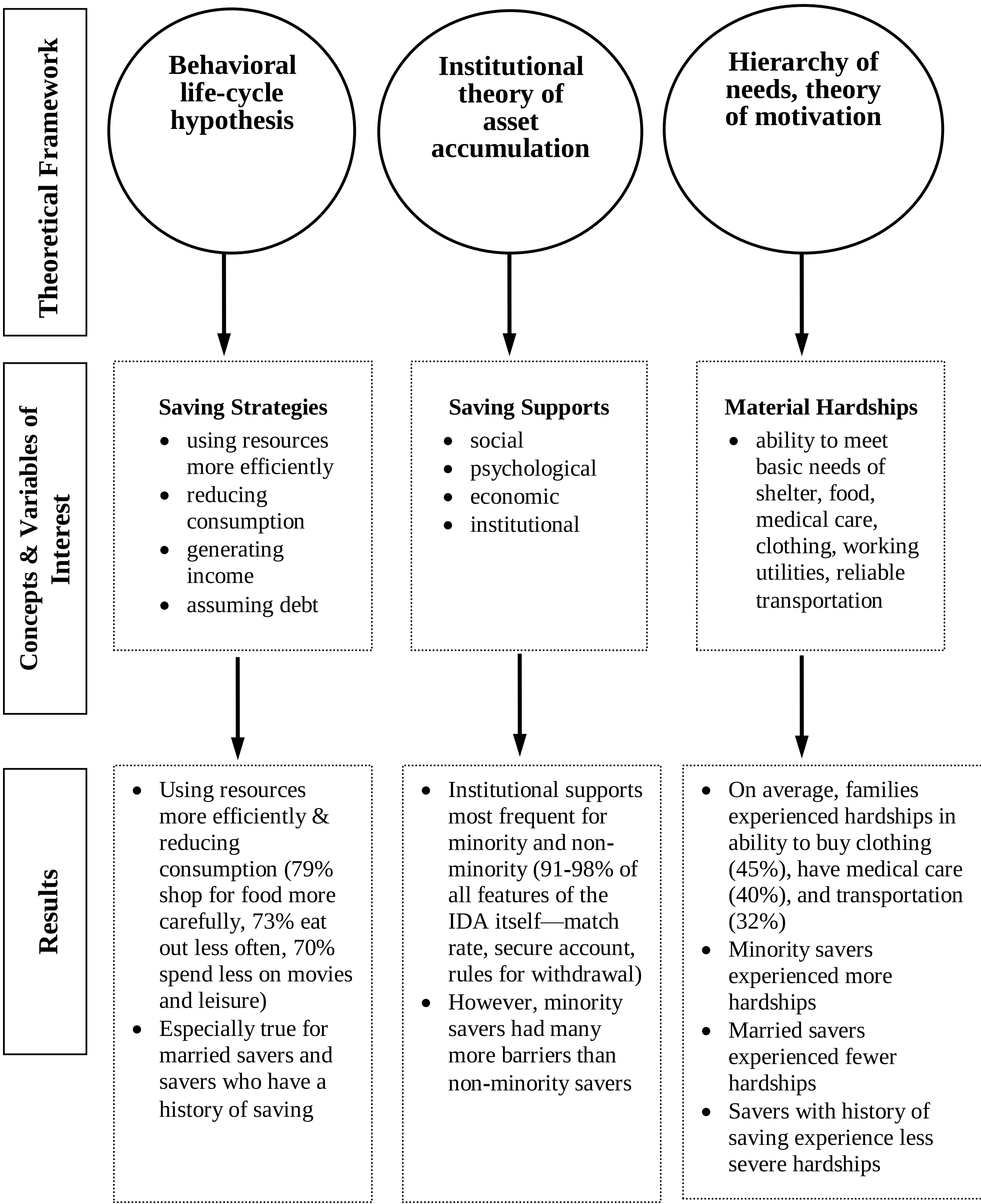
The most noteworthy findings are discussed as they relate to the three theories that form the framework for this dissertation (behavioral life-cycle hypothesis, institutional theory of asset accumulation, and hierarchy of needs). These results are noted in Figure 3.

The behavioral life-cycle hypothesis (BLCH) would argue that people create their own incentives or constraints to help them save (Shefrin & Thaler 1988, 1992). Beverley et al. (2001, 2002) applied the BLCH to a saving strategy model. In the model, savers use either psychological or behavioral saving strategies. The results from this dissertation show that low-income parents most often use the behavioral strategies of "using resources more efficiently" and "reducing consumption." For example, 79 percent shop for food more carefully, 73 percent eat out less often, and 70 percent spend less on movies and leisure. However, few parents in the sample assume debt as a strategy for saving. Only 19 percent postpone going to the doctor or dentist, 12 percent postpone paying bills, 5 percent borrow from family or friends, and only 4 percent borrow using a credit card. It appears people are making informed choices about their spending and saving behaviors. Married savers are more likely to use helpful saving strategies. Savers who have a history of saving are also more likely to use helpful saving strategies. The implications for these two sub-groups are discussed in the next section.

The institutional theory of asset accumulation posits that external factors facilitate or impede saving. This theory purports that institutional supports for saving—social, cultural, and personal norms regarding saving and spending, and encouragement to save from family and friends—are all important considerations (Beverly & Sherraden, 1999; Sherraden, 1991). The findings from this research show that institutional factors of the IDA (e.g., having a savings goal, match rate, account is secure, and rules for withdrawal) are reported as the greatest supports for both minority and non-minority savers. However, minority savers experienced many more barriers than non-minority savers. This finding is discussed in more detail in the next section.

In Maslow's hierarchy of needs and theory of motivation, human nature is affected by the continuous fulfillment of inner needs, beginning with those of a basic physiological character and progressing to self-actualization (1954, 1970). This dissertation found that voluntary savers do experience some hardships (2.38 hardships on average, on a scale of 0 to 7). Most frequent hardships are related to buying clothing, medical care, and transportation. However, few savers reported experiencing difficulties related to having a place to live, having enough food, having a telephone, or having working utilities. Applying the work of Maslow, it appears that for this population these parents are meeting the most basic needs of shelter, food, heat, lights, and communication (level 1 and 2 needs), but are lacking in needs that may fall at a higher level such as medical care and transportation. This explanation, however, does not address "clothing" which would be a lower level need. Regardless of being unable to meet some needs, low-income parents are saving with the purpose of securing a better future for themselves and their families.

Figure 3 Theoretical Framework and Dissertation Results



Results Discussed in More Detail

In this section the variables that proved to be important—history of saving, marital status, minority status, age, and education—are discussed with interpretations, explanations, and references to previous research.

History of Saving. The results show that parents who saved before joining the IDA program use more helpful saving strategies while in the IDA program than parents who do not have a history of saving. This was hypothesized because it was purported that people who have saved successfully in the past were likely to use these strategies again and were likely to use strategies that worked successfully for them (Furnham, 1985; Moore, Beverly, Schreiner, et al., 2001; Schreiner et al., 2000, 2001, 2002). Behavioral life-cycle hypothesis (BLCH) would suggest that people adopt behavioral and psychological strategies to help them save. Beverly et al. (2001, 2003) would argue that individuals must consume less than their incomes by reallocating existing resources from consumption to saving and/or by increasing resource inflows. This fits with the idea that people are inclined to "stick with what works." If a particular strategy worked in the past, then this strategy will probably be selected again when the need for saving arises.

One implication of this finding is that once people adopt helpful saving strategies, they are likely to continue using them. This finding is consistent with the institutional theory of asset accumulation. This theory argues that individuals make choices based on preferences, and these choices are influenced by institutions and people. In this case, parents are continuing with their saving strategies. This is encouraging evidence for financial education programs designed to teach helpful saving strategies, since it shows that people can, in fact, adopt helpful saving strategies and use them now and in the future.

Another finding from this research is that parents with a history of saving experience significantly less severe hardship than parents without a history of saving.

This relationship was hypothesized because people who saved successfully will likely adopt helpful saving strategies (i.e., ones that enable them to save and ones that are not harmful) and thus will experience less severe hardship. This finding is supported by previous research (Conger & Elder, 1994; Furnham, 1985; Moore, Beverly, Schreiner, et al., 2001; Rosenblatt, 1990; Schreiner et al., 2000, 2001, 2002). From a theoretical perspective, both BLCH and institutional theory of asset accumulation would argue that people do try to act rationally, but are influenced by their experiences and expectations. A possible interpretation of this finding is that people attempt to act rationally, and this means that they would avoid actions that cause harm to themselves or their families. People who have a history of successful saving know what worked for them and remember if any harmful effects resulted. Therefore, it is reasonable to expect that these same savers would continue to save without experiencing severe hardships.

Even though this finding was statistically significant, it is important to consider its practical significance. People who have a history of saving experience less severe hardship (1.98) than people who do not have a history of saving (3.25) on a severity scale of 0 to 21. Basically, parents without a history of saving experience one more hardship. While this may not seem too substantial for the family suffering the hardship, one additional hardship may be quite burdensome.

Marital Status. The findings from this dissertation show that there is a strong marriage effect. Being married is significantly related to the number of helpful savings strategies ($\beta = 0.666$; $p = .034$). This finding is consistent with both BLCH and institutional theory of asset accumulation, since people are actively making decisions, and in the case of married couples, this decision making appears to be quite effective.

This may be explained by having two people involved in the saving decision-making process. For example, if “postpone going to the doctor or dentist” is suggested by one member of the couple as a way to save money, it stands to reason that the other partner will have an opportunity to weigh in on this decision, and this strategy may not be palatable. Thus, this negative or harmful saving strategy is not used. Under this scenario, helpful strategies are adopted while harmful strategies are avoided.

Married savers experience significantly fewer hardships than non-married savers. The results indicate that the participants who were married experienced fewer hardships than the non-married participants (β = -1.35; p = 0.001). Parents in this sample experience an average of 2.58 hardships (range from 0 to 7; SD = 1.52). Again, it must be noted that even though this finding is statistically significant, its practical significance is uncertain.

This finding is consistent with the theoretical and empirical literature, which has shown that married couples experience the least amount of material hardship than other households (Bauman, 2002; Lerman, 2002; Ouellette et al., 2004). One popular explanation for this finding is that a second source of income operates as a buffer. However, in this analysis income was controlled. It appears that married savers operate differently from their non-married counterparts. Perhaps having two adults in the household gives the appearance of "things aren't so bad since we're in this together." It is unknown if the situation is actually better or if the perception of the situation is simply more optimistic.

Minority Status. This dissertation found that minority parents experience less intense saving supports. Based on the post-hoc analysis, it appears that the difference between minority and non-minority parents might be explained by minority parents experiencing more frequent barriers to saving. Therefore, it is not simply the absence of support; it is the presence of impediments. The behavioral life-cycle hypothesis would argue that people have a difficult time resisting temptation (Shefrin & Thaler 1988, 1992). There is some support for that assumption in this research. This proved to be especially true for minority savers. Significantly, more minority than non-minority parents (69 percent compared with 46 percent) report that it is hard to resist temptations to spend money on non-essential items.

Previous research also suggests strong financial, emotional, and social ties exist within the kin and social networks of African American families (Helfin & Patillo, 2002; McAdoo, 1978; Stack, 1974). Once a person established a level of financial stability, s/he often relinquished these limited savings to help someone in the kin network. It was also found that African Americans often relinquished limited savings to help other family members and felt obligated to provide such assistance. Thus, this helping behavior may limit their ability to save or affect their belief that they can save. The findings from this dissertation are consistent with this previous research. A significantly greater number of minority than non-minority parents (79 percent compared with 59 percent) have family and friends asking them for money. Minority savers had factors in their lives that made it difficult to save—most of their money going towards transportation and they believe that they could not save enough to make a difference. Clearly with these competing demands for money and their belief about their ability to save enough, it is not surprising that minority savers report a lower degree of saving supports.

Minority and non-minority families do experience saving supports. It is interesting to note that the top four most frequently cited saving supports are the same for minority and non-minority families. These are all associated with the design and unique features of the IDA program—saving for a certain goal, IDA account seemed secure, the match rate for the IDA was adequate, and liked the rules about taking money from the IDA. This finding is consistent with Moore et al. (2000, 2001) and the theoretical tenets of institutional theory of asset accumulation. Grinstein-Weiss and Wagner (2006) in their IDA research found that institutional variables (such as the IDA match rate and monthly savings target) appear to matter more for African Americans than non-minorities in terms of actual saving rates. However, the results of this dissertation show that institutional features appear to be important for both groups. More research is necessary to tease out the nuances of these different saving supports and their relative importance to various groups.

Minority parents experience more hardships than the non-minority parents. This finding is consistent with the already discussed results that show minority parents have a lower degree of saving supports, the presence of saving barriers, and more hardships. If a parent has few supports and a number of saving obstacles (e.g., family and friends asking for money), then it is likely that this parent may also experience hardship.

Age. One variable that did not prove to be significant was age. The age of the saver did not impact the number of helpful saving strategies. It was hypothesized that the older savers would use more helpful strategies because they are more likely to identify the true state of their financial situation and make adjustments (Danes & Rettig, 1993b; Strumpel, 1976; Titus et al. 1989; Weigel, 1988). Age also did not affect the number of hardships experienced. Previous research would argue that the younger couples with children experience more economic hardship largely because they have lower earnings and are most likely to "worry all the time" about meeting their bills (Campbell et al., 1976; Mirowsky & Ross, 1999; Ross & Huber, 1985).

It is surprising that hypotheses in this study regarding age were not supported. One explanation may be that there was simply not enough age variability in this sample. The average age is 34 with a standard deviation of 7.279. This means that the majority of respondents fall between 27 and 41 years of age. Young adults and older adults were not part of this sample. Perhaps an age effect might have been found if there was greater variability within the sample.

Another explanation might be that the education and counseling provided through the IDA program may have eliminated or reduced the use of negative saving strategies (i.e., borrow from family or friend, borrow using a credit card, postpone going to the doctor or dentist, and postpone paying bills). The content of the training intentionally covers "good" saving options and "bad" saving options. Perhaps this information resonates with the participants.

Another explanation might be the impact of the caseworker and the one-on-one connection that participants have with their caseworkers. Caseworkers check-in with savers throughout the program to determine how things are going and if any help is needed (a mutual decision for both the participant and the caseworker). It may be that through these discussions resources, support, and referrals are given to the families. This is not to suggest that these young parents are without stress, but only that the emotional support offered through the IDA program mitigates the escalation from stressor to hardship.

Education Level. The level of education of the saver proved important. The finding is that parents with a 2-year college degree have significantly less intense saving supports than parents who have less than a high school education ($\beta = -3.246$; $p = 0.048$). The literature shows that educational status was related to positive budgeting behavior among low-income people (Godwin & Carroll, 1986; Shelton & Hill, 1995). Michael (1975) argued that households with more educated family members were expected to be more efficient consumers because of greater access to knowledge and ideas. Rettig and Danes (1994) found that more highly educated people were more likely to engage in cognitive decision making processes. This suggests that external factors such as barriers and supports might play a role in their decision making.

The finding is inconsistent with the literature and it is not known why this specific education category was significant. In this data set, only 25 people fall into this category. What is unique about these 25 people? Further investigation is warranted.

Contributions of this Dissertation to the Literature

Based on the discussion of the results related to the theories and the detailed discussion of interpretations in the previous section, it is clear that this dissertation makes several important contributions to the matched savings literature. This dissertation provides new information and builds on existing research both to refine our knowledge of saving strategies and saving supports and to expand our understanding into new areas such as hardship.

First, this dissertation shows that voluntary savers do experience some hardships. Parents experience 2.38 hardships (on a scale of 0 to 7) and with a severity score of 2.43 (on a scale of 0 to 21). The hardships most frequently experienced by the respondents are "having enough money to buy clothing items" (45 percent), "having medical care" (40 percent), and "having reliable transportation" (32 percent). Few savers reported experiencing difficulties related to having a place to live, having enough food, having a telephone or having working utilities. Married savers and people who had a history of saving experienced fewer hardships than non-married savers or people who did not have a history of saving. However, minority savers experienced more hardships than non-minority savers. Scholars must grapple with the practical significance of these findings.

Second, this dissertation made an important contribution to the literature by linking the work of several fields through the investigation of hardship. This research examined hardship in a new field—a voluntary saving situation—and borrowed hardship measures primarily used in poverty and welfare reform research. This dissertation has helped inform the field about the exact choices low-income parents make to meet their basic living expenses while still trying to put money aside.

Third, few low-income parents use harmful saving strategies. Nineteen percent postpone going to the doctor or dentist, 12 percent postpone paying bills, 5 percent borrow from family or friends, and only 4 percent borrow using a credit card. It appears that at least for this population, people are making informed choices about their spending and saving behaviors. This is quite encouraging given the general trend in America for excessive debt and spending.

Fourth, there is something uniquely different about the people who have saved before they joined the IDA program. People with a history of saving experience fewer hardships, less severe hardship, and choose helpful saving strategies. This has important implications for financial education programs because the finding suggests that people do retain positive saving behaviors.

Finally, this dissertation replicated many of the findings presented by Moore et al. (2000, 2001). This dissertation's findings related to helpful saving strategies and institutional saving supports were consistent with the previous research. Moore et al.'s research had some design flaws that were addressed in this dissertation. The specific contribution to the literature is that the earlier findings are supported using a more rigorous design.

Limitations

This research provided a significant opportunity for a systematic study of the saving strategies used by low-income individuals and how the decision to save may create hardships for themselves and their families. Data collected in cross-sectional surveys offer a rich source of information for the type of analyses conducted for this dissertation. However, when working with existing data sets there are inherent limitations. Seven limitations of this study are discussed.

First, this study provides a "snap-shot" assessment since it is a cross-sectional survey. This study does not measure change over time. For example, it is not known if the reported saving strategies would be the same if surveyed at another time. Also, the demographic characteristics analyzed in this study were recorded only at enrollment. There is a possibility for some characteristics to change (e.g., marital status, level of education, income level, number of children), which may have a direct influence on the independent variables of interest. However, with this data set it is not known whether these characteristics changed or how they changed post-enrollment.

Second, the IDA participants were both self-selected (they volunteered to participate based on expected benefits) and program-selected (based on the eligibility criteria of geography, income level, earned income source, and age). As Schreiner et al.,

(2001) observed, IDA programs target certain people, and the eligible people in the target group who expect the greatest benefits are the ones most likely to enroll. IDA participants in this study are different in some aspects when compared with the U.S. general low-income population (i.e., these IDA participants are better educated, more likely to be employed, and are more likely to be married) when using national data from the same years the participants enrolled (U.S. Census Bureau 2001, 2002). Therefore, results of this study may not be representative of how the poor overall would perform in a matched savings program.

Third, seven individuals (or less than 5 percent of the sample) completed a survey in both October 2002 and October 2003. Obviously, the perceptions, opinions, and experiences of these seven people were counted twice. Though this is a very small percentage of the sample, it is important to note.

Fourth, the data were not collected using randomized assignment. There is lack of control in the data used in this study, which makes it difficult to establish the effects of participating in IDAs on specified outcomes. It is not possible to say what saving strategies participants would have used or what supports or hardships they would have experienced if they had not interacted with the IDA program. One of the ways of determining this would be to use a control group. In the American Dream Demonstration IDA research, one of the study methods is an experiment with a control group. However, these data are not yet available for public use.

Fifth, the majority of this data is self-reported perceptions of IDA savers. There are inherent cautions using self-report data given that respondents may have been biased and felt it was necessary to “give the correct answers” even though interviewers were not connected with the IDA programs. For example, it is not possible to verify if the reported saving strategies and hardships were actually experienced. However, all self-report survey data have this limitation, and there is no reason to suspect that this population is inclined to make excessively erroneous assessments of their own situations.

The sixth limitation is related to the sophistication of measurement for a key variable of interest. "History of saving" is an important variable in this study. However, its measurement is quite rudimentary. Respondents were simply asked how they saved before joining the IDA program with three possible response categories—"did not save," "if had extra money saved some of it," or "saved a regular amount each month." What is not known is if this saving behavior was longstanding or if the saving behavior changed when the person was saving for a certain goal. Clearly, a variable that is of such importance to the analysis would benefit from further refinement.

The seventh limitation is the issue of generalizability. This study is based on a matched savings program. The results may not be generalizable to unsubsidized savings programs. Also since this study is based on the experiences of a developed Western country with generally supportive socio-economic and political systems, results may not be replicable in poorer developing, non-Western nations. Also, this sample contained very few men (only 16 people or 11 percent of the survey sample). Without additional research that specifically includes men, it is not possible to state whether these findings would hold true for men. However, since this research focused on low-income parents and women are over-represented in this population, it is reasonable that this sample had a majority of women.

Despite these limitations, this study does help us to understand parental saving strategies, the factors facilitating saving, and the potential hardships low-income savers face. The next section of this chapter discusses how this study's results have implications for social work practice and policy.

Implications for Social Work

Overall, the findings from this dissertation have important implications for social work. As a profession, social workers have a long history of advocating for improvements in social welfare programs and have a particular concern for those who live outside of the economic and social mainstream. Implications for both practice and policy are presented.

Practice Implications

The first implication for social work practice is the issue of saving supports and barriers for minority families. As the results from this dissertation indicate, low-income minority families experience more saving barriers than do non-minority families. As this study shows, minority parents often have family and friends ask them for money. It is important for practitioners to understand the role that other people play in the lives of their clients from not only an economic perspective but a family functioning perspective as well. For example, if personal income helps an extended family member or friend pay his/her mortgage, this is an important "expense" for the caseworker to know about. Not that this decision to assist someone else would be criticized, but simply to make this factor a part of the discussion. Practitioners need to be aware that family finances can be quite complex and remember to probe for these arrangements when exploring finances and budgets.

Second, a model of practice that includes the concept of hardships when discussing the economic functioning of the family is critical. As the results from this dissertation demonstrated, married parents experience fewer hardships than non-married parents. Practitioners need to be aware of the likelihood of potential hardships for their non-married clients. This is not to suggest that married clients will suffer no hardships, only that married clients may suffer more. Family budgets are often created with caseworkers—at the same time it would be important to ask questions about the ability of the family to meet its basic needs. Extending the dialogue beyond simple budget preparation to examine areas of potential hardship is important so that the consequences of these decisions can be explored. By incorporating a discussion of possible hardships as part of the standard dialogue with clients, it is more likely that realistic solutions to problems will be identified. Questions that promote the exchange of information between practitioners and clients can only be advantageous.

Third, the results of this study are useful to social work practitioners because IDAs may be a part of the service landscape in many communities. As a basic first step, social workers need to know if an IDA program is operating in their area and what the eligibility requirements are so that they will be able to make appropriate referrals for their clients. Social workers need to be aware of the existence of IDA programs as a tool potentially available for their low-income clients. This awareness and understanding is not just necessary for caseworkers employed by human service agencies. Social workers in direct practice in a wide variety of areas—public assistance, counseling, schools, hospitals, and advocacy—need to know what is available in their communities so that they can provide the best possible referral for their clients.

Another component of this awareness is exposure to IDAs during undergraduate and graduate course work. It is incumbent upon people who guide academic programming for social workers to include asset-based material in social work course work. Social workers need to be familiar with how asset-building social policy strategies are different from consumption-oriented interventions. If possible, schools of social work need to provide practicum opportunities in agencies operating IDAs or other matched-saving programs if they are available in their area. Exposing students to these ideas will help them understand the importance of asset-building policies to combat poverty. As students and future leaders in the profession are introduced to these concepts and see them working first-hand, these lessons may stay with them as they move through their careers and hold positions to advocate change.

Policy Implications

One policy implication is to consider these findings in an international context. As noted in the first chapter of this dissertation, Americans save less than their counterparts in the rest of the industrialized world. The personal savings rate was 10.6 percent in the last quarter of 2007 for members of the European Union (EuroStat, 2008). By contrast, Americans had a personal savings rate near zero (U.S. Department of Commerce, 2007). One possible explanation for this disparity may be structural. For instance in other Western nations, some basic needs are met by the government, which may facilitate this higher rate of saving. It might be helpful to look at Maslow's hierarchy of needs and recognize that Europeans have more of their basic needs met through the government, which frees up more of their income for personal savings (even with higher taxation rates). In other Western nations, health care, housing, higher education, and even child care may be subsidized at some level by the government. When these basic needs are covered, more personal income can be dedicated to savings. American policies could be reformed to address the increasing burden placed on individual families who pay for these necessities at full market price. At a minimum, having a national health care policy would substantially reduce the financial burden on families. The United States could learn a great deal from other Western nations. Policy reform could greatly benefit from international study.

A second policy implication is related to the finding that minority low-income parents face unique challenges. One possible policy recommendation would be to pilot a matched savings program for an entire minority kinship network. A significantly greater number of minority than non-minority parents (79 percent compared with 59 percent) have family and friends asking them for money. Also minority savers have factors in their lives that made it difficult to save—hard to resist temptations to spend money on non-essential items, most of their money going towards transportation, and they believe that they could not save enough to make a difference. If a person's friends and family were also involved in the saving program then it might be possible to reduce the borrowing and lending (or at least discuss and examine its impact on personal savings). That is not to suggest that this practice would be eliminated but that the lending/borrowing might be channeled into the matched savings program so that individual goals might be achieved.

Also, there is a related policy implication with minority savers. Most sample members believe that the features of the IDA program itself (i.e., having a savings goal, rules, match rate, secure account) act as supports. However, there is one exception. More minority savers (79 percent) compared with non-minority savers (51 percent) believe that their IDA earns enough interest. This result may be due to the fact that minorities are more likely to be "unbanked" than non-minorities (Helfin & Patillo, 2002; Schreiner et al., 2001). Being "unbanked" means not having an established relationship with a financial institution (i.e., not having a checking/savings account). This finding is particularly intriguing because it gives some support to the idea that exposing minority populations to financial institutions is beneficial to them. They view the inherent features of the IDA and its attachment to a bank or credit union as a support.

Finally, another policy consideration is the daunting issue of America's rampant consumerism and consumption-spending culture. Action needs to be taken if the disturbing "high personal debt and no to little saving" trend is to be curtailed. Given the findings from this study, there is some hope that people who have a history of savings and people who are exposed to helpful saving strategies may continue those practices in the future. Also, this dissertation provides evidence that low-income parents in a matched savings program do not use harmful saving strategies.

The troubling financial practices of Americans have even attracted the attention of the federal government. Recently the U.S. Department of the Treasury has taken steps to address the problematic financial habits of Americans. The Treasury established the Office of Financial Education in May of 2002. The Office works to promote access to the financial education tools that can help all Americans make wiser choices in all areas of personal financial management, with a special emphasis on saving, credit management, home ownership, and retirement planning. It is indeed promising that financial education has garnered support at the national level. Through these national campaigns, more Americans will be exposed to positive financial management practices.

These practice and policy implications will help social workers and other professionals who serve low-income families continue to develop new perspectives, tools, and resources in an effort to enhance the personal, social, and economic well-being of low-income families. IDAs are certainly not a panacea. IDAs cannot fix all of the problems facing low-income families. Nevertheless, having them as part of the "tool kit" available to support families can only benefit individual families and society.

Future Research

While the number of studies addressing assets has grown in recent years, there is still a pressing need for more research. The results from this study illuminate the need for both quantitative and qualitative research in several areas.

The first area of research that would benefit from further investigation is the association between hardship and voluntary saving. This dissertation has shown that savers do experience hardships. A great deal more can be learned from examining the hardships experienced by low-income families who make the voluntary decision to save. Given the results of this study, it would be important to examine marital and minority status in relation to hardship. This research could be both qualitative and qualitative to more fully understand the issue of hardship. Having a better understanding of how families struggle with economic shortfalls provides a valuable picture of family well-being.

Because there is debate about the proper measure of hardship and which indicators should be included, more inquiry is obviously needed. This dissertation used one approach to measuring hardship; perhaps it would be beneficial to consider other items that describe the hardship. A measurement refinement might capture more variability, thus addressing the question of "practical" significance. For example, rather than asking “do you have enough food?” with the response categories being yes/no, respondents could select from a scale (no, sometimes or often). Plus, the item could be time-bound, perhaps within the last six months (to help with recall). Also, it would also be interesting to determine if over time there are patterns with hardships. *Do certain hardships appear infrequently while other hardships are more long-standing?* It is unknown if there is a sequence to the hardships—*which hardships appear first and which ones appear later?*

Second, it would be fruitful to draw a sample in which there was greater variability of the age of the saver. Previous research suggests that age plays an important role in saving strategies, saving supports, and hardships. To have a sample with a wider age range might require a multi-IDA program sample. Depending on the participant selection criteria, a single IDA program may not have enough age variability.

Third, it would be beneficial to understand who in the household actually decides which saving strategy is selected. This would require that research be conducted to include both adults in the household for married couples or cohabitating couples. For instance, *who is actually making the decision to save and when the decision is made, who decides how the money for saving will be acquired, who decides when adjustments to the saving strategies are needed? If couples have a history of saving, were these same strategies used before joining the IDA?* To answer these questions it might be best to use in-depth qualitative methods such as in-person interviews or focus groups.

Fourth, if a scholar was interested in examining the decision making process, saving strategies, and hardships of men and women, then a quota sample based on gender would be necessary. This might require some over-sampling of men since they are less likely to be IDA participants than women.

Fifth, this dissertation examined all of the saving strategies used by a family. What is not known is if particular strategies were used and then abandoned. It is only known that a strategy was used, not how long it was used, if it was abandoned, and the reason for this change. Future research could examine the commencement and cessation of specific saving strategies and their associated results. For example, it would be fascinating to investigate how long families use a particular strategy before moving onto another one. Or if certain strategies are always coupled together—getting a second job and reducing expenses for leisure activities. An investigation of this nature would benefit from the use of a qualitative research methodology. A qualitative approach would facilitate the in-depth investigation of these decision making processes and permit an examination of any subtle nuances.

Sixth, it would be helpful to examine how saving supports and saving barriers are connected to race. Additional research on the topic of different ethnic/racial groups would be beneficial. For instance*, is there a threshold effect whereby a few barriers have little impact, but barriers numbering over five (for example) create significant difficulties for savers from different racial backgrounds?* Likewise*, is the positive benefit of supports diminished after a certain number?* This research could help scholars comprehend how family and economic well-being are affected by race. This research could be a combination of qualitative and quantitative methods.

Lastly, it would be interesting to better understand the finding related to the level of education of the saver. This study's finding is that parents with a 2-year college degree have significantly less intense saving supports than parents who have less than a high school education. While the finding is consistent with previous research, what is not known is why this specific education category was significant. To investigate this, it would be necessary to have a sample that had a fairly equal number of people in each education level to allow for statistical analysis.

While the study of asset holding is growing today, it has been notably neglected in most academic fields. Social work has had a historic commitment to address the basic needs of vulnerable persons and to enhance their well-being. Thus, social work has been a leader in asset-building research. It would be gratifying to see a broader range of academic disciplines (for example sociology, family and consumer sciences, social psychology, psychology, and economics) investigate the field of asset-building. Any of the above suggested research topics could be examined by any of these disciplines. Cross-discipline research projects could only advance the field.

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