

Three essays on families with disability: Financial satisfaction, subjective financial well-being,  
and life satisfaction

by

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B.S., Texas Tech University, 2001

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AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Personal Financial Planning  
College of Health and Human Sciences

KANSAS STATE UNIVERSITY

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## **Abstract**

Over 61 million adults in the United States are living with a disability impacting millions of families and their well-being. Caring for and having a disabled/chronically ill family member takes a toll physically, financially, socially, and emotionally on loved ones. These essays use the Midlife in the United States (MIDUS) Refresher data to explore parents and caregivers of disabled/chronically ill loved ones and (a) financial satisfaction among parents, (b) the effect of positive psychology traits on subjective financial well-being among parents, and (c) the impact of subjective financial well-being as a resilience factor among caregivers.

The first essay explores subjective financial satisfaction among two populations, parents with disabled/chronically ill children and those with children without disability or chronic illness, using an adaptation of Deacon and Firebaugh's (1988) input-throughput-output model. Two multinomial logistic regressions were estimated and results showed that families with a disabled/chronically ill child with high thought and effort placed on finances had higher odds of reporting highest financial satisfaction when compared to lowest financial satisfaction but lower odds of having average financial satisfaction when compared to lowest financial satisfaction. Mixed results were found in families with no disabled/chronically ill child. The most significant positive predictors for both populations was perceived control over finances and difficulty arranging life.

Next, the second essay examines the effect of positive psychology traits on subjective financial well-being among parents and the effect of having a child with disability/chronic mental illness. Operationalized through Seligman's PERMA constructs, an OLS regression with interaction was employed and results indicated that having a child with a disability/chronic mental illness plays two separate roles. First, there was a main negative effect on subjective

financial well-being. There was also a moderating effect, whereby the positive effect of optimism on subjective financial well-being was dependent on the status of having a disabled/chronically ill child. While positive emotions positively predict subjective financial well-being, when considering those with a disabled/chronically ill child, the impact was greater.

Finally, the third essay examines the impact of subjective financial well-being as a resilience factor on life satisfaction among caregivers of disabled/chronically ill loved ones. Operationalized using Herrman's interactive model of resilience (2011), an OLS regression was employed to examine caregivers' life satisfaction across domains through the interactive resiliency model with the inclusion of subjective financial well-being as a personal resiliency resource. This research identifies the importance of considering subjective financial well-being as part of modeling life satisfaction. Subjective financial well-being is not one's actual financial well-being but rather their perception of their current financial position and looking to the future. Keeping that in mind, subjective financial well-being should be considered by financial planners, financial therapists, and mental health professionals as it serves as a resilience tool in maintaining life satisfaction among caregivers.

Collective results imply that financial satisfaction and subjective financial well-being are driven by more than the simple financial resources of income and net worth in families with a disabled/chronically ill child and subjective financial well-being plays a role in life satisfaction among caregivers.

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blessed to have had the newfound time to dedicate to completing this degree at Kansas State University.

## **Chapter 1 - Introduction**

According to the CDC, over 61 million adults in the United States are living with a disability (CDC, 2018). About 17% of children (3-17) have one or more developmental disabilities and diagnoses are on the rise (Zablotsky et al., 2019). Having a disability/chronic mental illness can range in severity and impact and can have a profound effect on the entire family including parents, spouses, children, siblings, and extended family. Caring for a disabled/chronically ill family member often takes a toll physically, financially, socially, and emotionally on loved ones. Some individuals and families fare much better than others. Identifying traits and actions which may improve the finances and life satisfaction of those with disabled/chronically ill family members could better prepare professionals to assist families who may be impacted.

The first essay explores financial satisfaction among parents, comparing those of disabled/chronically ill children to those with children without disability or chronic illness. The study examines internal and external resources/demands, financial attitudes, and financial management efforts and their impact on subjective financial well-being. Grounded by the family resource management model and literature reviewed, financial resources and relational resources, are hypothesized to impact financial satisfaction differently for families with disabled/chronically ill children since having a disabled/chronically ill child is also considered a resource/demand. Thought and effort placed on finances, perceived financial control, and one's difficulty level managing life's responsibilities may affect subjective financial well-being. Having a child with a disability or chronic illness places additional financial and time constraints on the family. Two separate multinomial logistic regressions were estimated to model financial satisfaction for families with a disabled/chronically ill child and those with a typical child.



The second essay focuses on the subjective financial well-being among families with living children. Operationalized through Seligman's PERMA constructs (2012), this research strives to answer whether positive psychology attributes impact one's subjective financial well-being and if having a disabled or chronically ill spouse or child has an impact. Positive emotions, positive engagements, positive relationships, more meaning in one's life, and greater achievement in one's life were hypothesized to be positively associated with subjective financial well-being. Having a disabled or chronically ill child or spouse was expected to have a direct negative effect on subjective financial well-being and act as a moderator on positive emotions when predicting subjective financial well-being.

The third essay also looks at disability and chronic illness but through the lens of caretaking and subjective financial well-being as a part of life satisfaction. Operationalized using Herrman's interactive model of resilience (2011), this study seeks to answer how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction. In particular, does the effect vary across recipient domain types of children, spouses, parents, and others, and does the intensity of care provided matter? Family solidarity and purpose in life are expected to be positively related to life satisfaction.

Collectively, these studies examine disability/chronic mental illness and the impact on subjective financial well-being and life satisfaction. The sandwich generation faces many challenges in caring for their children and their aging parents and oftentimes simultaneously. Studying families with disabilities and the impact on family finances and life satisfaction can equip planners and other professionals to better understand clients in this domain and hopefully identify ways to better assist them.

## **Chapter 2 - Financial Satisfaction and Parents of Disabled/Chronically Ill Children**

### **Introduction and Statement of Purpose**

Parents of children with disabilities face significant financial, social, and emotional burdens layered on top of the need to function day to day as a parent and provider (Lauderdale & Huston, 2013; Springer & Lauderdale, 2019). Often, a parent of a child with a disability/chronic mental illness will remove themselves from the workforce to care for the child resulting in additional resource implications (Lauderdale, Durband, Scott, & Springer, 2010; Lauderdale & Huston, 2012). Little research has been conducted on the effect of financial management decisions made by parents of special needs children. Very few researchers have empirically examined special needs financial planning topics, especially through any theoretical lenses.

Nearly 1 in 5 children in the United States has a special healthcare need (Children and Youth with Special Healthcare Needs in Emergencies, 2021). From 2009 to 2017, there was approximately a 2% overall increase in the prevalence of developmental disability and researchers suggest this increase could be due to improvements in general awareness and improved access to healthcare (Zablotsky et al., 2019). Mental and physical disabilities are on the rise with both early-onset childhood diagnoses, such as autism or Down's syndrome, and many who are diagnosed much later in life, such as traumatic brain injury or mental health diagnoses (VonSchrader & Lee, 2017). Regardless of the timing of disability/chronic mental illness diagnoses, there is a disruption to the family system and resource management (Nadworny & Haddad, 2007). Caregivers of both adults and children with disabilities are more likely to suffer lost income or wages, but having a child with disabilities doubles the risk when

compared to caring for elderly or older disabled/chronically ill persons (Earle & Heymann, 2012; Sharpe & Baker, 2007).

This paper examines how internal and external resources/demands, financial attitudes, and financial management efforts affect financial satisfaction among families with a disabled/chronically ill and families with children without disability or chronic illness. The family resource management model (Deacon and Firebaugh, 1988) was used to examine cross-sectional data from the National Survey of Midlife Development Refresher in the United States of America with children living in the home in 2011-2014 MIDUS Refresher (Ryff et al., 2017a). These data include parents of children with special needs, which will be referred to as disabled/chronically ill children throughout this paper. Deacon and Firebaugh's input-throughput-output model suggests families conduct a systematic analysis of decisions and resource use leading to an output. Inputs include resources available and demands placed on those resources while throughputs include behavioral aspects of financial planning. Two regression analyses were employed on financial satisfaction for each population: families with a disabled/chronically ill child and those with children without disability or chronic illness.

Given the heightened stresses and external demands experienced by parents of disabled/chronically ill children and burdens placed on resources, the throughput decisions are especially critical for this subpopulation. Results will help inform financial advisors, financial therapists, counselors, and special needs financial planners regarding their clients' perceptions of financial well-being. Given that very little research has been conducted on financial planning and this population, the results may help identify future research topics to explore.

## **Review of Literature and Theoretical Framework**

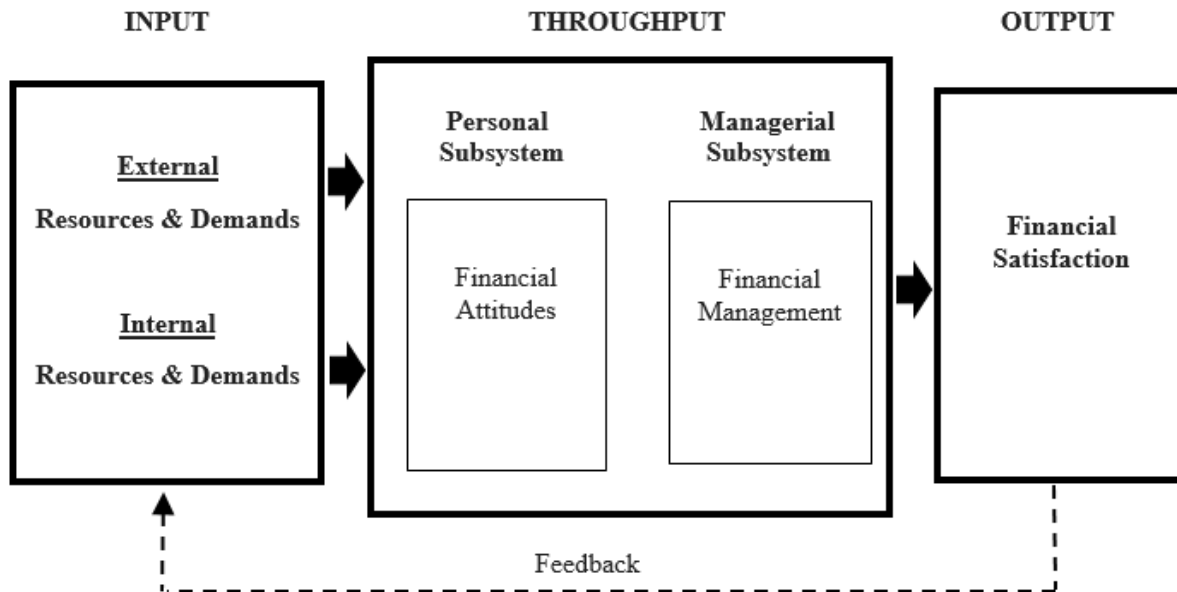
### **Family Resource Management Model**

The family resource management model, originally conceptualized by Deacon and Firebaugh (1988), served as the foundation for this study. The overarching family systems framework provides that families interact with the broader economic, social, and political systems, but the input-throughput-output concept of the Deacon and Firebaugh family resource management model was found to be more useful for empirical testing due to the measurability of each facet rather than simply providing an overarching framework (Heck & Douthitt, 1982). At the family level, Deacon and Firebaugh presented the input-throughput-output model where families conduct a systematic analysis of decisions and resource use leading to an output that then provides a feedback loop including information and resources to the family system.

The input-throughput-output model has been frequently utilized as an underpinning for research examining family financial behaviors (Bir, 2016; Davis & Helmick, 1985; Lown & Ju, 1992; Mugenda, Hira, & Fanslow, 1990; Parrotta & Johnson, 1998). Outputs have most commonly been measured by financial satisfaction (Bir, 2016; Davis & Helmick, 1985; Lown & Ju, 1992; Parrotta & Johnson, 1998; Titus, Fanslow, & Hira, 1989). Others have utilized value creation, income and profits, personal benefits, and employment growth (Marcketti, Niehm, & Fuloria, 2006) to serve as outputs in the model. Others have expanded the output of financial satisfaction to also include life satisfaction (Mugenda, Hira, & Fanslow, 1990). Deacon and Firebaugh (1988) suggested it was a sense of well-being or satisfaction by the idea that demands were addressed but could also be the actual change in income or net worth.

The central theme which surrounds the input-throughput-output model is that, with better decision making and financial management, one will achieve better outcomes and higher

satisfaction (Deacon & Firebaugh, 1988; Marcketti, Niehm, & Fuloria, 2006). A model combined with the most widely used outputs is shown in Figure 2-1. Financial satisfaction was utilized as the output in this study.



**Figure 2-1 Family Resource Management Model: Adaptation of the Deacon and Firebaugh Model (1988)**

While research directly related to financial satisfaction and well-being does exist, little to no research directly applicable to the financial satisfaction of parents of disabled/chronically ill children have been conducted. However, there have been numerous studies examining the psychological and physical well-being of parents and caregivers of disabled/chronically ill children. Well-being in a physical and emotional sense provides at least some background on the resource and demand impact on the financial satisfaction of parents of disabled/chronically ill children. To provide some context related to special needs parents regarding the model and hypothesis, much of the literature review addresses the relationship of inputs and throughputs to the outputs of physical and psychological well-being of parents due to the gap in the literature.

## **Disability/Chronic Mental Illness and the Family Resource Management Model**

While the application of the family resource management model is widespread among examining financial management, very little use has been made of it when studying families with disabilities other than one time as a basis to examine financial issues with having a child with autism (Sharpe & Baker, 2007). However, Deacon and Firebaugh (1988) saw a direct application at the inception of the model and dedicated a full chapter in their book to families with handicapped members. The chapter discusses how having a handicapped member of the family can impact the family management and the disabled/chronically ill family member could be affected by the throughputs of the family resource management (Deacon & Firebaugh, 1988).

Deacon and Firebaugh (1988) laid out four factors to pay particular attention to concerning a disabled/chronically ill family member. The first factor is the timing in which the disability/chronic mental illness occurs in the life cycle. If it occurs before the formation of the family, there is less need for change in expectations because it was already a calculated decision to enter the relationship. The second factor is what role the handicapped person plays in the family - such as a parent, spouse, or child. The resource and demand implications would vary. The third factor is the severity, duration, and mortality related to the disability/chronic mental illness and the roles each play in understanding the implications of the disability/chronic mental illness on the family. Lastly, the fourth factor is the managerial skills or capacity acquired by the family before the handicapping condition (Deacon & Firebaugh, 1988). Managerial decisions for time and financial resource use is crucial when examining throughputs for families with a special needs individual (Sharpe & Baker, 2007). There are increased expenses and potential income losses due to the disability/chronic illness, but there are often external resources available that

need to be taken into account. Satisfaction can be achieved in the event goals and resource uses are adjusted realistically in the managerial process (Deacon & Firebaugh, 1988).

### **Resources and Demands of Disabled/Chronically Ill Children**

In general literature, inputs have been composed of both resources and demands placed on those internal and external resources. Researchers have defined resources to include human resources such as education, age, financial knowledge, and other demographic characteristics; and also, material resources such as the number of earners (Davis & Helmick, 1985), net worth, income, and other financial support (Bir, 2016; Parrotta & Johnson, 1998). Demands have often been unclearly operationalized in prior studies, but debt-to-income ratios and childrearing responsibilities were included in one study (Davis & Helmick, 1985). Deacon and Firebaugh (1988) suggested external demands exist with family values and social norms where internal demands are related to personal goals.

Having a child with a disability/chronic mental illness presents unique challenges for families regarding resources and places additional demands on the family itself (Ha, Greenberg, & Seltzer, 2011; Lecavalier, Leone, & Wiltz, 2006; Sharpe & Baker, 2007). Parental support for disabled/chronically ill children often extends into adulthood depending on the type of disability/chronic mental illness and poses additional stress and burdens on parents which can impact their well-being (Greenberg, Seltzer, & Greenley 1993; Ha, Hong, Seltzer, & Greenberg, 2008; Kling, Seltzer, & Ryff 1997). Financial strains on families with disabled/chronically ill children can be enormous. In a qualitative study on parents of children with autism, Sharpe and Baker (2007) identified a theme from families that bankruptcy was perceived as inevitable and once was unthinkable before having a disabled/chronically ill child. While prescriptive special needs financial plans can assist with families with a disabled/chronically ill child, even the best

financial plan cannot address the complexities of the unique situation without the personal side of planning. The personal side refers to the need for communication among the families, friends, and professional partners associated with the vision for the future (Lauderdale, Walther, & Springer, 2017). With the high prevalence of disability/chronic illness, advances in medicine, and increased life expectancies of parents and children, parents of special needs children need to plan accordingly (Ha et al., 2008; Seltzer & Krauss, 1994). Almost 13% of the total U.S. non-institutionalized population reported a disability/chronic mental illness in 2015 and over 5% of children under the age of 20 were disabled/chronically ill (Erickson, Lee, & von Schrader, 2017). Disabilities include visual, cognitive, auditory, ambulatory, self-care, and independent living disabilities, but are often categorized differently by researchers.

Type of disability/chronic illness, age of disability/chronic mental illness onset, and other confounding behavioral problems have all been found to impact parents' overall well-being (Ha et al., 2015). While the prevalence of disability/chronic mental illness was found to be higher in male children, neither gender nor age of the child was found to impact the psychological or physical well-being of parents (Ha et al., 2008). Mental health diagnoses and developmental problems play an important role when analyzing the impact of having a disabled/chronically ill child. Developmental diagnoses are typically diagnosed at an earlier average age than mental health disabilities which researchers suggest result in a longer duration of disability/chronic mental illness for the child (Ha et al., 2008). The impact on parents of children with intellectual disabilities was found to attenuate over time suggesting some form of adaptation or resilience (Glidden & Schoolcraft, 2003; Luthar, Cicchetti, & Becker, 2000; Smith & Grzywacz, 2014). What might seem to be in contrast, the duration of disability/chronic mental illness was a



significant predictor of parents' overall well-being (Ha et al., 2008). However, attenuation and being a significant predictor are not mutually exclusive.

Having multiple children with disabilities has been a contributing factor making parents more vulnerable to impact due to stress and additional responsibilities associated with the children (Ha et al., 1990; Orsmond, Lin, and Seltzer, 2007). Parents of children with developmental disabilities and intellectual disabilities were found to have a larger number of children and those with developmental disabilities reported a greater number of co-residing children than those with mental health disabilities (Ha et al., 2008). For this reason, researchers have controlled for the number of children and co-resident children when assessing caregiver burdens (Greenberg, Seltzer, Krauss, Chou, & Hong, 2004; Ha et al., 2008). Having more than one child and a child with a mental health disability/chronic mental illness was a significant predictor of negative effects on parents (Ha et al., 2008). Behavioral problems in children with disability/chronic mental illness have varied by type, but those with higher severity of behavioral problems have affected parents' stress and health (Ha et al., 2015) and some suggest it may be the co-occurring behavioral problems of children with autism that was more predictive of divorce than having a child with autism (Hartley et al., 2010).

### **Parents of Disabled/Chronically Ill Children and Their Well-being**

Parents are the greatest provider of resources when it comes to planning for family finances. Resources and demands of having a special needs child and the effects of planning to meet those demands vary among parental demographics. Marital status has been correlated with having a special needs child and reduced overall parental well-being (Ha et al., 2008; Seltzer et al., 2004). Married parents of children with developmental problems were found to have significantly lower levels of negative effects and significantly higher psychological well-being

when compared to single parents of children with disability/chronic illness (Ha et al., 2008; Campbell, Converse, & Rodgers, 1976), but that did not hold true for those having children with mental health disabilities (Ha et al., 2008). Marital status has impacted employment status and employment status can be a financial management decision that can potentially impact financial well-being. Married mothers of children with a disability/chronic mental illness were less likely to be working and if they worked, worked fewer hours than mothers without a disabled/chronically ill child (Gould, 2004). Parents of children with disabilities have been found to have an increased risk of divorce when compared to parents of children without disability/chronic mental illness (Breslau & Davis, 1986; Hartley et al., 2010; Witt, Riley, & Coiro, 2003; Wymbs, Pelhama, Molina, Gnagy, Wilson, & Greenhouse, 2008); however, others have not found the increased risk (Urbano & Hodapp, 2007). Some suggest this is due to variations in risk based on types of disabilities which has placed extraordinary levels of stress on the parents (Hartley et al., 2010).

Parents' age and gender have also impacted well-being. Older parents experience a more positive impact on well-being when having a child with a disability/chronic mental illness (Carstensen & Charles, 1998; Ha et al., 2010), including lower levels of distress with behavioral problems (Ha et al., 2008), and less negative effects (Mroczek & Kolarz, 1998). While gender roles have seen some changes over time, caregivers are still more likely to be women than men (Namkung, Greenburg, & Mailick, 2016), and as a consequence, mothers often face more chronically stressful situations resulting in negative mental and health effects, such as cognitive decline, when compared to fathers (Song et al., 2015). Not unique to parents of children with disabilities (Song et al., 2008), women in caregiving roles have seen a greater incidence of depression, lower well-being, and worse physical outcomes (Eisenhower, Baker, & Blacher,

2009; Brehaut et al., 2009; Glidden & Schoolcraft, 2003; Ha et al., 2008). Some researchers have found no difference in gender (Essex, Seltzer, & Krauss, 1999; Smith & Grzywacz, 2014), and others have found that fathers of children with mental health disabilities experience a greater incidence of alcoholism (Seltzer et al., 2001).

The caregiver burden varies among race and ethnicity in most research studies which have been explained by cultural and social norms (Magaña & Smith, 2006; Namkung, Greenburg, & Mailick, 2016). Researchers have often found lower perception of burden and higher parent well-being in African Americans than Whites (Dilworth-Anderson, Williams, & Gibson, 2002), others have found increased negative effects and lower well-being in minority parents of disabled/chronically ill children when compared to Whites (Magaña, Seltzer, & Krauss, 2004), while others find no race moderated effects of caring for a disabled/chronically ill child on parent well-being (Ha, Greenberg, & Seltzer, 2011).

Socioeconomic status, higher levels of education, and higher income of parents with disabled/chronically ill children are positive indicators of parental well-being (Ha, Greenberg, & Seltzer, 2011; Ha et al., 2008). Those with lower income and unreimbursed out of pocket medical expenses were significantly more likely to have experienced financial difficulty (Sharpe & Baker, 2007). Parental income was correlated to children's health status and the likelihood of having a child with a disability/chronic mental illness (Cidav, Marcus, & Mandell, 2012; Earle & Heymann, 2012). Parents with disabled/chronically ill children face higher unreimbursed out-of-pocket medical expenses when compared to parents without disabled/chronically ill children which result in a need for consistent income to cover necessary care. The impact of income shortage is far greater in a family with a special needs child (Cidav, Marcus, & Mandell, 2012; Earle & Heymann, 2012).

Providing care for a disabled/chronically ill child takes a toll on parents' physical and mental well-being (Brehaut et al., 2009; Namkung, Greenburg, and Mailick, 2016), and those with children exhibiting compounding behavioral problems see a cumulative stress effect with greater negative impacts on health (Seltzer et al., 2011). Mothers of disabled/chronically ill children have shown greater evidence of depression than comparison mothers (Song et al., 2015). Caregiving demands have shown an indirect relationship with overall life satisfaction in the presence of high family strain (Li, Shaffer, & Bagger, 2015). Researchers suggested it was not just the stress tolling from caring for a disabled/chronically ill child, but also the lack of time to care for one's self placing the needs of the child above one's own (Ha, Greenberg, & Seltzer, 2011).

Support from family has long been related to happiness and life satisfaction overall (Ellison, 1990). Strong social supports can lead to more positive parental well-being (Thurston, Paul, Loney, Ye, Wong, & Browne, 2011) and has been found to lessen the experience of parental stress (Smith, Oliver, & Innocenti, 2001; Weiss, 2002), however, others found no support for a protective effect of social support (Smith & Grzywacz, 2014). Some suggest there are different types of support such as positive and negative interactions (Ha, Greenberg, & Seltzer, 2011) which can be hard to measure, but one could include family strain as a factor in a study (Li, Shaffer, & Bagger, 2015).

### **Financial Attitudes and Management Decisions**

There are two throughput subsystems, personal and managerial. Personal subsystems were posited to include both developmental aspects such as cognitive, emotional, social, and physical, as well as personal values. Planning and implementing behaviors that connect inputs to outputs made up the managerial subsystem. Personal and managerial subsystems were presented

as parts of a whole in which one affects the other and cannot exist without the other (Deacon & Firebaugh, 1988). Researchers have operationalized throughputs in a variety of ways but most commonly they have used financial attitudes for the personal subsystem and financial management for the managerial subsystem (Bir, 2016; Parrotta & Johnson, 1998). Financial management has generally been comprised of retirement planning, cash and budget management, investments, savings, debts, and other strategies (Parrotta & Johnson, 1998). Others have explored throughputs using value-based decision-making, development of business capabilities, (Marcketti, Niehm, & Fuloria, 2006), and the use of credit (Lown & Ju, 1992).

While it is not specific to parents of children with disabilities, researchers have used financial attitudes and financial management to examine financial outcomes and satisfaction (Bir, 2016; Parrotta & Johnson, 1998). Little research has been conducted in the financial realm of special needs families and the historical context is thin regarding financial attitudes and satisfaction of special needs families. In a qualitative study presented by Sharpe and Baker (2007), families indicated a shift in their financial planning attitudes from savers to spenders and placed a higher value on the present instead of the future regarding financial planning once their child was diagnosed with a disability/chronic illness.

Locus of control plays an important role. A weakened locus of control can lessen one's ability to cope with unexpected economic situations (Hira, Fitzsimmons, Hafstom, & Bauer, 1993; Hira & Mugenda, 1998). Perceived locus of control has been shown to be significantly related to financial satisfaction (Sumerwan & Hira, 1993). A parent's perception of control is more protective for mothers than fathers, resulting in fewer negative impacts on well-being when having a disabled/chronically ill child (Duchovic, Gerkenmeyer, & Wu, 2009; Smith & Grzywacz, 2014). A sense of control is lost naturally in the process of handing over so much

power to the healthcare and government systems who assume such a large role in the well-being of disabled/chronically ill children (Bailey, Golden, Roberts, & Ford, 2007). Mental health outcomes have shown to be protected (Weiss, 2002) and a minimizing effect on stress was found when perceived control was present (Butcher, Wind, & Bouma, 2008). With a long-term presence of perceived control, Smith and Grzywacz (2014) found a health protection factor for parents of special needs children.

Parents struggle with financial decisions and planning surrounding disability. In a focus group study among caregivers of special needs loved ones, researchers explored the financial planning needs of families through the lens of family caregivers (Springer & Lauderdale, 2019). The complexities of planning beyond simple finances arose, including major themes of a guardianship dilemma, relational and emotional stressors, navigating the myriad of responsibilities, and managing the unknown (Springer & Lauderdale, 2019). Special needs planning was thought be prescriptive steps that need to occur, but it can be more complicated and draining on families to actually take the steps.

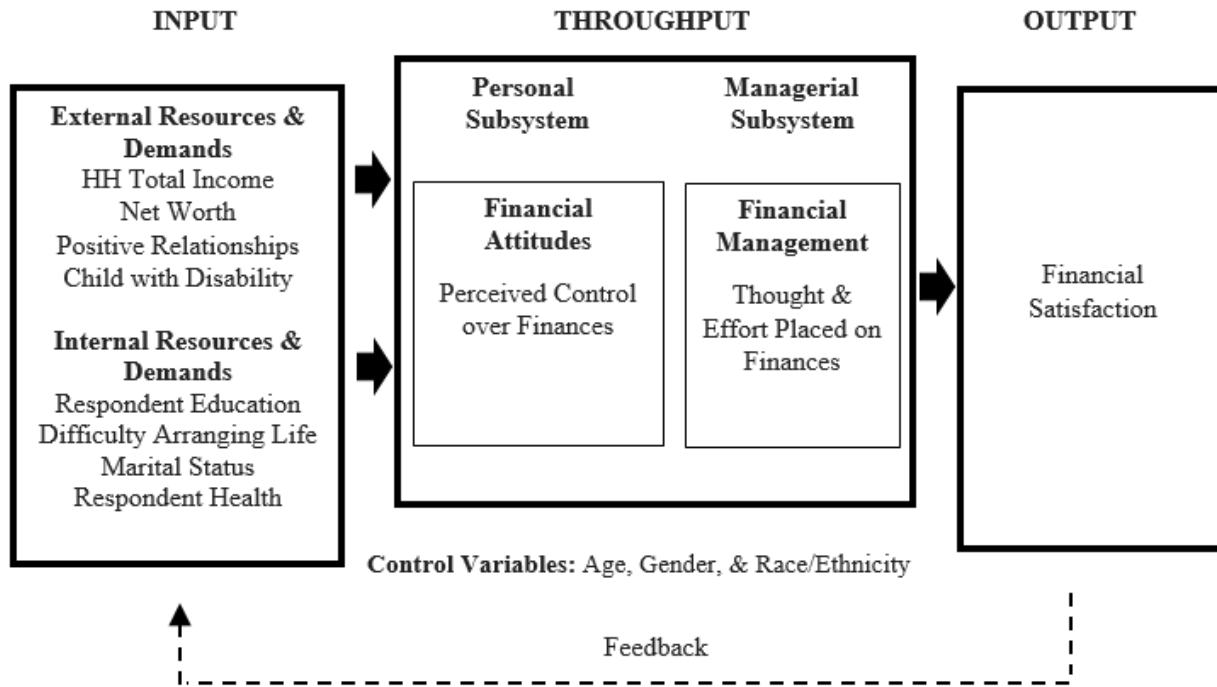
## **Summary**

Having a child with disability/chronic mental illness places potentially extreme financial burdens on families and can affect the psychological and physical well-being of parents, can contribute to higher divorce rates, and one could expect it could ultimately impact parental financial outcomes, financial satisfaction, and overall life satisfaction (Lauderdale & Huston, 2012; Sharpe & Baker, 2007). The family resource management model serves as a framework to examine families with disabled/chronically ill children. Having a child with a disability or chronic illness places external demands on a family's resources beyond that of a family with children without disability or chronic illness. Taking into consideration internal and external

resources/demands, financial attitudes, and management decisions surrounding thought and effort placed on finances results in the output of one's financial satisfaction, which then provides feedback in the form of resources back to the family.

### **Model**

The input-throughput-output model from the family resource management theory (Deacon & Firebaugh, 1988) has been frequently used to examine family financial behaviors but has not been operationalized to study the population of special needs families in a form that could be replicated. In this model, families conduct a systematic analysis of decisions and resource use leading to an output that then provides a feedback loop including information and resources to the family system. As Figure 2-2 illustrates, the inputs are external such as financial resources (income and net worth) as well as relationships with others and internal such as education, difficulty arranging life, marital status, and health. Throughputs are inclusive of personal and managerial subsystems and include perceived control over finances and thought/effort placed on finances. The output identified in this study was financial satisfaction. The measurements identified are especially relevant to families with children with disabilities.



**Figure 2-2 Operationalized Model: Adaptation of the Deacon and Firebaugh Model (1988)**

### **Statement of Research Questions/Hypotheses**

This study seeks to answer the question of whether resources/demands, financial attitudes, and financial management throughputs influence the financial satisfaction of parents and whether the predictors are different for parents of disabled/chronically ill children than those without disabled/chronically ill children. In order to evaluate the research hypotheses, this study used the National Survey of Midlife Development Refresher in the United States MIDUS Refresher (Ryff et al., 2017a). Grounded by the family resource management model and literature reviewed, the following hypotheses are presented.

H1: Higher thought and effort placed on finances are associated with financial satisfaction for families with a disabled/chronically ill child.



H2: Perceived financial control is positively associated with higher financial satisfaction for families with and without a disabled/chronically ill child.

H3: Having positive relationships with others is positively associated with financial satisfaction for families with disabled/chronically ill children because of the benefit of social supports to manage the added demands of having a child with a disability/chronic mental illness.

H4: Difficulty arranging life is negatively associated with financial satisfaction for families with and without a disabled/chronically ill child.

## **Methodology**

### **Sample**

Midlife in the United States (MIDUS) began in 1995 as a general population survey conducted by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development (MIDMAC) to examine the areas of physical health, psychological well-being, and social responsibility. The first wave collected in 1995-1996, referred to as MIDUS 1, included 7,108 non-institutionalized, English-speaking adults, aged 25-74, and was drawn from a nationally representative random-digit-dial sample. Oversampling of five metropolitan areas was also included. The survey method encompassed an initial phone interview followed by a mail questionnaire.

In addition to the main data, siblings of the general population respondents and sets of twins were surveyed. In 2002, through a grant from the National Institute of Aging, the University of Wisconsin Institute on Aging continued MIDUS with longitudinal follow-up. The

MIDUS 2 project was conducted in 2004-2006, approximately 10 years later, resulting in respondents aged 35-86. This longitudinal follow-up included those who were MIDUS 1 core, metropolitan oversample, siblings, and twins. New to MIDUS 2 was an African American sample of 592 respondents recruited from Milwaukee, Wisconsin.

MIDUS Refresher was conducted during 2011-2013 to provide cross-sectional information on 3,577 adults age 25-74. These data were nationally representative and were collected through 30-minute telephone interviews followed up by two 50-page questionnaires delivered via mail (Ryff et al., 2017a). The third longitudinal wave was MIDUS 3, conducted in 2013-2014, and had 77% of living longitudinal participants complete the telephone survey resulting in 3294 cases. The MIDUS projects examine respondents on behavioral, psychological, financial, and social questions that are useful for this study and this Refresher also covered questions regarding the economic recession and its impact. Many psychosocial constructs and composite variables were embedded in the data and a construct and variable guide is provided with the data download (Ryff et al., 2017b).

The sample for this study was restricted to parents of living children of any age and pulls from MIDUS Refresher since it was the most recent sample. MIDUS Refresher includes working-age respondents and spouses where the other MIDUS series have mostly aged out of the workforce. This restricted the sample from 3,577 down to 2,035. MIDUS Refresher includes 247 (12.14%) respondents who reported having a child with a long-term physical or mental health problem or developmental disability, which will be referred to as disabled/chronically ill in this manuscript.

Missing data were handled using two different methods. Net worth had almost 11% of the analytic sample responses listed as missing/refused to answer. Utilizing listwise deletion was

not appropriate because net worth is unlikely to be missing at random and would likely bias the results. A separate dummy category was created for refused net worth to preserve and properly categorize those cases. Listwise deletion was used to handle all other missing data that had less than 2% of the analytic sample missing. The final complete cases included 1,989 observations comprised of 1,750 families with children without disability/chronic mental illness and 239 families with at least one disabled/chronically ill child.

## Measurement of Variables

### Dependent Variable.

Respondents were asked to rate their current financial situation from 0-10, the worst possible situation to the best possible situation. The mean of all families with living children was 7.40 and of those with a disabled child was 6.83. A categorical version of financial satisfaction was constructed using three dummy categories of lowest, average, and highest. Table 2-1 shows the variations considered when establishing the categories and option two was selected. Based on the distributions across the 0-10 responses, lowest was created using responses of 0, 1, 2, 3, and 4; average was created using responses of 5, 6, and 7; and highest was created using 8, 9, and 10.

**Table 2-1 Frequency Statistics for Possible Dependent Variable Financial Satisfaction (N=2035)**

Variables	Proportion
<b>Model 1 Dependent - Financial Satisfaction - 0-10</b>	
0 - Worst	2.58%
1	2.09%
2	3.28%
3	5.56%
4	7.00%
5	13.31%
6	13.16%
7	21.30%
8	18.97%
9	8.54%
10	4.22%
<b>Model 2 Dependent - Financial Satisfaction - 3</b>	

Lowest (0-4)	20.51%
Average (5-7)	47.77%
Highest (8-10)	31.73%
<hr/>	
Model 3 Dependent - Financial Satisfaction - 4	
Lowest (0-3)	13.51%
Average (4-6)	33.47%
Better (7-8)	40.24%
Highest (9-10)	13.76%

Note: Includes respondents with at least one living child. All models have 21 missing.

**Table 2-1 Frequency Statistics for Possible Dependent Variable Financial Satisfaction**

Variables	Proportion
<hr/>	
Option 1 Dependent - Financial Satisfaction - 0-10	
0 - Worst	2.58%
1	2.09%
2	3.28%
3	5.56%
4	7.00%
5	13.31%
6	13.16%
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<hr/>	
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Lowest (0-4)	20.51%
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Highest (8-10)	31.73%
<hr/>	
Option 3 Dependent - Financial Satisfaction - 4	
Lowest (0-3)	13.51%
Average (4-6)	33.47%
Better (7-8)	40.24%
Highest (9-10)	13.76%

**Control Variables.** The age of the respondent, sex, and race/ethnicity were control variables. Age was continuous. Sex was binary and was recoded where male was 1 and female was 0. Race and ethnicity were combined where White non-Hispanic was binary.

### **Independent Variables.**

**Inputs.** External resources and demands were measured by four variables. Household total income in continuous dollar amounts includes wages, pension, social security, and other income. Income responses exceeding \$998,000 were top-coded and included but set to that limit. Income was transformed using the log function to achieve a more normal distribution. Net worth was calculated by combining a series of variables. First, respondents were asked, “Suppose you cashed in all of your checking and savings accounts and sold your homes, vehicles, stocks and bonds, real estate, and all of your valuable possessions. Then suppose you put that money toward paying off your mortgage and all of your other loans, debts, and credit cards. After paying your debts, would you still be in debt, just break even, or have a positive balance?” A follow-up question was asked regarding how much would be owed or how much would the respondent have. These responses were combined into one continuous net worth variable that if the amount were owed it was negative, just breakeven was 0, and the amount you would have was left positive. Negative net worth exceeding \$300,000 and a positive net worth exceeding \$9,998,000 were bottom-coded and top-coded and included but set to those limits. Due to those limitations of the data, the results were then grouped into dummy categories. Positive relationships with others, shown in Table 2-2, was a psychological well-being scale embedded in MIDUS Refresher (Ryff, 1989) that included seven summed items which include questions about trust, loving nature of the respondent, giving nature, loneliness, and exchange of trust. Respondents were asked to rate each as 1 (*Strongly agree*) to 7 (*Strongly disagree*).

**Table 2-2 Psychological Well-Being Scale: Positive relationships with Others**

Variable	Item
Positive Relationships with Others	1. Most people see me as loving and affectionate.
Positive Relationships with Others	2. Maintaining close relationships has been difficult and frustrating for me.

Positive Relationships with Others	3. I often feel lonely because I have few close friends with whom to share my concerns.
Positive Relationships with Others	4. I enjoy personal and mutual conversations with family members and friends.
Positive Relationships with Others	5. People would describe me as a giving person, willing to share my time with others.
Positive Relationships with Others	6. I have not experienced many warm and trusting relationships with others.
Positive Relationships with Others	7. I know that I can trust my friends, and they know they can trust me.

---

Items 1, 4, 5, and 7 were reverse coded so that high scores reflect higher positive relationships. Respondents were also asked if they have a child with a chronic disability or disease in the last 12 months which will also be represented by a binary 1 = yes and 2 = no.

Internal resources and demands were measured by four direct questions. The respondent's human capital was a resource and was measured based on the highest level of education attained. Dummy categories of less than high school, high school, some college, college, and graduate degree were created. Difficulty arranging life was a demand where respondents were asked how difficult they feel it was to arrange their life in a satisfying way and was reverse coded where 1 = strongly disagree to 7 = strongly agree and treated as an ordinal variable. Married/cohabitating is binary and recoded where yes was 1 and no was 0. Current health was self-evaluated and was reverse coded where 1 = poor and 5 = excellent.

**Throughputs.** Financial attitudes were represented by perceived control over finances. When asked how they would rate the amount of control one has over their financial situation, the

responses ranged from 0 = no control at all to 10 = very much control and had an overall mean of 6.34 and 5.56 for those with a disabled/chronically ill child.

Financial management was measured by self-reported thought and effort placed on finances. Respondents were asked how much thought and effort they put into their financial situation ranging from 0 = none to 10 = very much with the overall mean of 7.66 and 7.4 for those with a disabled/chronically ill child. Categories were created around the mean of with low thought and effort (1-5), moderate thought and effort (6-8), and high thought and effort (9-10).

### **Analysis**

Multivariate analyses were employed to examine internal and external resources/demands, financial attitudes, and financial management and their impact on financial satisfaction while taking into account the control variables previously described. Due to the ordinal nature of the dependent variable, a cumulative ordered logit was employed to assess what factors are associated with better financial satisfaction. Respondents provided answers describing their current financial situation on a scale of 0 (worst possible situation)-10 (best possible situation) where an incremental change from 0-1 should be the same as an incremental change from 6-7 or any other one point change. However, after performing the proportional odds assumption test, the results were significant. This resulted in a change to a multinomial logit. The analysis used a multinomial logistic regression model where:

$P_{i1}$  = the probability of Highest Financial Satisfaction for person  $i$

$P_{i2}$  = the probability of Average Financial Satisfaction for person  $i$

$P_{i3}$  = the probability of Lowest Financial Satisfaction for person  $i$

Let  $x_i$  be a column vector of explanatory variables for person  $i$ :

$$x_i = [x_{i1} \ x_{i2} \ x_{i3} \ x_{i4} \ x_{i5} \ x_{i6} \ x_{i7} \ \dots]$$

Where the x's refer to low thought/effort, high thought/effort, financial control, log income, negative net worth, \$0 to 149 net worth, \$150 to 499 net worth, \$500 to 999 net worth, \$1M plus net worth, refused net worth, positive relations with others, less than high school, high school, college, grad degree, difficulty arranging life, married/cohabitating, respondent health, and controls. The model was formulated as follows (Allison, 2012):

$$\log \left[ \frac{P_{i1}}{P_{i3}} \right] = \beta_1 x_i$$

$$\log \left[ \frac{P_{i2}}{P_{i3}} \right] = \beta_2 x_i$$

$$\log \left[ \frac{P_{i1}}{P_2} \right] = \beta_3 x_i$$

Since the literature suggested that having a disabled family member plays a very important role in family financial outcomes, this analysis also examined whether it was necessary to estimate separately for families with and without a disabled/chronically ill child. Separate regressions would allow for varying slopes for each independent variable for the two populations rather than limiting them in one single regression.

To determine whether a restricted (pooled) or unrestricted (separate regressions) model was more appropriate, a likelihood ratio test was performed (Wooldridge, 2009). This test supposes a null hypothesis that a pooled model is more appropriate than separate models. The pooled model included both families with a disabled/chronically ill child and those without a disabled/chronically ill child a included a dummy independent variable to account for that difference. The restricted model had 22 parameters while each of the separate logistic regressions included 21 parameters (pooled model less the dummy variable for disabled/chronically ill child), for a total of 42 parameters in the unrestricted model. Therefore, this approach tested 20 exclusion restrictions ( $q = 20$ ), and the chi-square test statistic was (Greene, 2012, pp. 703-706):



$$LR = -2[\ln L_P - (\ln L_D - \ln L_{ND})] = \chi^2_q$$

where  $\ln L_P$  = log-likelihood function of pooled model,

$\ln L_D$  = log-likelihood function for families with a disabled/chronically ill child,

and  $\ln L_{ND}$  = log-likelihood function for families without a disabled/chronically ill child.

## Results

### Descriptive Results

Unweighted descriptive results can be found in Table 2-3. The largest category of financial satisfaction overall was average financial satisfaction (48%) followed by highest satisfaction (32%) and then lowest financial satisfaction (20%). Families with a disabled/chronically ill child had a noticeably lower baseline with over 30% in the lowest category, 49% average, and only 21% in highest financial satisfaction. The largest category of financial thought and effort was moderate (45%) followed by high thought and effort (39%) and low thought and effort (16%). Families with a disabled/chronically ill child had a noticeably larger proportion of low thought and effort (21%). Perceived control over finances had a mean of 6.34 out of 10 with families with a disabled/chronically ill child having a lower level of perceived control (5.56). This sample had an average household income (\$124,450) and over \$1.1M in net worth. However, over 10% of respondents refused to answer the net worth question and were kept in a separate category for the analyses.

About 12% of the respondents indicated having a living child (of any age) with a disability or chronic mental illness. The households in this study are highly educated with almost 25% having a college degree and an additional 22% with a graduate or professional degree. The average age was 52.9 years old and the majority female (53%). Over 80% were White (non-Hispanic) and considered themselves generally healthy reporting 3.6 out of 5. Without further

analysis, there appears to be lower financial satisfaction among families with a disabled/chronically ill child than those with children without a disability/chronic illness.

**Table 2-3 Descriptive Statistics of Complete Cases N = 1,989**

Variable	Proportion/ Mean	Min	Max	No Disabled Child N=1,750	Disabled Child N = 239
<b>Financial Satisfaction</b>					
Lowest Fin Sat	20.36%			19.03%	30.13%
Average Fin Sat	47.86%			47.71%	48.95%
Highest Fin Sat	31.77%			33.26%	20.92%
<b>Fin Thought &amp; Effort</b>					
Low Effort	15.69%			14.91%	21.34%
Moderate Effort	45.40%			45.83%	42.26%
High Effort	38.91%			39.26%	36.40%
Perceived Fin Control	6.34	0	10	6.45	5.56
Total Income (HH)	\$ 124,450	-	999,998	129,529	87,264
Net Worth (HH)	\$ 1,179,061	(300,000)	9,999,998	1,212,046	929,043
Negative	10.31%			10.23%	10.88%
Even	18.70%			18.34%	21.34%
Up to 149K	18.00%			17.89%	18.83%
150K - 499	15.94%			16.34%	12.97%
500-999K	8.70%			8.91%	7.11%
1Mplus	17.50%			17.83%	15.06%
Refused	10.71%			10.34%	13.39%
Positive Rel w Others	39.77	12	49	40.06	37.71
Child with Disability	12.02%			0.00%	100.00%
<b>Education</b>					
Less than HS	5.98%			5.54%	9.21%
HS	17.55%			17.43%	18.41%
Some College	29.81%			29.31%	33.47%
College	24.94%			25.66%	19.67%
Grad Degree	21.57%			21.94%	18.83%
Difficulty Arranging Life	3.00	1	7	2.93	3.52
Married or Cohab	76.92%			78.29%	66.95%
Respondent Health	3.60	1	5	3.65	3.23
<b>Control Variables</b>					
Age	52.9	23	76	52.6	55.5
Sex Male	46.46%			47.03%	42.26%
White Non-Hispanic	81.90%			81.83%	82.43%

*Note:* Unweighted. Sample limited to respondents with at least one living child. Data Source: MIDUS Refresher. Variables represent respondent information unless otherwise noted as household (HH).

### Multivariate Results

The descriptive results showed general differences between those with a disabled/chronically ill child and those without a disabled/chronically ill child. Due to the expected differences of these groups, the likelihood ratio test was employed as shown in Table 2-4. The test concluded that the unrestricted model was more appropriate than the pooled model. Therefore, two separate regressions were estimated, one for families without a disabled/chronically ill child (Model 1) and another for families with a disabled/chronically ill child (Model 2).

**Table 2-4 Likelihood Ratio Test: Pooled versus Separate Logits for Disabled and Not Disabled/Chronically Ill Child**

<b>Model</b>	<b>-2LogLikelihood</b>	<b>df</b>	<b>p-value</b>
Restricted (Pooled) Model	2849.072	22	-
Unrestricted Model	2738.309	42	-
Model 1: Child Not Disabled/Chronically Ill	2496.053	21	-
Model 2: Disabled/Chronically Ill Child	242.256	21	-
Likelihood Ratio Test Statistic, $X^2$	110.763	20	<.00001
<b>Conclusion</b>	<b>Reject the null hypothesis: Unrestricted/Separate Model is more appropriate</b>		

**Model 1: Child Not Disabled/Chronically Ill.** Using highest, average, and lowest financial satisfaction as the categorical dependent variable, independent variables representing the inputs and throughputs were regressed on the sample of 1,750 parents without a disabled/chronically ill child. Detailed results for the multinomial logit (Model 1) can be found in Table 2-5 followed by the odds ratios presented in Table 2-6.

Low thought/effort placed on finances, when compared to moderate thought/effort, had higher odds of having highest financial satisfaction than average financial satisfaction. High thought/effort compared to moderate thought/effort placed on finances had lower odds in two comparison groups of having highest financial satisfaction rather than lowest life satisfaction and average satisfaction rather than lowest financial satisfaction. High thought/effort, when compared to moderate thought/effort, had higher odds for highest satisfaction rather than average satisfaction. Perceived control over finances was positively associated and the largest odds found when predicting highest financial satisfaction over lowest financial satisfaction.

Income (logged), including all wages, pensions, social security, and other income, were not significant. When comparing highest financial satisfaction to lowest, all net worth categories were positively associated with financial satisfaction when compared to even net worth while negative net worth was negatively associated. For highest financial satisfaction compared to average, net worth associations were consistent but only significant for negative, \$150,000-499,000, \$500,000-999,000, and refused net worth when compared to even net worth. All positive net worth categories and refused net worth were significant and had higher odds of having average financial satisfaction than lowest financial satisfaction.

Positive relationships with others was not significant. Having a college degree or graduate degree, when compared to some college, both had higher odds across the three comparison groups. Difficulty arranging life was negatively associated across all three comparisons, while age and married/cohabitating were positively associated. Respondent health had significantly higher odds of highest financial satisfaction than lowest and highest financial satisfaction than average financial satisfaction but was not significant for average to lowest.

**Table 2-5 Model 1 Multinomial Logistic Regression on Financial Satisfaction - No Disabled/Chronically Ill Child (N=1,750)**

Variable (Reference Group)	Highest (3) vs. Lowest (1)			Highest (3) vs. Average (2)			Average (2) vs. Lowest (1)		
	$\beta$	SE $\beta$	p	$\beta$	SE $\beta$	P	$\beta$	SE $\beta$	p
Intercept	-10.588	1.099	<.0001	-7.460	0.819	<.0001	-3.128	0.813	0.000
T & E Placed on Finances (Moderate)									
Low Thought/Effort	0.429	0.290	0.139	0.705	0.209	0.001	-0.276	0.226	0.223
High Thought/Effort	-0.516	0.217	0.017	0.341	0.141	0.015	-0.856	0.181	<.0001
Perceived Control over Finances	0.912	0.053	<.0001	0.439	0.039	<.0001	0.473	0.039	<.0001
Total Income (HH)	0.049	0.036	0.178	0.037	0.025	0.138	0.012	0.029	0.673
Net Worth (HH) (Even NW)									
Negative	-1.078	0.427	0.012	-0.816	0.382	0.033	-0.262	0.240	0.274
Up to 149K	0.847	0.305	0.006	0.235	0.239	0.326	0.612	0.225	0.007
150K - 499K	2.441	0.386	<.0001	0.915	0.229	<.0001	1.526	0.336	<.0001
500K-999K	2.207	0.520	<.0001	0.953	0.265	0.000	1.254	0.477	0.009
1Mplus	2.734	0.433	<.0001	1.258	0.234	<.0001	1.476	0.390	0.000
Refused	1.409	0.361	<.0001	0.773	0.270	0.004	0.636	0.281	0.024
Positive Relationships with Others	0.007	0.016	0.644	0.010	0.011	0.372	-0.003	0.013	0.834
Education (Some College)									
Less than HS	-0.322	0.451	0.475	-0.102	0.363	0.779	-0.220	0.318	0.488
HS	-0.020	0.280	0.944	0.343	0.207	0.098	-0.363	0.218	0.097
College	0.718	0.265	0.007	0.296	0.175	0.092	0.422	0.219	0.054
Grad Degree	1.014	0.315	0.001	0.330	0.179	0.065	0.684	0.277	0.013
Difficulty Arranging Life	-0.232	0.063	0.000	-0.129	0.044	0.004	-0.103	0.050	0.038
Age	0.041	0.008	<.0001	0.020	0.005	0.000	0.021	0.007	0.001
Sex Male	-0.104	0.209	0.620	0.096	0.137	0.485	-0.199	0.174	0.252
Married or Cohabiting	0.888	0.255	0.001	0.482	0.184	0.009	0.407	0.196	0.038
White Non-Hispanic	0.107	0.252	0.671	0.080	0.179	0.656	0.028	0.200	0.889

Respondent Health	0.327	0.104	0.002	0.201	0.073	0.006	0.126	0.083	0.127
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MODEL FIT STATISTICS

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R Squared - Cox & Snell      0.4746

R Squared - Nagelkerke      0.5431

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Source: MIDUS Refresher

Note: Unweighted. \*\*\*p<.001, \*\*p<.01, \*p<.05, † p<.10

**Table 2-6 Model 1 Odds Ratio Estimates - Multinomial Logistic Regression on Financial Satisfaction - No Disabled/Chronically Ill Child (N=1,750)**

Variable (Reference Group)	Highest (3) vs. Lowest (1)	Highest (3) vs. Average (2)	Average (2) vs. Lowest (1)
Intercept	- ***	- ***	- ***
T & E Placed on Finances (Moderate)			
Low Thought/Effort	1.536	2.024 **	0.759
High Thought/Effort	0.597 *	1.406 *	0.425 ***
Perceived Control over Finances	2.489 ***	1.551 ***	1.605 ***
Total Income (HH)	1.050	1.037	1.012
Net Worth (HH) (Even NW)			
Negative	0.340 *	0.442 *	0.769
Up to 149K	2.332 **	1.265	1.844 **
150K - 499K	11.486 ***	2.497 ***	4.599 ***
500K-999K	9.086 ***	2.592 ***	3.505 **
1Mplus	15.392 ***	3.519	4.374 ***
Refused	4.091 ***	2.167 **	1.888 *
Positive Relationships with Others	1.007	1.010	0.997
Education (Some College)			
Less than HS	0.724	0.903	0.802
HS	0.981	1.409 †	0.696 †
College	2.050 **	1.344 †	1.525 †
Grad Degree	2.756 **	1.391 †	1.982 *
Difficulty Arranging Life	0.793 ***	0.879 **	0.902 *
Age	1.042 ***	1.020 ***	1.022 **
Sex Male	0.902	1.100	0.820
Married or Cohabiting	2.431 ***	1.618 **	1.502 *
White Non-Hispanic	1.113	1.083	1.028
Respondent Health	1.387 **	1.223 **	1.134

Source: MIDUS Refresher

Note: Unweighted. \*\*\*p<.001, \*\*p<.01, \*p<.05, †p<.10

**Model 2: Child Disabled/Chronically Ill.** Also using highest, average, and lowest financial satisfaction as the categorical dependent variable, independent variables representing the inputs and throughputs were regressed on the sample of 239 families with at least one disabled/chronically ill child. Detailed results of the multinomial logistic regression can be found in Table 2-7 with the odds ratio presented in Table 2-8.

Low thought/effort placed on finances was significant in this model. High thought/effort compared to moderate thought/effort placed on finances had higher odds (3.44 OR) of having highest financial satisfaction rather than average financial satisfaction. High thought/effort, when compared to moderate thought/effort, had lower odds for average financial satisfaction rather than lowest satisfaction. Perceived control over finances was positively associated with the highest odds found when predicting highest financial satisfaction over lowest financial satisfaction with the 4.7 times the odds of highest versus lowest financial satisfaction.

Income (logged), including all wages, pensions, social security, and other income, significant for highest financial satisfaction versus lowest satisfaction ( $p = .078$ ) and average versus lowest financial satisfaction ( $p = .007$ ). None of the net worth predictors were significant across all three comparison groups, except for average financial satisfaction versus lowest financial satisfaction; \$150,000-499,000 net worth had significantly lower odds when compared to even net worth.

Positive relationships with others was not significant. The only significant education level across all groups was having a graduate degree compared to some college had lower odds of having average financial satisfaction than lowest financial satisfaction. Difficulty arranging life had lower odds for highest to lowest and average to lowest financial satisfaction but not significant in highest to average financial satisfaction. Age was positively associated across all



three comparison groups. Being male had higher odds of having highest financial satisfaction than lowest as well as average financial satisfaction than lowest. Married/cohabitating had higher odds for highest to lowest financial satisfaction and highest to average financial satisfaction. Respondent health had significantly higher odds of highest financial satisfaction rather than lowest and highest financial satisfaction rather than average financial satisfaction but was not significant when comparing average to lowest. Respondent health was a positive predictor of highest financial satisfaction compared to lowest financial satisfaction.

**Table 2-7 Model 2 Multinomial Logistic Regression on Financial Satisfaction - With Disabled/Chronically Ill Child (N=239)**

Variable (Reference Group)	Highest (3) vs. Lowest (1)			Highest (3) vs. Average (2)			Average (2) vs. Lowest (1)		
	$\beta$	SE $\beta$	p	$\beta$	SE $\beta$	p	$\beta$	SE $\beta$	p
Intercept	-17.998	3.924	<.0001	-10.950	2.932	0.0002	-7.049	2.848	0.013
T & E Placed on Finances (Moderate)									
Low Thought/Effort	-1.122	0.987	0.256	-0.645	0.670	0.335	-0.477	0.746	0.523
High Thought/Effort	0.031	0.819	0.970	1.237	0.521	0.018	-1.205	0.678	0.076
Perceived Control over Finances	1.547	0.230	<.0001	0.563	0.137	<.0001	0.984	0.187	<.0001
Total Income (HH)	0.248	0.141	0.078	-0.038	0.117	0.746	0.286	0.107	0.007
Net Worth (HH) (Even NW)									
Negative	-0.907	1.395	0.516	0.473	1.114	0.671	-1.380	0.985	0.161
Up to 149K	-0.167	1.090	0.878	0.110	0.794	0.890	-0.278	0.790	0.725
150K - 499K	-1.772	1.149	0.123	0.637	0.829	0.442	-2.410	0.903	0.008
500K-999K	1.026	2.038	0.615	-0.405	0.867	0.641	1.431	1.875	0.446
1Mplus	1.661	1.531	0.278	0.570	0.752	0.448	1.091	1.352	0.420
Refused	-0.440	1.400	0.753	-0.567	1.027	0.581	0.127	0.993	0.898
Positive Relationships with Others	-0.006	0.055	0.920	0.045	0.037	0.230	-0.050	0.044	0.253
Education (Some College)									
Less than HS	-1.157	1.542	0.453	0.434	1.121	0.698	-1.592	1.198	0.184
HS	-0.180	0.983	0.855	0.752	0.716	0.294	-0.932	0.742	0.209
College	1.044	0.960	0.277	0.858	0.620	0.166	0.186	0.768	0.809
Grad Degree	-1.615	1.123	0.150	0.417	0.633	0.510	-2.032	0.969	0.036
Difficulty Arranging Life	-0.615	0.226	0.007	-0.093	0.150	0.536	-0.522	0.182	0.004
Age	0.136	0.034	<.0001	0.057	0.022	0.008	0.080	0.028	0.005
Sex Male	1.994	0.889	0.025	0.443	0.488	0.364	1.552	0.780	0.047
Married or Cohabiting	1.536	0.912	0.092	1.257	0.655	0.055	0.279	0.674	0.679
White Non-Hispanic	-0.515	0.990	0.603	0.671	0.631	0.288	-1.186	0.786	0.131

Respondent Health	0.269	0.371	0.468	-0.316	0.230	0.170	0.585	0.305	0.055
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MODEL FIT STATISTICS

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R Squared - Cox & Snell      0.6546

R Squared - Nagelkerke      0.7485

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Source: MIDUS Refresher

Note: Unweighted. \*\*\*p<.001, \*\*p<.01, \*p<.05, † p<.10

**Table 2-8 Model 2 Odds Ratio Estimate - Multinomial Logistic Regression on Financial Satisfaction - With Disabled/Chronically Ill Child (N=239)**

Variable (Reference Group)	Highest (3) vs. Lowest (1)	Highest (3) vs. Average (2)	Average (2) vs. Lowest (1)
Intercept	***	***	***
	-	-	-
T & E Placed on Finances (Moderate)			
Low Thought/Effort	0.33	0.53	0.62
High Thought/Effort	1.03	3.44 *	0.30 †
Perceived Control over Finances	4.70 ***	1.76 ***	2.68 ***
Total Income (HH)	1.28 †	0.96	1.33 **
Net Worth (HH) (Even NW)			
Negative	0.40	1.61	0.25
Up to 149K	0.85	1.12	0.76
150K - 499K	0.17	1.89	0.09 **
500K-999K	2.79	0.67	4.18
1Mplus	5.26	1.77	2.98
Refused	0.64	0.57	1.14
Positive Relationships with Others	0.99	1.05	0.95
Education (Some College)			
Less than HS	0.31	1.54	0.20
HS	0.84	2.12	0.39
College	2.84	2.36	1.21
Grad Degree	0.20	1.52	0.13 *
Difficulty Arranging Life	0.54 **	0.91	0.59 **
Age	1.15 ***	1.06 **	1.08 **
Sex Male	7.35 *	1.56	4.72 *
Married or Cohabiting	4.65 †	3.52 †	1.32
White Non-Hispanic	0.60	1.96	0.31
Respondent Health	1.31 **	0.73	1.79

Source: MIDUS Refresher

Note: Unweighted. \*\*\*p<.001, \*\*p<.01, \*p<.05, †p<.10

## Discussion

This study sought to answer the question of whether resources/demands, financial attitudes, and financial management throughputs influence the financial satisfaction of families

with disabled/chronically ill children differently than those with children without disability or chronic illness.

It was hypothesized that thought and effort placed on finances would be associated with financial satisfaction for families with a disabled/chronically ill child. Model 2 demonstrates that families with high thought/effort, compared to moderate thought/effort, had 3.4 times the odds of having highest financial satisfaction than lowest satisfaction. However, families with high thought/effort placed on finances, when compared to moderate thought/effort, had 70% lower odds of having average financial satisfaction over lowest financial satisfaction. When comparing the results to families with no disabled/chronically ill child (Model 1), high thought/effort, when compared to moderate thought/effort, only had 1.4 times the odds of having highest financial satisfaction over average financial satisfaction and 57% lower odds of having average financial satisfaction over lowest financial satisfaction. Unique to Model 1 was that having high thought/effort placed on finances, when compared to moderate thought/effort, families have 40% lower odds of having high financial satisfaction than lowest financial satisfaction.

Perceived financial control was hypothesized to be positively associated with higher financial satisfaction. Both models showed a significant positive association between perceived control over finances and all comparison groups of financial satisfaction. The highest odds were identified in families with a disabled/chronically ill child (Model 2). An increase in perceived control in finances has 4.7 times the odds of having highest financial satisfaction than lowest financial satisfaction and approximately 2.5 times the odds for no disabled/chronically ill child (Model 1). This is in line with prior researchers' findings of the significance over overall locus of control on predicting financial satisfaction (Sumarwan & Hira, 1993), but adds the increased importance for families with a disabled/chronically ill child.

Income was only a significant predictor of financial satisfaction for families with a disabled/chronically ill child (Model 2) when comparing highest to lowest and average to lowest financial satisfaction. Household income included all sources of income, including disability benefits. Contrary to expectation, no significance was found in Model 1 suggesting that income is not a significant predictor of financial satisfaction among families with no disabled/chronically ill child. The opposite is found when it comes to net worth which is more in line with prior research. Model 1 showed strong net worth predictions across the three comparison groups with the highest ratio of over 15 times the odds of having highest financial satisfaction than lowest financial satisfaction. However, among families with a disabled/chronically ill child (Model 2) net worth was essentially not a significant predictor except for having \$150,000-499,000, when compared to even net worth, had 90% lower odds of having average financial satisfaction over lowest satisfaction. Prior researchers found that upon receiving a child's diagnoses of autism, the parent's attitudes shifted from savers to spenders (Sharpe & Baker, 2007). When combining the prior findings with these results, this suggests that families with a disabled/chronically ill children may place more of a focus on cashflow than wealth accumulation.

The priority of cashflow over wealth accumulation could be suggesting a strong present-bias often captured in the theory of self-control in behavioral finance (Thaler & Shefrin, 1981). However, being more present-oriented could also be explained by financial scarcity and its effect on cognitive load (Schilback, Schofield, & Mullainathan, 2016). Prior researchers looking poverty and its impact on bandwidth suggested that when cognitive bandwidth is taxed, decision-making can be impaired (Schilback, Schofield, & Mullainathan, 2016). Having a disabled/chronically ill child impede cognitive bandwidth similar to that of those with financial scarcity because of the similar physical, financial and emotions challenges they face. While the

cause may not be clear at this point, it is apparent that families with a disabled/chronically ill child place a high importance on cashflow when assessing their financial satisfaction.

Having positive relationships with others was hypothesized to have higher odds of having higher financial satisfaction for families with disabled/chronically ill children because of the benefit of social supports to manage the added demands of having a child with a disability/chronic mental illness. However, positive relationships with others was not a significant predictor for families with a disabled/chronically ill child nor was it significant for families without a disabled/chronically ill child.

Difficulty arranging life was hypothesized to have higher odds of negatively affecting financial satisfaction for families with a disabled/chronically ill child and without a disabled/chronically ill child. Model 1 had significance across all three comparison groups and model two was significant in highest to lowest and average to lowest. While not precisely the same, these results make sense given the findings in a focus group study finding that difficulty navigating life was as a common theme among caregivers of disabled loved ones when exploring barriers to special needs financial planning (Springer & Lauderdale, 2019). Model 2 showed a greater negative effect. In highest to lowest, model 1 showed an increase in difficulty arranging life had 20% lower odds while model 2 had 46% lower odds. For highest to average only model 1 was significant with 12% lower odds. For average financial satisfaction compared to lowest financial satisfaction, model 1 showed almost 10% lower odds while model 2 had 41% lower odds.

The results of this study need to be considered in light of limitations. Access to data on families with disabled/chronically ill children is limited and generally represents a small portion of any population. The sample size in this study was smaller than desirable and limited some

analysis types considered in this study. For example, the race categories had to be collapsed into a binary variable. All data were self-reported. These data are cross-sectional and cannot be interpreted as causal. Additionally, when respondents were asked about their thought and effort placed on finances, the type of thought could be interpreted differently by respondents.

## **Conclusion**

Parents of disabled/chronically ill children face significant, unique challenges affecting their internal and external resources/demands. The question here was whether financial satisfaction among families with disabled/chronically ill children have the same significant predictors as those with children without disability or chronic illness. A sense of control over finances is especially critical for families with a disabled/chronically ill child. They place a high priority on current finances over long-term wealth accumulations and have a more difficult time arranging life resulting an even greater negative effect.

When thinking of financial well-being, the typical first place to look is at family financial resources. That holds true in this study for families with children without disability or chronic illness when it comes to net worth but not income. However, it was the opposite for families with disabled/chronically ill children where income was a significant predictor and net worth was not. Families with disabled/chronically ill child prioritize income/cashflow over wealth accumulation. Assisting with identifying additional sources of income, such as supplemental security income (SSI) and social security disability insurance (SSDI), may assist in improving financial satisfaction. While financial satisfaction is important and may be positively impacted by improving cashflow, there is an opportunity to educate families with disability on the importance of planning for the long-term. To the extent possible, a longer planning time horizon is in the best interest of their family and especially their disabled/chronically ill child.



This research suggests that thought and effort placed on finances matters for all parents, but the directional impact varies based on one's level of financial satisfaction. Thought and effort placed on finances has a negative effect when comparing families with low to average financial satisfaction and shifts to a positive effect when comparing average to highest financial satisfaction. With mixed results on the impacts of increased thought and effort, more attention needs to be paid to the type of thought and effort placed on finances. Some families' thoughts might be those filled with stress about finances but may not be productive time spent. Regardless of the type of client, with or without a disabled/chronically ill child, clients' thoughts and efforts need to be intentional and effective which supports the need for financial planners, financial counselors, financial therapists, and/or other financial professionals. Using professionals to assist with planning efforts may be a more effective way to achieve a more positive outcome.

Finding ways to support families with a disabled/chronically ill child may make a positive impact on their overall financial satisfaction. Difficulty arranging life was negatively associated for both groups. While not unique to the families with disabled/chronically ill children, the odds of a negative impact were greater. Community resources for families with disability are quite prevalent. Identifying support groups, support services, and involved a social worker where appropriate may assist in life management. Having a common group of families facing similar challenges allows for appropriate referrals and a guidance on best ways to function in a given community with similar circumstances. Referrals may include school advice, medical referrals, dental referrals, special therapy referrals and respite opportunities. Assisting with applications for Medicaid waivers, which usually comes along with SSI, may provide additional help because they offer home and community-based services. Further research into the specific pieces of life that are most difficult to arrange could be beneficial. If consistent and supportive

employment environments are of particular issue, family medical leave may be a reasonably supportive option to consider. Given how all families were greatly affected by the COVID-19 pandemic and remote working/learning, one can only imagine the difficulties faced by families parenting, caring for, and educating children with disability/chronic illness. Policies to better support families with disabled dependents should be explored.

With very little research being conducted in this area, this research helps contribute to the body of literature to begin to better understand financial planning needs and perceptions of families with disabled/chronically ill children. Financial professionals often focus on the concrete nature of money. However, financial satisfaction seems to be a bit different for families with a disabled/chronically ill child than those with children without disability or chronic illness. While some factors are money-related, such as income, a feeling of control over finances was the most important while wealth accumulation was not. Net worth did not predict financial satisfaction in families with a disabled/chronically ill child suggesting that wealth accumulation does not directly affect financial satisfaction. For families with a disabled/chronically ill child, assisting with finding additional sources of income may assist in improving financial satisfaction. Special needs financial planning can be quite complex managing a myriad of government entitlements, medical, legal, and education aspects of life.

The most important predictor of financial satisfaction for families with a disabled/chronically ill child was perceived control over finances. This suggests that to make a real difference further research needs to be conducted to determine predictors of perceived control over finances for families with a disabled/chronically ill child. More research needs to be conducted to better understand the psychosocial aspects of financial satisfaction for all families but especially those with disabled/chronically ill children. Having a good financial plan in place

focused on financial resources alone might not be enough. There are many complicated legal and financial intricacies surrounding special needs financial planning which can help families get to an actual better financial place for the future of their child. While a plan might be solid from a financial and legal standpoint, it does not necessarily address one's satisfaction with their financial situation in families with disabled/chronically ill children.

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# **Chapter 3 - Subjective Financial Well-Being: PERMA and the Moderating Effect of Having a Disabled Child**

## **Introduction and Statement of Purpose**

Higher levels of poverty plague families with children with disabilities due to elevated costs, low levels of public benefits, and difficulty balancing employment and caregiving responsibilities (Parish & Cloud, 2006). Having a child with a limiting health condition has been shown to affect day-to-day material hardship and increases the odds of families not being able to pay bills and having their phones turned off (Stoddard-Dare, DeRigne, Quinn, & Mallett, 2015). Some researchers have worked to understand objective financial well-being and overall well-being among families with disabled/chronically ill children but not on the subjective financial well-being of families with disabled/chronically ill children. Subjective financial well-being has been found to be a key predictor of overall well-being (Netemeyer, Warmath, Fernandes, & Lynch, 2018), thus important to understand for families with disabled/chronically ill children.

Seligman's well-being theory (2012) suggests that five core elements serve as a construct with each measurable, essential element contributing to well-being. The five constructs include positive emotions, engagement, positive relations, meaning, and achievement/accomplishment. This paper examines how positive psychology traits affect the subjective financial well-being among parents of living children and whether having a child with a disability/chronic mental illness has a direct or moderating effect using the National Survey of Midlife Development Refresher in the United States of America with children living in the home in 2011-2014 MIDUS Refresher (Ryff et al., 2017a). These data include parents of children with special needs, which will be referred to as disabled/chronically ill children throughout this paper. Results will help inform financial advisors, financial therapists, counselors, and special needs financial planners

regarding their clients' subjective financial well-being, which may be as meaningful to them as their objective financial well-being. Given that very little research has been conducted on financial planning and this population, the results will begin to form a baseline body of knowledge for researchers to build upon so this population can be better served.

## **Review of Literature**

### **Financial Well-being**

Well-being can be examined overall, but the focus of this study was on the financial domain. Psychological aspects of money have been shown to contribute to one's happiness (Johnson & Krueger, 2006). Johnson and Krueger (2006) suggested that "life satisfaction may consist of psychological perceptions about financial matters rather than the actual financial matters themselves" (p. 680). Using Campbell, Converse, and Rodgers (1976) relative standards model, they explained that the value that really matters is a measurement "relative to one's expectations, desires, and standards of comparison that is of importance for satisfaction with one's circumstance in the financial domain" (Johnson & Krueger, 2006, p.680). Researchers also suggest that in wealthier nations, the marginal growth of subjective financial well-being is minimal (Clark, 2008).

Sorgente and Lanz (2017) conducted a scoping review of how financial well-being was defined and divided definitions into macro and micro level definitions. Different researchers view financial well-being through different lenses while some use objective measures, others use subjective measures (Rutherford and Fox, 2010; Xiao et al., 2009). Subjective financial well-being is a key predictor of overall well-being (Netemeyer, Warmath, Fernandes, & Lynch, 2018). Psychologists view subjective financial well-being as an attitude or satisfaction (Ng & Deiner, 2014), while some economists view subjective financial well-being as a form of utility (Takeda,



2010; Zyphur et al., 2015). Many researchers often operationalize financial well-being as objective measurements of financial matters such as income and net worth. Netemeyer et al. (2018) operationalized financial well-being as two related but separate constructs a) money management stress and b) sense of security with one's finances. Based on these two constructs, Netemeyer et al. developed two scales, a) expected future financial security and b) current money management stress.

Subjective financial well-being has been shown to vary among sexes and suggests income does not buy happiness. The impact of income on subjective financial well-being varied among men and women where higher income resulted in higher subjective financial well-being for men but was not significantly associated with women (Zyphur, Li, Zhang, Arvey & Barsky, 2015).

### **Impact of Disability/Chronic Mental Illness on Family Finances**

Nearly one in five children in the United States has a special healthcare need (Children and Youth with Special Healthcare Needs in Emergencies, 2021). Approximately 12 to 18% of children in the United States face special healthcare needs and put families' economic and parent careers on unexpected and different trajectories (Bruhn & Rebach, 2014). Parents, siblings and the household can all be affected by having a child with a disability/chronic mental illness (Cauda-Laufer, 2017). Cauda-Laufer reported that parents reported feeling socially isolated, financially stressed, and emotionally taxed when raising a child with a disability/chronic illness.

Having a child with a limiting health condition has been shown to affect day-to-day material hardship and increases the odds of families not being able to pay bills and having their phones turned off (Stoddard-Dare, DeRigne, Quinn, & Mallett, 2015). Using income and asset-based measurements, when comparing single mothers with children without disability or chronic

illness to single mothers with developmental disabilities, those with developmental disabilities had markedly worse financial well-being (Parish, Rose, Swaine, Dababnah, & Mayra, 2012). Having multiple children with a disability/chronic mental illness has a multiplying effect on material hardship (Ghosh & Parish, 2013). Mothers of children with Autism Spectrum Disorder have been found to earn much less (35%) than mothers of other types of disability/chronic mental illness and have an even greater disparity (56% less) than mothers of children with no disability/chronic mental illness (Cidav, Marcus, & Mandell, 2012).

Race, ethnicity, and parents' socioeconomic status vary among disability/chronic mental illness types. Families with infant children with Down syndrome are also more likely to be Hispanic and less likely to be Black (Grosse, 2010). Family plays a significant role in supporting the household when a disabled/chronically ill child is present. Researchers have found a strong correlation between family support and parenting stress, but this was mediated by parental locus of control (Hassall, Rose, & McDonald, 2005).

An exploratory focus group study was conducted with caregivers of special needs loved ones to determine barriers to special needs financial planning (Lauderdale, Durband, Scott, & Springer, 2010; Springer & Lauderdale, 2019). Common barriers were identified in themes of guardianship selection issues, relational and emotional stressors, navigating life issues, and trying to plan for the unknown (Springer & Lauderdale, 2019). The major issues identified as barriers were not typical financial planning issues but rather many related to psycho-social aspects of planning. Many tools exist to assist in special needs planning to help with financial well-being, but even the best plan is not helpful unless it can be implemented within a family and among the individuals who will be a part of the current and future plan (Lauderdale, Walther, & Springer, 2017).

Many researchers focus on the overall well-being of families and caregivers of disabled loved ones. However, minimal research has been conducted on the objective financial well-being of families with disabled/chronically ill loved ones and no empirical studies were found examining the subjective financial well-being among families with disabled/chronically ill loved ones. Results from this study can help inform planners and professionals on how they work with families with disabled/chronically ill loved ones.

### **Theoretical/Conceptual Framework**

Psychology plays a significant role in financial behaviors. Optimistic or impulsive attributes, how individuals approach challenges, and whether one feels in control of their future have been found to impact financial capability (Shephard, Ko, & Zikos, 2018). Optimism correlates with positive beliefs about future economic conditions and is related to numerous work/life choices. Puri and Robinson (2007) found more optimistic people work harder, expect to retire later, are more likely to remarry, invest more in individual stocks, and save more. When comparing moderate optimists to extreme optimists, moderates display reasonable financial habits and extreme optimists display financial habits and behavior that are generally not considered prudent (Puri & Robinson, 2007).

Positive psychology is rooted in original work by Seligman & Csikszentmihalyi (2000) where they began to outline the framework to “build the factors that allow individuals, communities, and societies to flourish.” Seligman (2003) said that positive psychology is about ‘happiness’. As he continued to build upon his work on positive psychology, Seligman presented his well-being theory (2012) and suggested that five core elements serve as a construct with each measurable, essential element contributing to well-being. The five constructs are referred to as PERMA and include positive emotions, engagement, positive relations, meaning, and

achievement/accomplishment. Positive emotions are those such as happiness, optimism, pleasure, and enjoyment. Engagement is often referred to as “flow” and is more about focus, concentration, being in-the-zone, and contentment. Relationships include positive, supportive, and intimacy among friends and family. Meaning looks to our purpose in life, beliefs, personal significance, and impact on the world around us. Achievement is a feeling of a sense of accomplishment, self-satisfaction, and fulfillment of reaching goals.

Seligman’s PERMA model has application across education, economics, therapy, medicine, and public policy (Seligman, 2012). With the rise in research related to financial therapy, the use of positive psychology, and the PERMA framework related to financial planning is on the rise. Asebedo and Seay (2014) examined positive psychological attributes and retirement satisfaction. In 2015, Asebedo and Seay applied their research to practice and clearly articulated how traditional psychology focuses on deficits, such as mental illness, where neutral is mental functioning and strengths are would be represented by flourishing in life. When applied to financial planning, the deficit is needs-focused such as being in debt, neutral is financially functioning and positive psychology is represented by flourishing in life to “use money as a tool to optimize well-being.”

While PERMA has been interpreted as a different type of well-being, Seligman (2018) clarifies it is not. PERMA constructs serve as the building blocks of well-being. Selegman (2011) also suggests that learned optimism is valuable regardless of one’s phase in life. Better understanding families with disabled/chronically ill children and what role PERMA plays, financial therapists and other professionals can better assist.

The PERMA framework has been used to examine flourishing in life across many domains. PERMA has broad application and has been used to measure well-being among

classical musicians (Ascenso, Perskings, & Williamon, 2018) and in human resources (Mayo, Velaz, Nieto, & Sanchez, 2019). When applying PERMA to students with disabilities, PERMA was negatively associated with college difficulty, meaning failure, and positively associated with college success (Tansey, Smedema, Umucu, Iwanaga, Wu, Cardoso, & Strauser, 2018). PERMA has also been found to vary across cultures when applied to a Malaysian sample (Khaw & Kern, 2014). However, subjective financial well-being has not been examined using the PERMA model among families with disabled/chronically ill children.

### **Statement of Research Questions/Hypotheses**

Operationalized through Seligman's PERMA constructs (2012), this research strives to answer whether positive psychology attributes predict one's subjective financial well-being while taking into account whether parents have a child with a disability/chronic mental illness. Due to the nature of having children with chronic disease/disability, the baseline levels of positive psychology traits are hypothesized to be different. The following hypotheses are proposed.

H1: Having a child with a disability/chronic mental illness is negatively associated with subjective financial well-being.

H2: Positive emotions are positively associated with subjective financial well-being.

H3: Having a child with a disability/chronic mental illness moderates the effects of positive emotions on subjective financial well-being.

H4: Positive engagements are positively associated with subjective financial well-being.

H5: Positive relationships are positively associated with subjective financial well-being.

H6: More meaning in one's life is positively associated with subjective financial well-being.

H7: Greater achievement in one's life is positively associated with subjective financial well-being.

## **Methodology**

### **Data and Sample Characteristics**

Midlife in the United States (MIDUS) began in 1995 as a general population survey conducted by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development (MIDMAC) to examine the areas of physical health, psychological well-being, and social responsibility. MIDUS Refresher was conducted during 2011-2013 to provide cross-sectional information on 3,577 English-speaking adults age 25-74 (Ryff, et al, 2017a). These data were nationally representative and were collected through 30-minute telephone interviews followed up by two 50-page questionnaires delivered via mail. Oversampling of five metropolitan areas was also included. The MIDUS projects examine respondents on behavioral, psychological, financial, and social questions that are useful for this study and this Refresher also covered questions regarding the economic recession and its impact. Many psychosocial constructs and composite variables were embedded in the data and a construct and variable guide is provided with the data download (Ryff et al., 2017b).

For this study, the sample will include all respondents who completed the self-administered questionnaire (SAQ) and to parents of living children of any age. Several key variables are contained within the SAQ and would otherwise be missing. These reduced the sample from 3,577 to 2,035.

Missing data were handled using two different methods. Net worth had almost 11% of the analytic sample responses listed as missing/refused to answer. Utilizing listwise deletion was not appropriate because net worth is unlikely to be missing at random and would likely bias the results. A separate dummy category was created for refused net worth to preserve and properly

categorize those cases. Listwise deletion was used to handle all other missing data that had less than 2% of the analytic sample missing. The final complete cases included 1,924 observations comprised of families with and without children without disability/chronic mental illness.

## Measurement of Variables

### Dependent Variable

A subjective financial well-being measurement was constructed. An exploratory factor analysis was employed to identify the appropriate subjective financial well-being measurement more carefully. Modeled after prior researchers' use of subjective financial well-being in MIDUS (Zyphur, Li, Ahang, Arvey, & Barsky, 2015), six items were examined for inclusion. After running a correlation analysis followed by exploratory factor analysis, the following five variables loaded into one factor.

**Table 3-1 Subjective Financial Well-being Construct - 5 items**

Variable	Item
Subjective Financial Well-being	1. Using a scale from 0 to 10 where 0 means "the worst possible financial situation" and 10 means "the best possible financial situation," how would you rate your financial situation these days?
Subjective Financial Well-being	2. Looking ahead ten years into the future, what do you expect your financial situation will be like at that time?
Subjective Financial Well-being	3. Using a 0 to 10 scale where 0 means "no control at all" and 10 means "very much control," how would you rate the amount of control you have over your financial situation these days?
Subjective Financial Well-being	4. In general, would you say you (and your family living with you) have more money than you need, just enough for your needs, or not enough to meet your needs?
Subjective Financial Well-being	5. How difficult is it for you (and your family) to pay your monthly bills - very difficult, somewhat difficult, not very difficult, not at all difficult?

The five items in Table 3-1 were averaged to measure subjective financial well-being. Number 4 was reverse coded where more money than you need was highest at 10, just enough money at 5, and not enough money at 0. These five items plus one additional item asking respondents to indicate the amount of thought and effort placed on finances were analyzed. The five items were normalized 0-10 and averaged, resulting in a minimum of 0 and a maximum of 10.

### **Control Variables**

The age of the respondent, sex, and race/ethnicity were control variables. Age was continuous. Sex was binary and was recoded where 1 was male and 0 was female. Race and ethnicity were combined into dummy categories of White, Hispanic, Black, and Other. Highest level of education attained was measured using dummy categories of less than high school, high school, some college, college, and graduate degree. Household total income in continuous dollar amounts includes wages, pension, social security, and other income. Income responses exceeding \$998,000 were top-coded and included but set to that limit. Income was transformed using the log function to achieve a more normal distribution.

Net worth was calculated by combining a series of variables. First, respondents were asked, "Suppose you cashed in all of your checking and savings accounts and sold your homes, vehicles, stocks and bonds, real estate, and all of your valuable possessions. Then suppose you put that money toward paying off your mortgage and all of your other loans, debts, and credit cards. After paying your debts, would you still be in debt, just break even, or have a positive balance?" A follow-up question was asked regarding how much would be owed or how much would the respondent have. These responses were combined into one continuous net worth variable. Negative net worth exceeding \$300,000 and a positive net worth exceeding \$9,998,000



were bottom-coded and top-coded and included but set to those limits. Due to those limitations of the data, the results were then grouped into dummy categories.

Highest level of education attained was measured using dummy categories of less than high school, high school, some college, college, and graduate degree.

**Independent Variables**

Respondents were asked if they have a child with a chronic disability or disease, which was coded as yes 1 (disabled/chronically ill child) and 0 (no disabled/chronically ill child).

Positive psychology attributes of PERMA are represented as follows.

**Positive emotion** was operationalized by using the life orientation test of optimism overall embedded in the MIDUS Refresher.

**Optimism overall** was measured using a summed six-item scale shown in Table 3-2 (Scheier & Carver, 1985; Scheier, Carver & Bridges, 1994; and Schulz, Bookwala, Knapp, Scheier, & Williamson, 1996). Respondents were asked whether they 1 (*a lot agree*) to 5 (*a lot disagree*).

**Table 3-2 Optimism Overall 6-Item Scale**

Variable	Item
Optimism Overall: Optimism	1. In uncertain times, I usually expect the best.
Optimism Overall: Optimism	2. I'm always optimistic about my future.
Optimism Overall: Optimism	3. I expect more good things to happen to me than bad.

Optimism questions were reverse coded so that higher scores represent higher levels of optimism. Means values were used to impute missing data. The scale was computed for cases that have valid values for at least three items on the scale. The scale score was considered missing for cases with fewer than three items on the scales.

**Engagement** was measured by reading books/magazines/news (Asebedo & Seay, 2014). Reading books was coded as an ordinal variable based on frequency from 1-6 with 6 being the highest frequency.

**Positive relationships** were measured using two scales, support from family solidarity and support from friend solidarity, and both were embedded in MIDUS Refresher (Shuster, Kessler, & Aseltine, 1990; Whalen & Lachman, 2000).

*Family affectual solidarity* was an eight-item scale described in Table 3-3.

**Table 3-3 Family Affectual Solidarity 8-Item Scale**

Variable	Item
Family Solidarity	1. Do they care about you?
Family Solidarity	2. Do they understand the way you feel about things?
Family Solidarity	3. Can you rely on them for help if you have a serious problem?
Family Solidarity	4. Can you open up to them if you need to talk about your worries?
Family Solidarity	5. Do they make too many demands on you?
Family Solidarity	6. Do they criticize you?
Family Solidarity	7. Do they let you down when you are counting on them?
Family Solidarity	8. Do they get on your nerves?

Respondents were asked to answer the first four questions with 1 (*A lot*) to 4 (*Not at all*) and the last four questions 1 (*Often*) to 4 (*Never*). Scales were constructed by calculating the mean of the values of the items in each scale. Items were reverse coded so that high scores reflect higher standing in the scale. The scores were summed, and any missing data were imputed by using the mean of the other scores.

*Friend affectual solidarity* was a four-item scale described in Table 3-4.

**Table 3-4 Support From Friends 4-Item Scale**

Variable	Item
Friend Solidarity	1. How much do your friends really care about you?
Friend Solidarity	2. How much do they understand the way you feel about things?
Friend Solidarity	3. How much can you rely on them for help if you have a serious problem?
Friend Solidarity	4. How much can you open up to them if you need to talk about your worries?
Friend Solidarity	5. How often do your friends make too many demands on you?
Friend Solidarity	6. How often do they criticize you?
Friend Solidarity	7. How often do they let you down when you are counting on them?
Friend Solidarity	8. How often do they get on your nerves?

Respondents were asked to answer each question with 1 (*A lot*) to 4 (*Not at all*). Scales were constructed by calculating the mean of the values of the items in each scale. Items were reverse coded so that high scores reflect higher standing in the scale and missing data were imputed using the mean of other scores in the scale. The scale was computed for cases that had valid values for at least one item on the scale.

**Meaning** was measured by a proxy of religiosity.

**Religiosity** was measured using a three-item scale on private religious practices embedded in the MIDUS Refresher and described in Table 3-5 (Koenig, Parkerson, & Meador, 1997).

**Table 3-5 Religiosity 3-Item Scale**

Variable	Item
Religiosity	1. Pray in private?
Religiosity	2. Meditate or chant?

The scale included summed responses of the frequency responses for each question. Respondents were asked to answer with 1 (*Once a day or more*), 2 (*A few times a week*), 3 (*Once a week*), 4 (*1-3 times per month*), 5 (*Less than once per month*); or 6 (*Never*). Responses were reverse coded where higher scores represent a higher frequency of practice and standing in the scale. The scale was computed if at least two items were answered. If only one question was answered then the scale was considered missing.

**Accomplishment** was operationalized through *achievement*. Respondents were asked whether they 1 (*Strongly agree*) to 7 (*Strongly disagree*) to the statement that “in many ways, I feel disappointed about my achievements in life.” The item was recoded so that high scores reflect achievement rather than disappointment in lack of achievement.

### **Analyses**

Two multivariate analyses were employed to operationalize positive psychology attributes and having a child with a disability/chronic mental illness on subjective financial well-being while taking into account the control variables previously described. An ordinary least squares regression was utilized to measure the main effects of the independent variables. Even though the independent variable of subjective financial well-being was bound by a minimum and maximum possibility, the scale combined means of five responses rather than whole numbers resulting in continuous interval measurements between 0 and 10. The main effects regression was performed where subjective financial wellbeing ( $y$ ) was equal to the sum of the intercept plus each regression coefficient times the explanatory variables plus the regression coefficient times the control variables as shown below:

$$y = \beta_0 + \beta_1 \text{DisabledChild} + \beta_2 \text{Optimism} + \beta_3 \text{Reads} + \beta_4 \text{FamilySolidarity} \\ + \beta_5 \text{FriendSolidarity} + \beta_6 \text{Religiosity} + \beta_7 \text{Achievement} + \beta \text{Controls}$$

Since the impact of optimism was expected to have a different effect on subjective financial well-being for families with a disabled/chronically ill child than those without, an interaction model was employed interacting disabled child and optimism. This method allowed the effect of optimism to differ based on the disabled/chronically ill child status. The interaction effects regression was performed where subjective financial wellbeing ( $y$ ) was equal to the sum of the intercept plus each regression coefficient times the explanatory variables plus the regression coefficient times the control variables as shown below:

$$y = \beta_0 + \beta_1 \text{DisabledChild} + \beta_2 \text{Optimism} + \beta_3 \text{Optimism} * \text{DisabledChild} + \beta_4 \text{Reads} \\ + \beta_5 \text{FamilySolidarity} + \beta_6 \text{FriendSolidarity} + \beta_7 \text{Religiosity} \\ + \beta_8 \text{Achievement} + \beta \text{Controls}$$

The multivariate analyses were unweighted. Variance inflation factors were assessed in the main effects model to rule out multicollinearity issues.

## **Results**

### **Descriptive Results**

Unweighted descriptive results can be found in Table 3-6. Respondents were more financially well than not with an average of 5.98 out of 10 being reported. Over 12% of respondents have children with a disability or chronic illness. Most respondents were married or cohabitating (77%). Respondents were generally optimistic reporting 11.5 out of 15, reads frequently (5.15 out of 6). Respondents report high family solidarity (3.24 out of 4) and similar friend solidarity (3.25 out of 4). They were somewhat religious (9.13 out of 18) and feel a modest sense of achievement (5 out of 8).

Households report high annual incomes of \$121,019 an average net worth of over \$1.1M. Over 10% refused to respond to net worth so a dummy variable was created for the analytical sample. The respondents were highly educated with over 25% having a college degree and another 22% with graduate degrees. Respondents were almost 53 years on average and mostly female (53%) and White non-Hispanic (82%).

**Table 3-6 Descriptive Statistics for Complete Cases Parents with Living Children (1924)**

Variable	Proportion/ Mean	Min	Max
Subjective Financial Well-being	5.98	0	10
Disabled Child	12.32%		
Optimism	11.50	3	15
Reads (Engagement proxy)	5.15	1	6
Family Solidarity	3.24	1	4
Friend Solidarity	3.26	1	4
Religiosity	9.31	3	18
Achievement	5.10	1	7
<b>Control Variables</b>			
Income (HH)	\$ 121,019	-	999,998
Net Worth (HH)	\$ 1,143,002	(300,000)	9,999,998
Negative	10.60%		
Even	18.76%		
Up to 149K	18.09%		
150K - 499K	16.11%		
500-999K	8.84%		
1Mplus	17.36%		
Refused	10.08%		
<b>Education</b>			
Less than HS	5.98%		
HS	16.89%		
Some College	29.94%		
College	25.05%		
Grad Degree	21.99%		
Married/Cohab	77.34%		
Age	52.77		
Male	46.73%		
<b>Race</b>			
White non-Hispanic	81.76%		

Black non-Hispanic	6.39%
Hispanic	3.95%
Asian/Other non-Hispanic	7.74%

*Note:* Unweighted. Sample limited to respondents who completed the Self-Administered Questionnaire (SAQ). Data Source: MIDUS Refresher. Variables represent respondent information unless otherwise noted as household (HH).

## Multivariate Results

Ordinary least squares regressions were utilized for both the main effects and interaction models. Table 3-7 shows the results of the main effects model. Having a disabled child was negatively associated with subjective financial well-being ( $p = .0464$ ). Optimism ( $p < .0001$ ), reading ( $p = .0139$ ), and achievement ( $p = .0244$ ) were positively associated with subjective financial well-being. Religiosity was negatively associated ( $p = .0035$ ) with subjective financial well-being. The control variable showed high levels of significance. Log income and all positive net worth categories, when compared to no net worth, were all positively associated with subjective financial well-being while negative net worth was negatively associated. When compared to some college, having a college degree or a graduate degree were positively associated and less than college was negatively associated with subjective financial well-being. Being married/cohabitating and being Hispanic when compared to White non-Hispanic were also positively associated. Age was negatively associated with subjective financial well-being. The adjusted R-squared was .3779 suggesting that the model explains 37.79% of the variance in subjective financial well-being was explained by the main effects model. Variance inflation factors were all assessed and no multicollinearity issues were identified.

**Table 3-7 Main Effects Model: OLS Regression on Subjective Financial Well-Being (N=1,924)**

Variable (Reference Group)	B	SE $\beta$	p	VIF
Intercept	0.8333	0.4267	0.0510	0.0000

Disabled Child	-0.2456	*	0.1232	0.0464	1.0317
Optimism	0.1270	***	0.0181	<.0001	1.2787
Reads	0.0815	**	0.0331	0.0139	1.1706
Family Solidarity	0.1435		0.0880	0.1033	1.3750
Friend Solidarity	0.1505		0.1004	0.1340	1.3296
Religiosity	-0.0285	**	0.0098	0.0035	1.1200
Achievement	0.2261	***	0.0244	<.0001	1.3314
Control Variables					
Log Income (HH)	0.0684	***	0.0148	<.0001	1.1300
Net Worth (HH) (Even NW)					
Negative	-0.5726	***	0.1547	0.0002	1.4262
Up to 149K	0.3127	**	0.1329	0.0187	1.6458
150K - 499K	1.2657	***	0.1411	<.0001	1.6936
500-999K	1.6395	***	0.1715	<.0001	1.4905
1Mplus	1.8334	***	0.1444	<.0001	1.8823
Refused	0.5076	**	0.1587	0.0014	1.4370
Education (Some College)					
Less than HS	-0.3843	*	0.1832	0.0360	1.1859
HS	-0.0815		0.1229	0.5074	1.3334
College	0.2236	*	0.1100	0.0422	1.4295
Grad Degree	0.5198	***	0.1163	<.0001	1.4593
Married/Cohab	0.3412	**	0.1058	0.0013	1.2348
Age	-0.0076	*	0.0034	0.0237	1.3618
Male	0.1210		0.0867	0.1633	1.1779
Race (White non-Hispanic)					
Black non-Hispanic	0.0772		0.1736	0.6566	1.1339
Hispanic	0.4082	*	0.2077	0.0495	1.0292
Asian/Other non-Hispanic	0.1154		0.1526	0.4493	1.0459
<hr/> MODEL FIT STATISTICS <hr/>					
R Squared	0.3856				
Adjusted R Squared	0.3779				

Source: MIDUS Refresher

Note: Unweighted. \*\*\*p<.001, \*\*p<.01, \*p<.05

Looking to the interaction model shown in Table 3-8, optimism and having a disabled/chronically ill child were interacted allowing for the effects of optimism to be contingent on the disabled child status. The interaction effect was significant ( $p = .0445$ ). The



interaction model shows a slight improvement from the main effect model. Adjusted R-squared was .379 suggesting that the model explains 37.9% of the variance in subjective financial well-being was explained by the main effects model.

**Table 3-8 Interaction Model: OLS on Subjective Financial Well-Being (N=1,924)**

Variable (Reference Group)	B		SE $\beta$	p
Intercept	0.9677	*	0.4310	0.0249
Disabled Child	-1.2948	*	0.5093	0.0111
Optimism	0.1124	***	0.0194	<.0001
Optimism*Disabled Child	0.0945	*	0.0445	0.0339
Reads	0.0803	*	0.0331	0.0153
Family Solidarity	0.1356		0.0880	0.1236
Friend Solidarity	0.1677		0.1006	0.0959
Religiosity	-0.0290	**	0.0097	0.0029
Achievement	0.2241	***	0.0244	<.0001
Control Variables				
Log Income (HH)	0.0700	***	0.0148	<.0001
Net Worth (HH) (Even NW)				
Negative	-0.5588	***	0.1547	0.0003
Up to 149K	0.3205	*	0.1328	0.0159
150K - 499K	1.2717	***	0.1410	<.0001
500-999K	1.6425	***	0.1714	<.0001
1Mplus	1.8362	***	0.1443	<.0001
Refused	0.5061	**	0.1586	0.0014
Education (Some College)				
Less than HS	-0.3890	*	0.1830	0.0337
HS	-0.0866		0.1228	0.4809
College	0.2287	*	0.1099	0.0376
Grad Degree	0.5240	***	0.1162	<.0001
Married/Cohab	0.3348	**	0.1058	0.0016
Age	-0.0076	*	0.0034	0.0251
Male	0.1262		0.0867	0.1458
Race (White non-Hispanic)				
Black non-Hispanic	0.0864		0.1735	0.6183
Hispanic	0.4128		0.2075	0.0468
Asian/Other non-Hispanic	0.1106		0.1524	0.4681

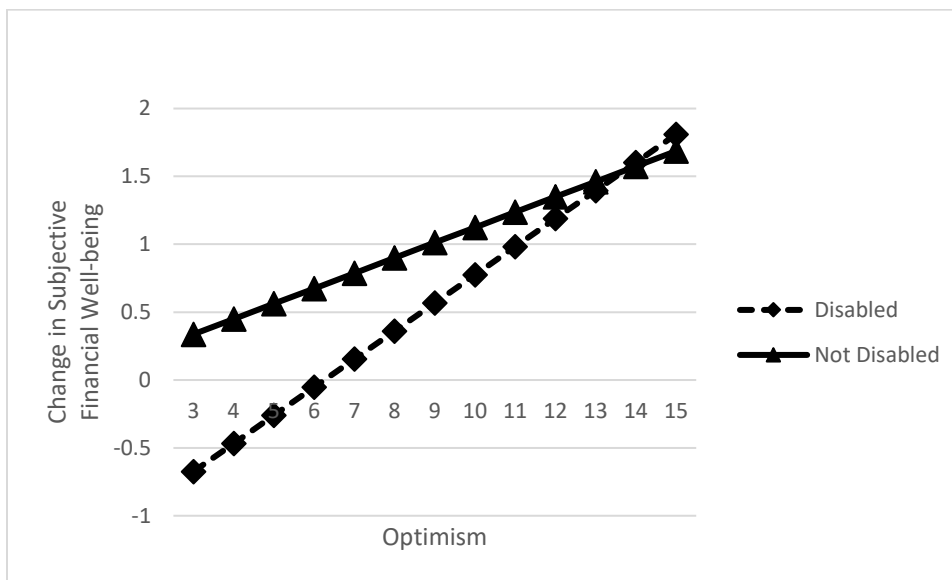
**MODEL FIT STATISTICS**

R Squared 0.3871

Source: MIDUS Refresher

Note: Unweighted. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ 

Figure 3-1 illustrates the relationship among optimism, having a child with a disability/chronic illness, and the change in subjective financial well-being. A steeper slope on the families with a disabled/chronically ill child implies that the higher the optimism the greater the positive change in subjective financial wellbeing.



**Figure 3-1 The Effect of Optimism on Subjective Financial Well-being by Having a Disabled/Chronically Ill Child**

## Discussion

The purpose of this study was to determine whether positive psychology attributes, defined by Seligman's PERMA constructs (2012), predict a parent's subjective financial well-being and whether having a child with a disability/chronic mental illness made an impact.

The results are in line with the first hypothesis that having a disabled/chronically ill child has a negative effect on subjective financial well-being. While no research was found examining the subjective financial well-being of families with a disabled/chronically ill child, it is in line

with existing evidence that having a disabled/chronically ill child has a negative effect on objective financial well-being (Parish, Rose, Swaine, Dababnah, & Mayra, 2012; Stoddard-Dare, DeRigne, Quinn, & Mallett, 2015). The positive emotion of optimism plays a positive role in subjective financial well-being and is in line with previous research indicating psychological aspects of money have been shown to contribute to one's happiness (Johnson & Krueger, 2006). While not specific to the financial domain of well-being, Fotiadou et al. (2008) found optimism to be positively correlated with life satisfaction among parents of children with cancer and children without cancer.

As hypothesized, the positive emotion of optimism is moderated by having a disabled/chronically ill child. Essentially the magnitude of the effect of optimism is impacted but not the positive directional association with subjective financial well-being. Comparing families with a disabled/chronically ill child to those having children without, the effect of optimism is greater for those with a disabled/chronically ill child. Positive emotions are powerful in life and especially powerful in relation to predicting subjective financial well-being.

As predicted, engagement is a positive predictor of subjective financial well-being. While the measurement options were limited in the data, reading has been used in prior studies (Asebedo & Seay, 2014) and was the best proxy available. One's ability to focus and be engrossed in experiences are more likely to have higher subjective financial well-being. Meaning in life was measured by religiosity. Not an expected result, religiosity has a negative relationship with subjective financial well-being. While this could be a measurement issue due to the proxy of religiosity for meaning in life, it also could be explained by the common practice of tithing for those who are religious thus affecting one's budget and their overall subjective financial well-being.

Contrary to expectation, positive relationships with others is not significant. Family solidarity and friend solidarity are not significant predictors. The last element of PERMA to discuss was accomplishment, measured by a sense of achievement. Sense of accomplishment is one of the strongest predictors of subjective financial well-being among parents of living children.

Four out of the five elements of PERMA predict subjective financial well-being among parents of living children with three positive associations and one negative association. Positive emotions, engagement, and accomplishment are all positive predictors of subjective financial well-being among parents. Not in line with what was expected, meaning (measure by religiosity) is a negative predictor.

Having a child with a disability/chronic mental illness plays two separate roles in this study. First, there is a main negative effect on subjective financial well-being. There is also a moderating effect, whereby the positive effect of optimism on subjective financial well-being is dependent on the status of having a disabled/chronically ill child. While positive emotions positively predict subjective financial well-being, when considering those with a disabled/chronically ill child, the impact is not the same.

Interpretation of these results needs to be considered in light of limitations. Self-reported data inherently have their own limitations. Additionally, these data only represent a snapshot in time due to the cross-sectional nature and cannot be interpreted as causal. Access to data on families with disabled/chronically ill children is limited and generally represent a small portion of any population.

## Conclusion

Operationalized through Seligman's PERMA constructs (2012), this research strives to answer whether positive psychology attributes impact one's subjective financial well-being and if having a disabled or chronically ill spouse or child has an impact. Positive emotions, positive engagements, positive relationships, more meaning in one's life, and greater achievement in one's life were hypothesized to be positively associated with subjective financial well-being.

Having a child with a disability/chronic mental illness has a main negative effect on subjective financial well-being and a moderating effect, whereby the positive effect of optimism on subjective financial well-being was dependent on the status of having a disabled/chronically ill child. While positive emotions positively predict subjective financial well-being, when considering those with a disabled/chronically ill child, the impact was not the same.

Families with a disabled/chronically ill child start with a lower baseline subjective financial well-being, however, this research suggests it is possible to overcome that lower baseline with greater optimism. Optimism plays a larger role in predicting subjective financial well-being for families with a disabled/chronically ill child than families with child without disability/chronic illness. Working with families to increase optimism could positively impact their subjective financial well-being. Financial therapy could play an important role in supporting families with disabled/chronically ill children. Future research on best methods to improve optimism in families with disabled/chronically ill children could establish a best practice for working with families with disability.

With very little research being conducted in this area, this research helps contribute to the body of literature to begin to better understand financial planning needs and perceptions of families with disabled/chronically ill children. While adding to the literature to better understand

families with disabled/chronically ill children, this also adds to the literature emphasizing the importance of the psychosocial aspects of subjective financial well-being for parents. Positive psychology plays a role in addition to the typical financial predictors when examining subjective financial well-being. Future longitudinal studies examining changes in PERMA elements and their impact on subjective financial well-being could be helpful to researchers and financial professionals.

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# **Chapter 4 - Caretaker Life Satisfaction: Subjective Financial Well-Being and Caretaking Domains**

## **Introduction and Statement of Purpose**

Approximately 43.5 million caregivers have provided informal, unpaid care to an adult or child in the last 12 months and about 34.2 million Americans have provided informal unpaid care to an adult age 50 or older in the last year (National Alliance for Caregiving and AARP, 2015). Informal caregivers' economic value has steadily increased over the last decade, with an estimated economic value of \$470 billion in 2013, up from \$450 billion in 2009 and \$375 billion in 2007 (AARP Public Policy Institute, 2015). According to the CDC, over 61 million adults in the United States are living with a disability (Centers for Disease Control and Prevention, 2018). About 17% of children (3-17) have one or more developmental disabilities and diagnoses are on the rise (Zablotsky et al., 2019). Having a disability/chronic mental illness can range in severity and impact and can have a profound effect on the entire family including parents, spouses, children, siblings, and extended family.

Caregivers of both adults and children with disabilities are more likely to suffer lost income or wages, but having a child with disabilities doubles the risk of lost income when compared to caring for elderly or older disabled/chronically ill persons (Earle & Heymann, 2012; Sharpe & Baker, 2007). Caring for a disabled/chronically ill family member often takes a toll physically, financially, socially, and emotionally on loved ones (Springer & Lauderdale, 2019). Some individuals and families fare much better than others. Identifying traits and actions which may improve the finances and life satisfaction of those with disabled/chronically ill family members could better prepare professionals to assist families who may be impacted.

Operationalized using Herrman's interactive model of resilience (2011), this study seeks to answer how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction using the National Survey of Midlife Development Refresher in the United States of America with children living in the home in 2011-2014 MIDUS Refresher (Ryff et al., 2017a). In particular, does the effect vary across recipient domain types of children, spouses, parents, and others, and does the intensity of care provided matter?

## **Review of Literature and Theoretical Framework**

### **Caregiving**

According to the Family Caregiver Alliance (2019), the average age of informal caregivers in the US is 49.2 years old with 48% of caregivers ages between 18 and 49 years old. On average, caregivers spend 13 days per month on homemaking tasks and giving medications, 6 days per month assisting with activities of daily living (ADL), and 13 days per month researching and managing medical and financial matters. Over half (57%) of caregivers report no choice in performing clinical and ADL tasks with 43% reporting no one else can or insurance will not cover the support, 12% feel pressure from the care recipient, and 8% feel pressure from other family members to provide the care. Family caregivers spend an average of 24.4 hours per week providing care to loved ones and those who reside with the family member spend more like 40 hours per week (Family Caregiver Alliance, 2019).

Over 85% of caregiving is provided by a relative or other loved one and caring for a parent continues to be the primary caregiving situation (National Caregiving Alliance, 2019). Caring for a spouse was reported to be 44.6 hours per week were caring for a minor child was less than 30 hours per week (National Caregiving Alliance, 2019). Disparities among caregiver race and ethnicity have been identified where Black female caregivers provide higher levels of

care than males of all ethnicities and White females (Cohen et al., 2019). Black caregivers were found to have spent 28.5 more hours per month than White caregivers (Cohen et al., 2019), and more than half report being sandwiched between providing care for an older person and a minor child (National Caregiver Alliance, 2019). Similar to the population distribution, the majority (62%) of caregivers in the United States are White followed by 17% Hispanic and 13% Black (National Caregiver Alliance, 2019).

Caregiving is frequently found to be associated with increased stress, declining physical health, and poor psychological outcomes (Luchetti, Terracciano, Stephan, Aschwanden, & Sutin, 2020; Pinquart & Sörensen, 2003). Non-cognitive traits have been found to increase resilience among caregivers of older relatives. Luchetti et al. (2019) found that caregivers had higher neuroticism, lower energy level, and higher compassion/agreeableness than non-caregivers and that personality traits had strong associations with psychological outcomes but no difference among caregivers and non-caregivers. Caregiver differences, such as personality, may moderate caregivers' impact. In a longitudinal study, researchers confirmed that informal caregiving did reduce life satisfaction, but was unable to confirm physical and mental health decline after one year (Hajek & König, 2018). Agreeableness has been found to moderate the negative effect of informal caregiving on life satisfaction (Hajek & König, 2018).

Caregivers face financial burdens as a consequence of caregiving (Earle & Heymann, 2012; Sharpe & Baker, 2007). Caregiving responsibilities compete with employment opportunities. Nevertheless, there may be some form of self-selection into caregiving suggested by the research findings of Lee, Tang, Kim, and Albert (2014) that women with lower household income were more likely than women with higher household income to take on caring responsibilities.

Caregivers are often found to be responsible for managing financial planning responsibilities to identify plans for the future of the disabled loved one. Barriers to successful planning were discussed in a focus group study including future guardianship identification issues, relational and emotional stressors, navigating the details, and fear of the future unknown (Lauderdale, Durband, Scott, & Springer, 2010; Springer & Lauderdale, 2019).

## **Resilience**

Herrman et al. (2011) suggest that resilience is dynamic across a lifespan and that personal, biological, and environmental or systemic sources of resilience can affect one's ability to positively adapt. Resilience can be defined not only by the absence of negative psychopathology but how one can dynamically adapt to adversity; this can also be applied to physical stress sensitivity (Rutten et al., 2013). Models of resilience across disciplines now focus on one's ability to successfully adapt when facing adversity (Kim & Knight, 2016; Herrman et al., 2011).

Personal factors such as personality traits, locus of control, mastery, self-efficacy, self-esteem, and optimism all play a role in resiliency. Intellectual functioning, coping, hardiness, emotional regulation, and positive emotions are all associated with resilience (Herrman et al., 2011). Social relationships and demographic factors such as age, sex, gender, race, and ethnicity play a role as well (Herrman et al., 2011). When caring for patients with cancer, daily emotional support and personal mastery moderated caregiver experiences and depression (Nijboer, Tempelaar, Triemstra, van de Bos, & Sanderma, 2001).

Biological factors can manifest through brain changes after traumatic life events such as low infant nurturing, poor relationships, and facing adversity (Herrman et al., 2011). Cortisol levels even have been found to contribute to resilience when interacted with maltreated children



(Chicchetti & Rogosch, 2007). Caregivers have been found to have poor physical health and activity limitations (Anderson et al., 2013; Yamaki et al., 2009) and beyond that have been found to have increased mortality risk (Fredman et al., 2008; Perkins et al., 2013) and engage in behaviors that could lead to poorer health outcomes (Grossman & Webb, 2016; Hoffman, Lee, & Mendez-Luck, 2012). However, a decreased mortality risk was in two studies (Brown et al., 2009; Fredman, Cauley, Hochberg, Ensrud, & Doray, 2010). Increased incidents of depression have been found in caregivers (Aschbrenner, Greenberg, & Seltzer, 2009; Ghosh & Greenberg, 2009). Diminished mental well-being and cognitive processing have been found through self-reported mental health measures (Anderson et al., 2013; Grossman & Webb, 2016; Roth et al., 2009), but other researchers have found lower levels of depression and better mental health outcomes (Barker et al., 2011; Clay et al., 2013; Magana & Smith, 2006; Piazza et al., 2014). Better caregiver well-being was found in a small number of studies (Grossman & Webb, 2016).

Environmental-Systemic factors such as family and friend support correlate with resilience (Herrman et al., 2011). Family stability, absence of maternal depression, and substance abuse are all positively correlated with resilience. Community factors such as good schools, spirituality, and religion are also positively correlated (Herrman et al., 2011). Caregivers have an increased risk of income and asset poverty (Scharlack et al., 2008) and reduced social participation (Grossman & Webb, 2016; Seltzer et al., 2011).

Not all caregiving outcomes have been negative among researchers. Some researchers have found better caregiver well-being (Riffin et al., 2013; Yamki et al., 2009) and some among specific domains such as spouses (Fredman, Doros, Ensrud, Hochberg, & Cauley, 2009; Park-Lee, Fredman, Hochberg, & Faulkner, 2009; Poulin et al., 2010). Contrary to the caregiver burden theme, the reward and satisfaction of caregiving have also been documented by several

researchers (Heru & Ryan, 2006; Cummings & Kropf, 2015). Older wives experience more happiness providing care than doing other daily chores (Freedman, Cornman, & Carr, 2014).

Caregiving subgroups have been examined before with a focus on experience and mental and physical well-being. Kim and Knight (2016) found direct and indirect associations between personal wisdom-related resources and life satisfaction. The relationship by resource type varied among subgroups. For example, for spouse caregiving, openness to experience had a direct positive link to life satisfaction where emotional regulation was directly related to life satisfaction among caregiving parents (Kim & Knight, 2016). Examining caregivers' life satisfaction across domains through the interactive resiliency model with the inclusion of financial well-being as a resiliency resource is a new contribution to the literature.

### **Statement of Research Questions/Hypotheses**

Operationalized using the model of resilience (Herrman et al., 2011), this study examines how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction and whether the effect varies across recipient domain types.

H1: Subjective financial well-being will be positively associated with life satisfaction.

H2: Caregiving of a child will be positively associated with life satisfaction when compared to other domains.

H3: Higher intensity of caring will be negatively associated with life satisfaction.

H4: Family solidarity will be positively associated with life satisfaction.

H5: Purpose in life will be positively associated with life satisfaction.

## **Methodology**

### **Data and Sample Characteristics**

Midlife in the United States (MIDUS) began in 1995 as a general population survey conducted by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development (MIDMAC) to examine the areas of physical health, psychological well-being, and social responsibility. MIDUS Refresher was conducted during 2011-2013 to provide cross-sectional information on 3,577 English-speaking adults age 25-74 (Ryff et al., 2017a). These data were nationally representative and were collected through 30-minute telephone interviews followed up by two 50-page questionnaires delivered via mail. Oversampling of five metropolitan areas was also included. The MIDUS projects examine respondents on behavioral, psychological, financial, and social questions that are useful for this study and this Refresher also covered questions regarding the economic recession and its impact. Many psychosocial constructs and composite variables were embedded in the data and a construct and variable guide is provided with the data download (Ryff et al., 2017b).

For this study, the sample included all respondents who completed the self-administered questionnaire (SAQ). Several key variables were contained within the SAQ and would otherwise be missing. This restricted the sample from 3,577 down to 2,598. Respondents were asked “Sometimes because of a physical or mental condition, illness, or disability, people have trouble taking care of themselves and require the assistance of friends or relatives. During the last 12 months have you, yourself, given personal care for a period of one month or more to a family member or friend because of a physical or mental condition, illness, or disability?” The sample was limited to those who have provided care in the last 12 months which limited the sample to 304 respondents.

## **Variable Descriptions**

### **Dependent Variables**

The dependent variable was life satisfaction. Life satisfaction was measured using a six-item scale where the respondent was asked to rate each domain of their life overall, work, financial situation, health, relationship with spouse/partner, and relationship with children from 0 (the worst possible) to 10 (the best possible). The relationship with spouse/partner and children was averaged to create one item and then averaged with the remaining items to create an overall mean score (Prenda & Lachman, 2001).

### **Control Variables**

The age of the respondent, sex, marital status, race/ethnicity, and current respondent health were control variables. Age was continuous. Sex was binary and was recoded where male was 1 and female was 0. Married/cohabitating was binary and recoded where yes was 1 and no was 0. Race and ethnicity were combined into dummy categories of White non-Hispanic, Hispanic, Black non-Hispanic, and Other non-Hispanic. Highest level of education attained was measured using dummy categories of less than high school, high school, some college, college, and graduate degree. Current health was self-evaluated and was reverse coded where 1 = poor and 5 = excellent.

Household total income in continuous dollar amounts includes wages, pension, social security, and other income. Income responses exceeding \$998,000 were top-coded and included but set to that limit. Income was transformed using the log function to achieve a more normal distribution.

Net worth was calculated by combining a series of variables. First, respondents were asked, "Suppose you cashed in all of your checking and savings accounts and sold your homes,

vehicles, stocks and bonds, real estate, and all of your valuable possessions. Then suppose you put that money toward paying off your mortgage and all of your other loans, debts, and credit cards. After paying your debts, would you still be in debt, just break even, or have a positive balance?" A follow-up question was asked regarding how much would be owed or how much would the respondent have. These responses were combined into one continuous net worth variable. Negative net worth exceeding \$300,000 and a positive net worth exceeding \$9,998,000 were bottom-coded and top-coded and included but set to those limits. Some refused to provide net worth information. Due to those limitations of the data, the results were then grouped into dummy categories of Negative, Even, Up to 149K, 150K-499K, 500-999K, 1M plus, and refused net worth.

### **Independent Variables**

***Subjective financial well-being.*** A subjective financial well-being measurement was constructed. An exploratory factor analysis was employed to identify the appropriate subjective financial well-being measurement more carefully. Modeled after prior researchers' use of subjective financial well-being in MIDUS (Zyphur, Li, Ahang, Arvey, & Barsky, 2015), five items were examined for inclusion. After running a correlation analysis followed by exploratory factor analysis, the following five variables loaded into one factor.

**Table 4-1 The Subjective Financial Well-being Construct - 5 items**

Variable	Item
Subjective Financial Well-being	1. Using a scale from 0 to 10 where 0 means "the worst possible financial situation" and 10 means "the best possible financial situation," how would you rate your financial situation these days?
Subjective Financial Well-being	2. Looking ahead ten years into the future, what do you expect your financial situation will be like at that time?
Subjective Financial Well-being	4. In general, would you say you (and your family living with you) have more money than you need,

Subjective Financial Well-being	just enough for your needs, or not enough to meet your needs? 4. How difficult is it for you (and your family) to pay your monthly bills - very difficult, somewhat difficult, not very difficult, not at all difficult?
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The five items in Table 4-1 were averaged to measure subjective financial well-being. Number 3 was reverse coded where more money than you need was highest at 10, just enough money at 5, and not enough money at 0. These five items plus one additional item asking respondents to indicate the amount of thought and effort placed on finances were analyzed. The five items were normalized 0-10 and averaged, resulting in a minimum of 0 and a maximum of 10.

**Caring for Domains.** Respondents were asked to identify to whom they have cared for most during the last twelve months. Options included: husband, wife, son, daughter, father, mother, brother, sister, grandfather, grandmother, father-in-law, mother-in-law, and other. Dummy groups were created to include spouse, children, parent, and other.

Respondents were also asked whether the care recipient lived in the household during the time in which care was provided. This was coded as binary 0 (no) and 1 (yes). Four types of care were offered to describe the types of help which were provided. For each of the four variables in Table 4-2, respondents were asked “Because of [his/her] limitations do/did you provide [him/her] personal help with:”

**Table 4-2 Types of Care Provided**

Variable	Item
Types of Care: ADL Help	1. Bathing, dressing, eating or going to the bathroom.
Types of Care: Get Around Help	2. Getting around inside the house or going outside
Types of Care: Home Making Help	3. Shopping, cooking, housework or laundry

**Care intensity.** Respondents self-reported the number of weeks of care was provided in the last twelve months, which was a continuous number up to 52. They also provided the number of hours per week help was provided but the max number was top-coded at 96 or more hours per week.

**Family solidarity** was an eight-item scale described in Table 4-3.

**Table 4-3 Family Solidarity 8-Item Scale**

Variable	Item
Family Solidarity	1. Do they care about you?
Family Solidarity	2. Do they understand the way you feel about things?
Family Solidarity	3. Can you rely on them for help if you have a serious problem?
Family Solidarity	4. Can you open up to them if you need to talk about your worries?
Family Solidarity	5. Do they make too many demands on you?
Family Solidarity	6. Do they criticize you?
Family Solidarity	7. Do they let you down when you are counting on them?
Family Solidarity	8. Do they get on your nerves?

Respondents were asked to answer the first four questions with 1 (*A lot*) to 4 (*Not at all*) and the last four questions 1 (*Often*) to 4 (*Never*). Scales were constructed by calculating the mean of the values of the items in each scale. Items were reverse coded so that high scores reflect higher standing in the scale. The scores were summed, and any missing data were imputed by using the mean of the other scores.

**Purpose in life** was a three-item scale is described in Table 4-4.

**Table 4-4 Purpose in Life 3-Item Scale**

Variable	Item
Purpose in Life	1. I live life one day at a time and don't really think about the future.
Purpose in Life	2. Some people wander aimlessly through life, but I am not one of them.
Purpose in Life	3. I sometimes feel as if I've done all there is to do in life.

All responses were summed. Respondents were asked to answer each question using 1 (*Strongly agree*) to 7 (*Strongly disagree*). The second question was reverse coded, and the scale was coded overall so that higher scores reflect a higher purpose in life. The purpose in life scale was embedded into MIDUS Refresher (Ryff, 1989).

### **Analysis**

An OLS regressions was performed where life satisfaction ( $y$ ) was equal to the sum of the intercept plus each regression coefficient times the explanatory variables plus the regression coefficient times the control variables as shown below:

$$\begin{aligned}
 y = & \beta_0 + \beta_1 \text{SubjFinWellBeing} + \beta_2 \text{CaringforSpouse} + \beta_3 \text{CaringforParent} \\
 & + \beta_4 \text{CaringforSibling} + \beta_5 \text{CaringforOther} + \beta_6 \text{InHouseCare} \\
 & + \beta_7 \text{ADLCare} + \beta_8 \text{GetAroundHelp} + \beta_9 \text{HomemakingHelp} \\
 & + \beta_{10} \text{LifeMgtHelp} + \beta_{11} \text{NumWksPerYr} + \beta_{12} \text{NumHrsPerWk} \\
 & + \beta_{13} \text{FamilySolidarity} + \beta_{14} \text{PurposeInLife} + \beta \text{Controls}
 \end{aligned}$$

Even though the independent variable of subjective financial well-being was bound by a minimum and maximum possibility, the scale combined means or five responses rather than whole numbers resulting in continuous interval measurements between 0 and 10. The multivariate analysis was unweighted. Variance inflation factors were assessed.



## Results

### Descriptive Results

Unweighted descriptive results can be found in Table 4-5. Respondents report relatively high satisfaction with an average of 6.88 out of 10. The subjective financial well-being scale has an average of 5.42 out of 10 with a low of .4 and a high of 7.40. The largest domain of caretakers was those primarily caring for a disabled or chronically ill parent (43.49%). The remaining domains are child (13.01%), spouse (15.51%), grandparent/other (20.07%), and sibling (7.06%). Over half (51.67%) of the respondents provide care in their own homes. Homemaking help has the highest proportion of yeses (85.87%), but all other types of care are relatively high. Over 75% of respondents indicated they provide life management help, almost 65% provide help getting around, and over 50% provide more active help with activities of daily living. On average, respondents help almost 30 weeks out of the year and almost 25 hours a week. Respondents report strong family solidarity with a mean of 3.12 out of 4 and high purpose in life with a mean response of 16.28 out of 21. Household income (\$121,990) and net worth (\$782,304) are both high. Almost 12% of respondents refused to provide net worth therefore a dummy category was created to retain the respondents.

Respondents are highly educated with 20% with a college degree and an additional 20% with a graduate degree. The sample for analysis was an average 54 years old, female (60%), married or cohabitating (68%), White (82%), and mostly healthy (3.4 out of 5).

**Table 4.1 Descriptive Statistics for Complete Cases N = 269**

Variable	Proportion/ Mean	Min	Max
Life Satisfaction	6.8753	1.7	9.8
Subjective Financial Well-being	5.42	0.40	7.40
Caring For			

Child	16.36%		
Spouse	13.01%		
Parent	43.49%		
Sibling	7.06%		
Other	20.07%		
In House Care	51.67%		
Type of Care			
ADL Care	52.42%		
Get Around Care	64.68%		
Home Making Help	85.87%		
Life Management Help	75.46%		
Number of Weeks in Year			
Help	29.5502	0	52
Number of Hours per Week			
Help	24.3160	0	96
Family Solidarity	3.1160	1.375	4.00
Purpose in Life	16.2844	3	21
Income (HH)	\$		
	121,990	0	999,998
Net Worth (HH)	\$		
	782,304	(300,000)	9,999,998
Negative	11.52%		
Even	21.56%		
Up to 149K	21.93%		
150K - 499K	11.52%		
500-999K	8.92%		
1Mplus	12.64%		
Refused	11.90%		
Education			
Less than HS	10.04%		
HS	15.24%		
Some College	33.83%		
College	20.45%		
Grad Degree	20.45%		
Control Variables			
Age	53.78	24.00	76.00
Sex Male	39.41%		
Married/Cohabiting	67.66%		
Race			
White	81.78%		
Black	5.95%		
Hispanic	5.58%		

Asian/Other	6.32%		
Respondent Health	3.4238	1.00	5.00

*Note:* Unweighted. Sample limited to respondents who completed the Self-Administered Questionnaire. Data Source: MIDUS Refresher. Variables represent respondent information unless otherwise noted as household (HH).

**Table 4-5 Descriptive Statistics for Complete Cases (N = 269)**

Variable	Proportion/ Mean	Min	Max
Life Satisfaction	6.88	1.7	9.8
Subjective Financial Well-being	5.42	0.40	7.40
Caring For			
Child	16.36%		
Spouse	13.01%		
Parent	43.49%		
Sibling	7.06%		
Other	20.07%		
In House Care	51.67%		
Type of Care			
ADL Care	52.42%		
Get Around Care	64.68%		
Home Making Help	85.87%		
Life Management Help	75.46%		
Number of Weeks in Year Help	29.55	0	52
Number of Hours per Week Help	24.32	0	96
Family Solidarity	3.12	1.375	4.00
Purpose in Life	16.28	3	21
Income (HH)	\$ 121,990	0	999,998
Net Worth (HH)	\$ 782,304	(300,000)	9,999,998
Negative	11.52%		
Even	21.56%		
Up to 149K	21.93%		
150K - 499K	11.52%		
500-999K	8.92%		
1Mplus	12.64%		
Refused	11.90%		
Education			
Less than HS	10.04%		

HS	15.24%		
Some College	33.83%		
College	20.45%		
Grad Degree	20.45%		
Control Variables			
Age	53.78	24.00	76.00
Sex Male	39.41%		
Married/Cohabiting	67.66%		
Race			
White	81.78%		
Black	5.95%		
Hispanic	5.58%		
Asian/Other	6.32%		
Respondent Health	3.42	1.00	5.00

*Note:* Unweighted. Sample limited to respondents who completed the Self-Administered Questionnaire. Data Source: MIDUS Refresher. Variables represent respondent information unless otherwise noted as household (HH).

### **Multivariate Results**

An ordinary least squares regression was utilized to model life satisfaction. As shown in Table 4-6, subjective financial well-being ( $p < .001$ ), family solidarity ( $p < .001$ ), and purpose in life ( $p = .0025$ ) positively predict life satisfaction. Other positive predictors include those who are providing caretaking through activities of daily living ( $p = .425$ ) and home-making help ( $p = .0005$ ), but getting around help and life management help were not significant. Other negative associations include number of weeks in the year ( $p = .0093$ ) and the number of hours per week ( $p = .0045$ ). Caring for a parent rather than a child ( $p = .0686$ ) and a spouse rather than a child ( $p = .0084$ ) are negatively associated with life satisfaction. Household income was positively associated with life satisfaction among caregivers ( $p = .0588$ ). Control variables of married/cohabiting, age, and respondent health are all positively associated with life satisfaction. Having a graduate degree compared to some college and being male were negatively associated with life satisfaction among caregivers.

**Table 4-6 OLS Regression on Life Satisfaction (N=269)**

Variable (Reference Group)	$\beta$		SE $\beta$	p	VIF
Intercept	-1.5540	**	0.6851	0.0242	0.0000
Subjective Financial Well-being	0.3378	***	0.0330	<.0001	1.9641
Caring For (Ref Child)					
Spouse	-0.6484	**	0.2438	0.0084	1.9093
Parent	-0.3597	†	0.1966	0.0686	2.6947
Sibling	-0.4108		0.2899	0.1579	1.5658
Other	-0.1640		0.2144	0.4452	2.0931
In House Care	0.0988		0.1549	0.5243	1.7008
Type of Care					
ADL Help	0.2790	*	0.1368	0.0425	1.3243
Get Around Help	-0.0415		0.1493	0.7813	1.4450
Home Making Help	0.7423	***	0.2086	0.0005	1.4983
Life Management Help	-0.0753		0.1564	0.6307	1.2855
Number of Weeks in Year Help	-0.0088	**	0.0034	0.0093	1.4006
Number of Hours per Week Help	-0.0074	**	0.0026	0.0045	1.2936
Family Solidarity	0.7102	***	0.1173	<.0001	1.2508
Purpose in Life	0.0599	**	0.0196	0.0025	1.2953
Control Variables					
Log Income (HH)	0.0390	†	0.0205	0.0588	1.2017
Net Worth (HH) (Even NW)					
Negative	-0.0357		0.2280	0.8756	1.5040
Up to 149K	-0.1394		0.1899	0.4635	1.7517
150K - 499K	-0.3730		0.2434	0.1267	1.7132
500-999K	-0.4239		0.2711	0.1193	1.6947
1Mplus	-0.3158		0.2552	0.2171	2.0401
Refused	-0.2326		0.2241	0.3002	1.4928
Education (Some College)					
Less than HS	-0.1908		0.2318	0.4111	1.3761
HS	0.0034		0.1988	0.9865	1.4482
College	-0.2027		0.1759	0.2504	1.4277
Grad Degree	-0.4476	*	0.1841	0.0158	1.5644
Age	0.0248	***	0.0060	<.0001	1.6116
Sex Male	-0.3763	**	0.1398	0.0076	1.3234
Married/Cohabiting	0.4559	**	0.1490	0.0025	1.3781
Race (White non-Hispanic)					
Black non-Hispanic	-0.1961		0.2723	0.4721	1.1769
Hispanic	0.2209		0.2759	0.4240	1.1371
Asian/Other non-Hispanic	0.0557		0.2531	0.8260	1.0757

Respondent Health	0.3453	***	0.0678	<.0001	1.4904
<b>MODEL FIT STATISTICS</b>					
R Squared	0.7100				
Adjusted R Squared	0.6707				

Source: MIDUS Refresher

Note: Unweighted. \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ ,  $t p < .10$

Variance inflations factors were all assessed and no multicollinearity issues were identified. Adjusted R-squared was .6707 suggesting that the model explains 67% of the variance in life satisfaction among caregivers.

## Discussion

According to Herrman et al. (2011), resilience is dynamic across a lifespan and that personal, biological, and environmental or systemic sources of resilience can affect one's ability to positively adapt. While objective financial aspects of caregivers have been examined in the past and researchers found an increased risk of income and asset poverty in caregivers (Scharlack et al., 2008), subjective financial wellbeing as a predictor of life satisfaction has not been explored. In line with personal factors, subjective financial well-being was strong predictor of life satisfaction among caregivers. Income was a positive predictor, but net worth was not. This suggests caregivers place a higher emphasis on cashflow rather than wealth accumulation when considering life satisfaction.

Kim and Knight (2016) found direct and indirect associations between personal wisdom-related resources and life satisfaction. While similar, but not the same, purpose in life was hypothesized to be positive predictor of life satisfaction among caregivers and it was significant. Purpose in life serves as a strong resilience factor in achieving life satisfaction. As a form of environmental systemic support (Herrman et al., 2011), marriage/cohabitating was also found to be strong resilience factor in predicting life satisfaction among caretakers.

Providing additional support that biological and demographic factors such as age, sex, gender, race, and ethnicity play a role in life satisfaction among caregivers (Herrman et al., 2011), this study supports that age is a positive predictor, and males are negative predictors of life satisfaction, but no support was found race and ethnic differences. Even though lower baseline health outcomes are likely for caregivers (Anderson et al., 2013), this research adds that among caregivers, self-reported health is positively associated with life satisfaction. If caregivers can work to maintain their health, they can assist in maintaining higher life satisfaction.

Providing additional support that environmental-systemic factors such as family and friend support correlate with resilience (Herrman et al., 2011), family solidarity was properly hypothesized to be positively associated with life satisfaction. Maintaining strong family relationship are crucial for caregivers. Seeking support through counseling and other outlets should be considered. Providing caretaking through activities of daily living and home-making help were positive predictors, where getting around help and life management help were not.

When considering caregiving domains of child, spouse, parent, and other, caregiving of a child was positively associated with life satisfaction when compared to caring for a spouse or a parent. Even though there is less choice associated with caring for your own child than caring for a parent or a spouse, resilience is stronger within that domain. Resilience has its limits and as expected, higher intensity of caring through both number of weeks and hours in the week were negatively associated with life satisfaction. However, providing support in the home was not a significant predictor of life satisfaction.

This research uniquely identifies the importance of considering subjective financial well-being as part of modeling life satisfaction. Examining caregivers' life satisfaction across domains through the interactive resiliency model with the inclusion of subjective financial well-being as a

personal resiliency resource is a new contribution to the literature. Financial planners can focus on the objective financial situations to help caregivers plan for their future, but this research suggests one's perception of their finances plays a role as well.

All research needs to be reviewed considering its limitations. These data are self-reported and cross-sectional. Due to the lower sample size, the number of independent variables was limited. The purpose of this study was to examine how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction, whether the effect varies across recipient domain types, and what role subjective financial well-being plays among caregivers.

## **Conclusion**

Operationalized using Herrman's interactive model of resilience (2011), this study sought to answer how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction. Examining caregivers' life satisfaction across domains through the interactive resiliency model with the inclusion of subjective financial well-being as a personal resiliency resource is a new contribution to the literature. An emphasis on cashflow over wealth accumulation could be helpful in supporting caretakers as clients. Caretakers own health can assist in achieving higher life satisfaction. Maintaining or developing strong family solidarity is critical. Referring clients for family therapy to focus on family solidarity could assist in achieving higher life satisfaction among caregivers. Studying families with disabilities and the impact on family finances and life satisfaction can equip planners and other professionals to better understand clients in this domain and hopefully identify ways to better assist them.

This research identifies the importance of considering subjective financial well-being in addition to objective financial well-being as part of modeling life satisfaction. Subjective financial well-being is not one's actual financial well-being but rather their perception of their



financial position now and looking to the future. Keeping that in mind, subjective financial well-being should be considered when financial planners, financial therapists, and mental health professionals work with caregiver clients as it serves as resilience tool in maintaining life satisfaction among caregivers.

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## **Chapter 5 - Conclusion**

The preceding three essays offer a glimpse into the lives of special needs families, with the first two examining the predictors of subjective financial well-being among parents and the third using subjective financial well-being as a predictor of life satisfaction among caretakers of disabled loved ones. Subjective financial well-being measures one's perception of their finances rather than their actual financial situation. Identifying traits and actions which may improve the finances and life satisfaction of those with disabled/chronically ill family members could better prepare financial professionals and mental health professionals to assist families who may be impacted. Financial professionals often focus on the money because that is concrete. However, subjective financial well-being seems to be a bit different for special needs families.

The first essay explores financial satisfaction among parents, comparing those of disabled/chronically ill children to those with children without disability or chronic illness. Grounded by the family resource management model and literature reviewed, thought/effort placed on finances, perceived financial control, positive relationships with others, and difficulty arranging life, were hypothesized to impact financial satisfaction differently for families with disabled/chronically ill children since having a disabled/chronically ill child is also considered a resource/demand. Having a child with a disability or chronic illness places additional financial and time constraints on the family. Two separate logistic regressions were employed to model financial satisfaction for parents with a disabled/chronically ill child and those with no disabled/chronically ill child. High thought and effort placed on finances showed positive results on life satisfaction among parents with a child without disability/chronic illness and with disability/chronic illness when compared to moderate thought and effort but thought and effort was not significant among parents of disabled/chronically ill children and a negative association

for both groups when comparing average subjective financial well-being to lowest. Only for families without a disabled/chronically ill child there was also a negative association between high thought and effort placed on finances compared to moderate thought and effort when comparing highest subjective financial well-being to lowest subjective financial well-being. More attention needs to be paid to the type of thought and effort placed on finances. Working with financial professionals could assist in thought and effort being efficient and effective. The most significant predictors for families with a disabled/chronically ill child were perceived control over finances, income, and difficulty arranging life. With the most significant predictor being perceived control over finances suggesting, to make a real difference, further research needs to be conducted to determine predictors of perceived control over finances for families with a disabled/chronically ill child.

The second essay focuses on the subjective financial well-being among families with living children. Operationalized through Seligman's PERMA constructs (2012), this research answers whether positive psychology attributes impact one's subjective financial well-being and if having a disabled or chronically ill spouse or child has an impact. Positive emotions, positive engagements, positive relationships, more meaning in one's life, and greater achievement in one's life are hypothesized to be positively associated with subjective financial well-being. Having a child with a disability/chronic mental illness played two separate roles in this study. First, there was a main negative effect on subjective financial well-being. There was also a moderating effect, whereby the positive effect of optimism on subjective financial well-being was dependent on the status of having a disabled/chronically ill child. While positive emotions positively predict subjective financial well-being, when considering those with a disabled/chronically ill child, the impact was not the same.

The third essay also looks at disability and chronic illness but through the lens of caretaking and subjective financial well-being as a part of life satisfaction. Operationalized using Herrman's interactive model of resilience (2011), this study answers how caregiving of disabled/chronically ill individuals affects caregivers' life satisfaction. Examining caregivers' life satisfaction across domains through the interactive resiliency model with the inclusion of subjective financial well-being as a personal resiliency resource is a new contribution to the literature. This research identifies the importance of considering subjective financial well-being as part of modeling life satisfaction. Subjective financial well-being is not exactly one's actual financial well-being but rather their perception of their financial position now and looking to the future. Keeping that in mind, subjective financial well-being should be considered when clients of financial planners, financial therapists, and mental health professionals as it serves as resilience tool in maintaining life satisfaction among caregivers.

Collectively, these studies examine disability/chronic mental illness and the impact on financial satisfaction, subjective financial well-being, and life satisfaction. The sandwich generation faces many challenges in caring for their children and their aging parents and oftentimes simultaneously. Studying families with disabilities and the impact on family finances and life satisfaction can equip planners and other professionals to better understand clients in this domain and hopefully identify ways to better assist them.

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