

HISPANIC ADULTS WITH CHILDHOOD EXPERIENCES
OF OUT-OF-HOME CARE: AN ANALYSIS
OF OUTCOMES ACROSS RACE GROUPS

by

SUSY VILLEGAS DE CHAVERRI

Presented to the Faculty of the Graduate School of
The University of Texas at Arlington in Partial Fulfillment
of the Requirements
for the Degree of
DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

May 2007

Copyright © by Susy Villegas de Chaverri, 2007

All Rights Reserved

ACKNOWLEDGMENTS

My sincere appreciation to all of those that assisted and supported my work on this doctoral process. Thank you to my dissertation committee members: Maria Scannapieco, chair; Joan Rycraft, Rebecca Hegar, Peter Pecora, James Rosenthal, and Norman Cobb. I am very fortunate to have such recognized leading field experts guiding my work.

I am appreciative of The Casey Family Programs for letting me use their alumni data base, to Dr. Peter Pecora for his kindness and generosity, and Dr. O'Brien for all his assistance. Please extend my recognition to all the Casey staff for their work, and to the youth and families for their willingness to share their experiences.

To Dr. James Rosenthal, I want to express my gratitude for all the time, dedication, and support; I value your mentorship. Please extend my appreciation to the faculty and staff at the School of Social Work at OU.

I am grateful to my editor, Jo Ann Stevenson; not only for her outstanding work and expertise, but for her humor and friendship.

Lastly, a special acknowledgement and recognition to my family, Erick and Maria-Jose, for their sustaining encouragement, patience, assistance, and unconditional love.

Gracias to all.

April 11, 2007

ABSTRACT

HISPANIC ADULTS WITH CHILDHOOD EXPERIENCES OF OUT-OF-HOME CARE: AN ANALYSIS OF OUTCOMES ACROSS RACE GROUPS

Publication No. _____

Susy Villegas de Chaverri

The University of Texas at Arlington, 2007

Supervising Professor: Maria Scannapieco

This secondary data study focuses on the outcome differences of Hispanic, African American, and Caucasian adults with out-of-home care experiences as children. Centering on Hispanics as the reference group, the investigation tested the outcome success of 810 adults in areas of physical and mental health, education, and finance domains. The overall success of the outcomes for each race/ethnic group was also assessed using an integrated outcome composite success construct.

In order to determine the strength of race/ethnicity in outcome success, 38 predictors and 12 outcome criteria variables were entered into a series of multivariate analyses that included both logistic and general linear model regressions. The selected model of significant predictors of outcome success included parental, personal, and program or services characteristics according to an ecological frame of reference.

Race/ethnicity was identified as one of the statistically significant predictors of outcome success, primarily in finance measures. Hispanic and African American adults had predicted lower mean scores in the outcome success composite relative to Caucasian adults. No significant differences were identified with Hispanic and African American participants.

The study used the data from the Casey Family Program National Alumni Study (Pecora et al., 2003), a national research performed by the Casey Family Programs Foundation on their long-term out-of-home care program model.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
ABSTRACT.....	iv
LIST OF TABLES.....	vii
Chapter	
I. INTRODUCTION	1
II. THEORETICAL REVIEW	8
III. RESEARCH LITERATURE REVIEW	27
IV. HYPOTHESES AND DATA COLLECTION	65
V. DATA ANALYSIS RESULTS	96
VI. DISCUSSION.....	125
REFERENCES	143
BIOGRAPHICAL STATEMENT	168

LIST OF TABLES

Table	Page
1 Demographics	97
2 Education Achievement.....	97
3. Reasons for Placement.....	98
4. Parental Substance Abuse.....	99
5. Type of Maltreatment	99
6. Physical and Mental Health.....	100
7. Placement History of Alumni	101
8. Ethnicity by Outcomes	102
9. Physical Health Domain Regression	106
10. Mental Health Domain Regression.....	108
11. Education Outcome Domain Regression.....	112
12. Finance Domain Regression	115
13. Outcome Success Composite Results.....	118
14. Outcome Success Composite across Race/Ethnicity.....	122

CHAPTER I

INTRODUCTION

There is no difference in the incidence of child abuse and neglect across racial groups in the U.S. (Children Bureau Express, 2003; 2004, 2005, 2006; Green, 2002 in Chipungo & Bent-Goodley, 2004; Church et al., 2005; Church, 2006). However, there is substantial documentation of the overrepresentation and disproportionality of children of color in out-of-home placement (Hill, 2003, 2005, 2006; Pecora et al., 1994; Benedit et al., 1996; Gebel 1996; Barth, 1997; Brown & Bailey-Eta, 1997 in Hegar & Scannapieco, 1999; Roberts, 2002; McIntosh, 2002; Lu et al., 2004). Children of color account for 39% of the U.S. child population; however, they represent 58% of the children in foster care in 2004 (U.S. Department of Health and Human Services, 2006). African American children account for 34% of the children in out-of-home care while they are 15% of the U.S. child population; Native American children are 1% of the U.S. child population but 2% of placed children. Hispanic children represent 16% of the child population in the U.S., but 18% of those in out-of-home placement (U.S. Department of Health and Human Services, 2006). In contrast, Caucasian children represent 61% of the U.S. child population but only 40% of those are in foster care in 2004 (U.S. Department of Health & Human Services, 2006).

Differences concerning children of color in out-of-home placement not only include their overrepresentation, but also the discrepancies in their characteristics and the services they receive (Hill, 2003, 2006; Barth, 1997; McIntosh, 2002; Lu et al., 2004; McMurtry et

al., 1992; Roberts, 2002; Chipungo & Bent-Goodley, 2004; USDHHS, 2000; Child Welfare League of America, 2003; Flores et al., 2005; Church, 2006). Hispanic children seem to be removed at a younger age, originate from less educated parents, and come from poorest families (Ayon & Lee, 2005; Church, 2006, Church et. al., 2005). Children of color are more prone to be removed from their families; they tend to experience more placement disruptions, and they stay longer in care (Barth et al., 1996, McMurtry et al., 1992; USDHHS, 2000; Child Welfare League of America, 2003; Lu et al., 2004; Chipungo & Bent-Goodley, 2004; Ayon & Lee, 2005; Church, 2006, Church et. al., 2005). Services such as birth family visits, developmental and psychological assessments, worker contacts, and treatment plans are fewer than those received by White or Caucasian children (Barth et al., 1996, McMurtry et al., 1992; USDHHS, 2000; Child Welfare League of America, 2003; Lu et al., 2004; Chipungo & Bent-Goodley, 2004; Ayon & Lee, 2005; Church, 2006, Church et. al., 2005; Close, 1983 in Hill, 2003). In terms of outcomes, there is less chance for children of color to reunite with their parents, to be adopted, or even to leave foster care (Barth et al., 1996, McIntosh, 2002; Lu et al., 2004; Roberts, 2002; Leslie et al., 2000; Chipungo & Bent-Goodley, 2004; Church, 2006; Church et al., 2005).

Contrasting with these alarming facts, research of racial issues and groups is lacking (Hill, 2003, 2006). Of particular interest for this proposal is that information concerning Hispanics is scarce, incipient, and with inconsistencies. At the national level, there are seven states reported with high disproportionality of Hispanics in foster care, including Puerto Rico, New Mexico, California, Texas, Arizona, Colorado, and Connecticut (Hill, 2003). Furthermore, preliminary reports indicate that disproportionality of Hispanics seems to occur in urban areas (Enchautegui, 1997; Markley, 2006 in Hill, 2006). There is no current

research explaining the gaps in knowledge concerning Hispanics in out-of-home care (Hill, 2006).

Data on Hispanics in placement have been provided jointly within studies addressing other populations, but seldom as a central topic. Only a few quantitative studies were located exclusively addressing this population (Burnette, 1999, 2002; Church et al., 2005, and Church, 2006). This lack of publication and research is puzzling since Hispanics constitute the largest, youngest, and fastest growing minority in the country, representing 15% of the total U.S. population (USDHHS 2000). In 2002, there were 37.4 million Hispanics in the United States (U.S. Department of Commerce, 2003). It is expected that the number of Hispanics will reach 51 million by 2020 (U.S. Department of Commerce, 2003). Nearly 46% of Hispanics live in large cities in states such as California, New York, Florida, Texas, New Jersey, and Illinois. These states deal with large child welfare caseloads and placements (Burnette, 1999; Berrick et al., 1994; U.S. Department of Commerce, 2003).

Adding to this are indications of Hispanic children entering care at a faster rates than other children (U.S. Department of Human Services in Chipungo & Bent-Goodley, 2005). This is alarming since in the U.S population today, Hispanic children are the youngest and second largest group in the nation with 34.4% of Hispanics under age 18 (Child Welfare League of America, 2003; U.S. Department of Commerce, 2003). Research from other studies is useful, but usually lacks information about the unique situations and challenges that Hispanic families and children encounter before, during, and after placement (Hill, 2006; Flores et. al., 2005; Chipungo & Bent-Goodley, 2004; Burnette, 1999, 2001; Ayon & Lee, 2005).

Important issues for Hispanics include their history of migration to the U.S., legal immigration status, and cultural adaptation (including language). In 2002, 40.2% of the Hispanic population in this country was foreign born with 52.1% entering the U.S. between 1999 and 2002 (U.S. Department of Commerce, 2003). The intra-ethnic and interracial diversity of Hispanics, which include socio-economic and educational assets, family structure, gender roles, values, child rearing practices, parenting styles (i.e., definitions of discipline and dynamics of maltreatment), are powerful subjects that need to be examined (Flores et al., 2005; Ayon & Lee, 2005).

Because there is a continued and dramatic increase in the numbers of Hispanics in the U.S., it is a reasonable assumption that a part of that population will eventually need to access some child welfare, out-of-home care, and general social services. Why the lack of research on this population? Are the models of practice used in child welfare and out-of-home care today effective for Hispanics? What are the differences between the African American, Caucasian, Native American, and Hispanic placements? Are diverse families and youth experiencing the same situations and circumstances? Are existing prevention interventions effective for Hispanic families and children? How does race relate to outcomes? What are the characteristics of Hispanic families that are associated to positive children outcomes? These and many more questions concerning Hispanic and other children of color in out-of-home care are not yet fully answered.

The need for information on Hispanics in this country, particularly on those receiving child welfare services, is abysmal. Learning about those Hispanics in placement is crucial. The lack of such action may result in inadequate information feeding social policy, programmatic designs, direct service delivery, and research. Understanding of their

circumstances will help to provide effective services and influence policy decisions that ultimately impact the safety, stability, and outcome performance of minority children that experience placement.

Purpose of the Study

The purpose of this study is threefold. With Hispanics as the primary focus, the goals of this study are: (1) to increase knowledge about Hispanic adults' out-of-home care experiences as children; (2) to compare the outcomes of Hispanic, African American, and Caucasian adults with early experiences of out-of-home care in areas of physical health, mental health, education, and finances; (3) while controlling for other variables, to determine if race is a predictor of outcome success for Hispanics, African American, and Caucasian adults with out-of-home placement experiences in childhood. The leading question guiding this study is: *Are Hispanics who experienced out of home care as children successful adults?* Behind this question, there is a hypothetical formulation about the existence of a set of ecological correlates that distinguish successful and non-successful adults who experienced out-of-home care as children.

Importance of Study to Social Work

There is a disproportion in the number of children of color, including Hispanics in some states, in out-of-home placement in the U.S. Contrasting with this fact, information on the nature and impact of race in child welfare is limited, and the lack of research and information on Hispanics is remarkable considering that they are currently the largest minority and fastest growing group in the country (U.S. Census, 2003).

As the Hispanic population continues to grow and increasingly access state care, the need for further research on this population is critical. The professional literature on race/ethnicity, and particularly on Hispanics in child welfare system, is deficient. The majority of studies have been conducted within African American and Caucasian populations. Even though this has provided some information about Hispanics, further specific and in depth findings are needed. The research reports of Burnette (1999, 2002) on Hispanic kinship care providers, Church et al. (2005) on differences of child welfare practices with Hispanic children, and Church (2006) on the rates of entry and duration of Hispanic children in the Utah Division and Family Services were the only quantitative studies on Hispanics accessible.

Concerning race, the understanding of the nature and impact of race in child welfare outcomes still is unknown. The literature on race in child welfare is scarce. The clear substantiation of overrepresentation and disproportionality in out-of-home care based on racial characteristics compounds the need for further research. Information and research on race issues in foster care marshal information for practitioners and policy makers; therefore, its lack could result in harm to minority children and their families.

This study, building on previous research, aims to accomplish the following:

- provide information on the characteristics of Hispanics with early child welfare experiences and their later adult outcomes
- compare the outcomes of Hispanic, African American, and Caucasian adults in specific areas concerning physical health, mental health, education, and finances.
- controlling for other predictors and variables, detect if race is a predictor of success

- identify ecological correlates related to outcome success of placed youth.

This study will provide information on Hispanics that may be useful for future exploration of the unique characteristics and conditions of this group that could lead to suitable programs and interventions. The comparison of outcomes across different racial groups may precipitate further studies leading to the understanding of the nature and impact of race in child welfare outcomes. The ultimate goal, however, is to contribute to the wellbeing and positive outcomes for minority families and placed children.

CHAPTER II

THEORETICAL REVIEW

Child maltreatment is a serious social problem and was first identified during the late 1800s when the Society of Prevention for Cruelty to Children (SPCC) was founded in New York under the leadership of the Society for the Prevention of Cruelty to Animals (SPCA). During the Theodore Roosevelt administration, the 1909 White House Conference on Children later resulted in the creation of the United States Children Bureau in 1912 (Cicchetti, D. in Cicchetti & Carlson., 1989; Myers et al., 2002). A milestone for public recognition of the severity of the problem was realized in 1962 when an article published by Doctor Kempe and his colleagues in the *Journal of the American Medical Association* first referred to the “battered child syndrome” (Zellman & Fair in Myers et al., 2002). The article documented the number of physician-treated children who had been injured by their caretakers and parents. The battered child syndrome terminology began to be used to refer to the abused children, which consequently led to the emergence of reporting laws.

Today, mandated reporting laws exist across the country requiring professionals to report any suspicion of child abuse (Zellman & Fair in Myers et al., 2002). Child maltreatment is defined by the Federal and Child Abuse Prevention and Treatment Act (42 USCA & 5106g) as “at a minimum, any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or

exploitation, or act or failure to act which presents an imminent risk of serious harm” (USDHHS, 2004).

The awareness of the frequency and severity of child abuse not only resulted in the production of policies and definitions, it also ignited the need to understand the problem and its etiology. Diverse theoretical models have been created to guide prevention efforts, program interventions, policy, and further research. These theoretical models, by explaining the etiology of child maltreatment, have progressed from theories addressing unique or individual factors to complex multi-systems approaches (Myers et al., 2002; Cicchetti & Toth, 2000).

Initially, explanations of child maltreatment during the 1960s, '70s, and '80s were centered on individuals' or abusers' psycho-pathological characteristics (Zigler & Hall, 2000). It was the maladjustment of individuals which was perceived as the cause of child abuse, and interventions were aimed to correct the abuser's pathology, maladjustment, or mental defect. Individual therapy and parenting education are intervention examples of that period. It is important to understand that social factors or environmental conditions were discounted as having any role in the etiology of child maltreatment (Gelles, 1992; Myers et al., 2002). This was the period of psychological theoretical models of child maltreatment.

During the years following the 1980s, a shift in the thinking of the etiology of child maltreatment emerged with a sociological base paradigm. From this perspective, child maltreatment was explained by the stress on families living in a society that limited their options. Child maltreatment was no longer viewed as the result of an individual's psychological deficiency, but as the expression of a family's stress while living in a society with socio-economical and political structures that seemingly endorsed violence, and isolated

and impoverished them (Cicchetti & Tolt, 2000; Zigler & Hall, 2000). Interventions from this perspective included reducing stress and isolation by creating resources and social support systems to families deemed at risk (e.g., unemployment assistance, support networks, other support services).

Even though the psychological and sociological theoretical postulates have contributed to the understanding of child maltreatment, both fail to provide a comprehensive theory to this complex and multidimensional phenomena. The focus on uni-level psychological or sociological dimensions limits the ability to account for exceptions and to provide a comprehensive-integrative and flexible paradigm to understand child maltreatment and the follow up consequences to those that experienced it. However, from these two main positions, and based on theoretical models from biology, a more comprehensive and multidimensional theory emerged known in the child maltreatment literature as the ecological theoretical models (Cicchetti & Lynch, 1993; Cicchetti & Toth, 2000). The ecological theoretical model focuses on the understanding of the person in environment. It recognizes the transaction and interdependence between the individual and the social environment and provides a multi-level or multi-dimensional explanation of the maltreatment of children and the later issues impacting the individual outcomes.

From this ecological position, Bronfenbrenner's 1977 human developmental theory allowed Belsky's 1980 ecological integration theory to provide a specific child maltreatment theoretical frame work. Later in 1993 Cicchetti and Lynch expanded these theories with an additional transactional component of risk and protective factors (Cicchetti & Toth, 2000). To date, their theory continues to be the most accepted explanatory model of maltreatment

because it recognizes the interdependence of multiple causal agents (Myers et al., 2002; Garbarino, 1977; Cicchetti & Toth, 2000).

Bronfenbrenner's (1977) model recognizes child development as a process within a context that includes both strengths and risk factors. It places the individual in an interdependent or dialectic relationship with the culture, situation, or context. Bronfenbrenner identified in his model four factors that affect human development:

1. *Individual factors* refer to those bio-psychological characteristics pertaining to the person, such as handicaps, cognitive capacity, problem solving skills, personality, temperament, language and communication skills.

2. *Family system factors* refer to the family values, sex and gender roles, beliefs, supports, strengths, weakness, life style, internal and external family stressors, and relationships between the family sub-systems (i.e., parent-child, siblings, parents, extended family).

3. *Social structural factors* include the role of ethnicity, cultural values, belief systems, religions, and social norms of both the dominant culture in the U.S. and of the origins of its immigrants and minorities. This factor recognizes the relevance of religion, culture, language, racial and ethnic identity, kinship and extended family relationships, and customs in the development of children.

4. *Socio-cultural factors* refer to the social environment in general in which the community, family, and individual exist. They include the socio-cultural-structural conditions that are over-imposed on communities, families, and individuals, i.e., the political forces and economical structures that determine society members' access to health, education, religion, welfare services, and more.

Building on Bronfenbrenner's 1977 human development ecological postulates, and from the ontogenetic level identified earlier by Tinbergen, Belsky (1980) developed an etiological framework specific to child maltreatment that continues today to be the most comprehensive and primary theory guiding the field. Belsky's etiological postulates about child maltreatment include four ecological nested levels that exist simultaneously and are in constant interaction:

1. The *ontogenetic system* is concerned with the developmental history of the abuser. It refers to what the abuser brings to the situation, so it explores the abuser's own history of childhood maltreatment, and his/her personal characteristics (Myers et al., 2002). Belsky (1980) emphasizes that it is not the history of abuse by itself that explains maltreatment, but the internal resources and the developmental history of parents that may predispose them to respond in certain ways while in certain situations. Exploration of the abuser's strengths, challenges, and developmental history includes exposure and experience with violence, maltreatment as a child, parenting skills, and attachment experiences. According to the ecological model, the developmental history can create a predisposition for individuals to abuse depending on the circumstances and interactions with other levels of the model.

2. The *microsystem* refers to the immediate context in which the children exist and consequently in which child maltreatment occurs. It is the immediate environment of the child and includes the family system, both nuclear and extended, the parents, parenting styles, the child itself, and the type of abuse. Some specific components explored at the family level include the family setting, size, spousal relationship, kinship involvement, type of interactions, support systems and resources, and the parents' characteristics. Even though children are not responsible for being maltreated, some children's characteristics are

associated with other abusive responses. Age, health status, temperament, disabilities, interaction styles, and behavior problems are all factors, characteristics, or conditions that may elicit child maltreatment episodes by individuals who are unable under certain circumstances to cope effectively with those conditions in children (Zigler & Hall, 2000). It is also important to add that the microsystem level also includes the interaction between the family subsystems. Family subsystems include the parents' dyad, parent-child subsystem, and the siblings' groupings. All these subgroups coexist, and are nested within each other, creating an ongoing dialectic exchange of influence and interaction (Belsky, 1980).

3. The *exosystem* is composed of those formal and informal social structures that are immediately outside the family (Belsky, 1980). On this level, entities such as schools, neighborhoods, churches, day care centers, clinics, community centers, libraries, work sites, peers and friends, and recreational organizations are included. These social structures in the exosystem are in immediate and constant interaction with families, and their influence on them can be positive and supportive, or negative and stressful. For example, communities with high prevalence of violence, unemployment, and poverty may have an adverse consequence in families creating optimal conditions for higher incidence of child maltreatment.

4. *Macrosystem* is the large socio-cultural context within which individuals, families, and communities exist (Belsky, 1980). It refers to societal expectations and sanctions toward certain practices, behaviors, values, and beliefs (e.g., individualism, violence, competition, physical appearance, dominance, power). This level can be understood as the prevailing cultural attitudes and values in society that both directly and indirectly support abuse toward children. Belsky explains that this occurs by society not

placing value on parenting and not making it a priority, by endorsing violence (such as in the media) and oppression in the social structures that deny options to minorities, and by sustaining confusing messages about children's discipline and physical punishment. It is within this large societal macrosystem level that the other levels exist and interact.

Belsky's (1980) ecological model emphasizes that child maltreatment can be explained in the interaction of these levels and the influence among its factors. The understanding of the etiology of child maltreatment is only possible by the examination of all levels and factors interactions. The abuse of children, according to this theoretical frame of reference, is the result of multiple causative forces that exist in and influence each other simultaneously. The framework conceptualizes maltreatment as a socio-psychological phenomenon that is determined by multiple and simultaneous forces originating from the individual, family, community, and culture.

The transactional model (Cicchetti & Toth, 2000; Cicchetti & Lynch, 1993) adds to the ecological model a dimension of risk and protective factors to the occurrence and impact of maltreatment of children. This model additionally focuses on the impact of child maltreatment in the developmental outcomes of children. All the nested multilevels and factors in which children are embedded not only affect each other, but also ultimately impact the development outcomes of maltreated children. Subsequent to this, the model considers both risk and compensatory factors at each of the four levels of the ecological model allowing understanding of the possible sequelae of maltreatment, depending on available reparatory options for children. Cicchetti and Lynch (1993) differentiate between potentiality and compensatory risk factors; the former increases the possibility of maltreatment episodes while the latter diminishes that possibility (Cicchetti & Toth, 2000).

Some of these factors are also enduring, such as a child's disability, while others are temporary, such as the unemployment of parents. The addition of both risk and protective factors and enduring and transient, allows for the understanding of these dynamic factors' interactions to be considered during the analysis, assessment, and intervention of child maltreatment cases. The complexity of child maltreatment requires the exploration of all ecological levels interactions: ontogenetic, family, micro, exo, and macro systems, with the risk and protective factors present in each of them. It is this complex, multilevel, comprehensive, and interactive framework that makes the ecological transactional theory of child maltreatment the most currently used (Myers et al., 2002; Cicchetti & Toth, 2000, Garbarino, 1977).

This study will use the ecological transactional theoretical model to guide the organization and selection of variables from the available data and provide a framework for the analysis of results.

As the study focuses on the outcomes of adults who as children experienced out-of-home care, it is important to include the contributions from other theoretical frames of references that provide information about impact of early separation, maltreatment, and trauma, and the factors or conditions that may enhance or constrain the ability of children, and later adults, to achieve an optimal level of functioning and outcome success. Attachment and resiliency theories main conceptual components are reviewed.

Attachment Theory

Attachment is a learned enduring process of trust and security that occurs in the interaction between primary caretaker and infant through a series of instinctual evolutionary

behaviors that occur from pregnancy through three years of age. Its impact, however, is believed to last across the life span of the person (Levy & Orleans, 1998).

The newborn's expressions of distress elicit positive responses from the caregiver. Through this instinctual and fundamental cycle of reactivity-connection and needs-satisfaction, the infant develops a secure attachment with the caretaker. The consistency and predictability of both caretaker and infant interactions provide structure and safety for the child's optimum psychological development. The attachment experience fuels the complex processes of human social interaction and communication, the foundations for cognitive development, and emotional being of each person (Brazelton, 1991; Bowlby, 1982; Donley, 1993). This review will focus on the main contributions of Bowlby and Ainsworth, who are considered leaders in the development of attachment theory.

John Bowlby is considered to be the founder of attachment theory (Donley, 1993; Levy & Orleans, 1998). Contrary to the individual inner psycho-analytic focus of the 1950s, Bowlby believed the mother-infant relationship to be fundamental to the child's sense of security. He studied the mother-child dyadic relation from an ethologist and evolutionary perspective, and discovered a set of infant instinctual reactions that ensured the mother's proximity and protection (Karen, 1994; Yussen & Santrock, 1982). Bowlby developed an ethological theory of attachment, and described the infant-mother adaptive predisposed interaction. Mother and infant instinctively trigger each other's behaviors creating bond or attachment. This proximity and strong interaction provide the infant with a sense of security that leads to its ability to consolidate a sense of self or psychological development (Brazelton, 1974; Bowlby, 1982).

As the baby develops a primary attachment, there are many other fundamental emotions that emerge (e.g., trust, security, fear). The child's sense of self, based on the relationship with the primary caretaker and his/her ability to meet the needs of the child, is identified by Bowlby as the development of internal working models (Karen, 1994; Cole & Cole, 1989). The internal working models from the primary attachment experiences provide a definition of self and self worth and a level of trust of others that Bowlby believes lasts the lifetime of the individual (Bowlby, 1982). Internal working models were also determined to influence cognition on areas of attention, memory, and language (Levy & Orleans, 1998; Karen, 1994; Perry, 2001).

Ainsworth's (1985) work was essential to moving Bowlby's ideas from observing to testing them under different laboratory conditions (Karen, 1994; Levy & Orleans, 1998). In the 1960s, she developed the "strange situation" experiment to study children's reactions toward their mothers' departure, absence, and arrival. Her contributions included information on the circular or constant feedback between mother and child. She also identified the mother or caretaker as the secure base from which the child ventures to explore the surroundings (Karen, 1990, Karen, 1994; Yussen & Santrock, 1982). Ainsworth's main contribution includes the association she uncovered between the child attachment pattern and behaviors and the mother's parenting style (Karen, 1994; Donley, 1993; Cole & Cole, 1989; Ainsworth, 1985). The caregiver ability to understand and respond consistently to the infant needs, reassurance closeness, and nurturing contact determine the infant attachment style. Ainsworth identified three main patterns of attachment: (1) secure, (2) anxious, (3) anxious-avoidant. In the 1970s, a fourth attachment type, disorganized disorder, was named by Mary Main's longitudinal study that included both anxious and avoidant traits (Karen, 1994, 1990).

This type of attachment was later found to be associated with children who experienced maltreatment and parents who also had histories of trauma as children (Karen, 1994; Levy & Orleans, 1998).

Patterns of Attachments

Secure attachment: Children with secure attachments want and seek caregiver proximity. They explore their surroundings near the caregiver, display distress when separated, look for the caregiver at arrival, become calm with the caregiver's nurturing, and resume exploration of the environment. The caregiver of a secure infant responds quickly to the child's signs of distress, engages in soothing nurturing behaviors, responds consistently, and displays satisfaction and enjoyment in interaction with the child (Ainsworth, 1985; Karen, 1994; Brazelton et al., 1974).

Anxious attachment: This type of attachment is characterized by extreme distress from infants when separated from the caregiver, but an ambivalent reaction toward the caregiver's return. The caregiver's proximity does not seem to reassure or calm the distressed infant. These caregivers tend to relate to infants inconsistently or ignore or not understand the infant's clues. Consequently, the satisfaction of the child's needs is unpredictable (Ainsworth, 1985; Karen, 1994; Brazelton et al., 1974). The inconsistency precludes the infant from anticipating the caretaker response and keeps the infant in an ongoing state of anxiety characteristic of anxious or ambivalent attachments (Cole & Cole, 1989; Karen, 1990, 1994). Cognitively and emotionally, the infant is limited by the anxiety of his/her unfulfilled needs to engage in the exploration of his/her surroundings (Ainsworth, 1985; Cole & Cole, 1989; Karen, 1994; Brazelton et al., 1974).

Anxious-avoidant attachment: This attachment type occurs when the infant is oftentimes ignored and rejected by a caregiver. The child in turn rejects the caregiver's contact. Usually, no signs of distress are observed when the child is separated from the caregiver. The caretaker's behavior toward the infant is described as inconsistent, rejecting, and lacking nurturing expressions. Caregivers are also irritable, angry, and less amenable to physical contact (Ainsworth, 1985; Karen, 1990, 1994). A child with this type of attachment is often unable to express his/her own needs. The child's behavior oscillates between anger and dependency; exploration, self reliance, and curiosity become limited (Ainsworth, 1985; Brazelton et al., 1974; Karen, 1994; Cole & Cole, 1989; Levy & Orleans, 1998).

According to attachment theory, secure attachment impacts every aspect of the child's, and later, the adult's life. The development of a secure concept of self, increased social skills, a consolidated sense of competency, effective problem solving, integrated sense of autonomy and independence, capacity for nurturing relationships, and resiliency are all affected.

Child maltreatment has a definite impact on the attachment of children. Perry (2001) indicates that the specific problems of maltreated children with attachment difficulties vary. The nature, intensity, duration, and timing of the abusive and neglectful experiences would determine the level of complexity of their presenting problems. He adds that expectations concerning their achievements need to be realistic due to the number of issues that abused and neglected children have to overcome.

Resilience Theory

Bernard (1991, 1993) defines resilience as a combination of personal characteristics and protective mechanisms that shield individuals from the negative effects of trauma. It

allows successful adaptation even though serious adversity during the course of development may have occurred. Zimmerman et al. (2002) adds that resiliency is the ability to counteract or neutralized the effect of risk factors.

This strengths based theory, began as a reaction to the prevalent pathological model common in the 1950s (Saleebey, 1992). A shift occurred as professionals and researchers turned their attention not to individuals and families displaying symptomatic responses after difficult personal, family, and environmental situations, but to those that despite traumatic or problematic experiences were able to maintain a healthy functioning level, grow and develop, and avoid any symptomatic reactions.

Richardson (2002) identified three stages or waves in the development of resiliency theory: (1) resilient qualities, (2) resiliency process, and (3) innate resiliency. Following these three stages, a review of the theory evolution, main components, and contributions from other writers will be presented.

Resiliency qualities. The first stage, resiliency qualities, focuses on the phenomenological description of resilience qualities (Richardson, 2002). Some of the milestone studies that contribute to this stage of identification of resiliency qualities include the longitudinal study by Werner and Smith in 1993 (Howard et al., 1999). This study was done in Kauai with children growing in disadvantageous and highly risky environments. The research participants were followed from birth to 32 years. Independently from their difficulties and problems, one-third of the subjects were doing well at adolescence, and two-thirds were living normal adult lives at 32 years of age when the study ended (Howard et al., 1999). Another study was done by Rutter (1979) in England with children who faced poverty, family over-crowding, maternal mental illness, parental discord and criminality, and

out of home placement. This study documented that the presence of a single stressor did not affect the children. It was the combination of several stressors that limited positive outcomes; any additional stressor impacted all stressors already present (Rak & Patterson, 1979). Garmezy et al. (1984) did a study in the United States; it included a sample of 200 children from urban settings with physical disabilities (e.g., congenital heart defects) (Rak & Patterson, 1996). The studies not only reported on similar observations and findings concerning the strength and ability of children to successfully adapt and overcome difficult situations, but on the fundamental role that effective and positive relationships have on such outcome (Howard et al, 1999).

The questions were, which qualities make certain children resilient and which social organizations, services, or structures help them to function better (Richardson, 2002). The researcher focused mainly on understanding the elements that keep children or individuals thriving and away from negative consequences in the midst of adversity. This priority generated abundant information of personal characteristics, family conditions, environmental supports, program and services elements, and interventions that identify and promote resilient qualities.

More importantly, the search for resiliency qualities led to a focus on strengths and protective factors instead of the pathological concept of risks. This drew attention to a fundamental component of resiliency theory and provided an initial direction for intervention.

Risk indicates a potential for negative outcomes, and it is the assessment of risk which guides intervention (Howard et al., 1999). Risk as a concept is accumulative; the more risk the more possibilities that individuals may present symptomatic reactions. The strengths

based resilience movement changed the focus from risk to protective factors. The critical issue for the resilience movement became not only to know what places individuals at risk, but also primarily how to counteract them (Bernard, 1993; Rak & Paterson, 1996). Protective factors are circumstances and life events that lessen, buffer, and prevent the effects of risks, and enhance the adaptation capabilities to the environment (Green et al., 2003).

The purpose of intervention within the resilience movement was clarified: identify protective factors, processes, and mechanisms that minimize risk and those that enhance resiliency (Zimmerman et al., 2002; Christiansen & Evans, 2005).

Resiliency process. Richarson (2002) identified this second wave as one characterized by the search for explanatory constructs of how resiliency is acquired. Resiliency is defined as the process of coping with adversity, and as the opportunity to identify and reaffirm protective factors. A model of resiliency acquisition emerged from the normal task of adaptation required for survival. The cyclic experience of equilibrium, life disruptions, and reintegration to balance or adaptation are believed to foster the development of resiliency. Living requires ongoing adaptation to new welcome or unwelcome circumstances. The process of facing both disruptions and reintegration to equilibrium results in resiliency; there is an understanding of a dialectic relationship between facing adversity and building resiliency. Resiliency increases confidence, coping capabilities, and protective factors that prepare us for future adversity. In contrast, life stagnation is characterized by clinging to homeostasis and avoiding disruptions. This creates a cycle of evading experiences and opportunities that then reduces the potential for resiliency development. There is also life digression which refers to the chronic process of reintegrating after adversity but with personal losses of motivation, hope, and drive. Lastly,

there is dysfunctional reintegration when the means to deal with life's disruptions are self-destructive (Richardson, 2002).

The concept of life progression is important, it refers first to the capability of any individual for resiliency, and second, to the lifelong possibility to increase resiliency as one deals with the disruptions or adversities they encounter (Richardson, 2002). These two elements indicate a shift in the understanding and definition of resiliency.

Resiliency becomes understood as a lifelong process of growth and adaptation. It is no longer viewed as the ability to "bounce back." There is acknowledgment that resiliency is a human condition and is an experience that involves personal and environmental factors. Resilience becomes identified as multisystemic dynamic phenomenon across the life span of individuals and encompasses biological, psychological, social, and spiritual components (Greene et al., 2003).

The focus of research changes from searching for individual factors to searching for and understanding protective processes and mechanisms (Howard et al., 1999). Protective and risk factors are no longer understood in isolation or viewed as personal characteristics. The protective nature of a factor is understood within the process in which it guards the person from risk or trauma. According to Rutter (1990), it is the ability to moderate risk that determines a protective factor or process. He defines four basic protective processes that: (1) reduce exposure to risk or its impact, (2) prevent negative reactions after adversity, (3) promote self-esteem and efficacy through achievement, and (4) create positive relationships that provide opportunities and resources to move in a new direction in life.

Risk and protective factors are defined within three different structures or levels—individual, interpersonal, and community levels. Also, they are considered dynamic,

interactive, and accumulative (Masten et al., 1990; Place et al., 2002). Individual protective or risk factors refer to the person's own self perception and also to his/her perception of the adverse situation. It involves physical, psychological, affective and cognitive attributes that exert influence upon the person's physical, mental, and developmental functioning (Zimmerman & Arunkumar, 1994). Interpersonal protective or risk factors refers to the relationships and interactions in which the person is involved. The interpersonal relationships that serve as protective or risk factors occur in the inner circle of parents, family, and friends, and in other areas of social exchange such as schools, daycares, churches, and social agencies. The community protective factors include the socioeconomic conditions, the cultural characteristics, and the qualities of the environment surrounding the person. They comprise all aspects of communal living; from specific resources such as transportation, or housing, to characteristics such as density, poverty, safety, and cultural identity (Bernard, 1993; Zimmerman & Arunkumar, 1994; Werner & Smith, 1992).

The shift to define resiliency as an ongoing human process that involves individual, interpersonal, and communal protective factors leads to the identification of main areas that relate to resiliency. Social competence, problem solving, autonomy, and a sense of purpose and direction are understood as the main forces of strength that relate to increase resiliency (Bernard, 1993). These forces of strength are acquired and reinforced within an ongoing process of adaptation to the demands of the environment. Resiliency occurs in the context of positive relationships at the family, school, and community levels (West & Farrington, 1993; Werner & Smith, 1992; Bernard, 1993).

Innate resiliency. This is the third wave in the development of resiliency theory according to Richarson (2002). What is the energy and where does it come from that it reintegrates equilibrium and functioning in adversity, becomes the guiding question.

This particular stage begins with a paradigmatic definition and is a foundational belief at the core of the resiliency movement. It refers to the innate capacity of all humans and other living things for resiliency. Questioning the origin of energy that powers the movement toward reintegration or balance in adversity leads to the conclusion that it is innate in the spirit of life it self. The process of overcoming adversity requires energy, and the source of this energy is resiliency. Richarson (2002) clarifies that this inner resilience force drives us through transformation and change independently of the risk; it is the force of living.

He adds that the resilient force is not a new principle. The principle inherent in the belief that all humans have an inner source of energy or resilient capacity was described centuries ago by fundamental philosophical orientations. Those philosophical orientations originated disciplines that today share the common principles and understanding of resiliency. These include philosophy, psychology, physics, neurosciences, psycho-neuro-immunology, eastern medicine and more.

The inner strength and resilient force inherent in life is a core belief that transcends previously existing barriers across disciplines, and consequently is a unifying movement. The third wave or stage in the evolution of resiliency theory includes the multidisciplinary integration of these fundamentally congruent disciplines for the creation of experiences that continue to promote the activation of this human force (Richarson, 2002).

Stein (2006) identifies the need for theoretically based studies concerning youth transitioning out of foster care. He is particularly concerned that the state of knowledge in youth transitioning out of care is mainly descriptive, and that the studies are detached from theory in terms of context, conceptual exploration, or theory building and development.

The particular life experiences of maltreatment, trauma, loss, and the expected exit from care that affects youth in placement makes this population amenable to the purposes and focus of resiliency theory of overcoming the odds, adaptation, coping, ongoing growth, and recovery.

Stein (2006) presents the studies of Gilligan (2001), Schofield (2001), and Newman (2004) that uses resiliency theory with this population of youth. He further demonstrates the applicability of resiliency constructs to forward the knowledge on issues affecting out of home youth.

The studies identified three general categories of youth exiting care—moving on, surviving, and victims. Differences in the outcomes and situations experienced by each group were also detected. Stein (2006) points out that the use of a resiliency framework provided evidence on the association between quality of care, transition, and post-transition services and the youth differences.

It is essential for research to increase understanding of risk, protective factors, and outcomes on youth exiting foster care. There is a need for stronger links between empirical and theoretical work; resiliency theory provides a perspective that can greatly contribute.

CHAPTER III
RESEARCH LITERATURE REVIEW

Method

The purpose of this section is to describe the methodology used while conducting this research review. Due to the scarcity of studies of both Hispanic and racial issues in out-of-home placement this review focuses on studies addressing: (1) race disproportionality in out-of-home care, (2) differential uses of placement practices across diverse races and ethnic groups, (3) similarities and differences between care providers based on ethnicity and race, and (4) differential outcomes of out-of-home placements based on race and ethnicity. Information about Hispanics and out-of-home care is included. Twenty-six reports were found addressing race/ethnicity/Hispanic issues in out-of-home care. The selected studies were obtained by searching multiple data bases and professional journals from 1960 to 2006. This search includes diverse related disciplines and documents such as social work, psychology, sociology, anthropology, gerontology, policy, government reports, demographic studies, and nursing publications.

The 26 studies chosen were classified in a grid that includes the following sections: author and year of publication, topic or purpose of the study, research type and method used, sample methodology and response rate obtained, the use or not of comparison group, statistical analysis used, and main findings reported.

Methodological Concerns

A literature review of race, ethnicity, and Hispanic issues in out-of-home care shows that research on these topics continue to be an area for further development. Of the cohort of 26, five were qualitative studies (Curtis & Denby, 2004; Gibson, 1999, 2002a, 2002b; Johnson-Garner & Meyers, 2003), and 21 were quantitative. Twenty-five studies were cross-sectional and one was longitudinal (Barth, 1997). Sixteen of the studies used secondary data for their analysis, samples, or sub-samples (Barth, 1997; Ards et al., 1998; McMurtry & Lie, 1992; O'Donnoll, 1999; Keller et al., 2001; Lau et al., 2003; Fluke et al., 2003; Lu et al., 2004; Perry & Limb, 2004; Church et al., 2005; Schuck, 2005; Berger et al., 2005; Ayon & Lee, 2004, 2005; Church, 2006; Libby et al., 2006).

Surveys were used for data collection: eight used face-to-face interviews (O'Donnoll, 1999; Gibson, 1999, 2002, 2002; Burnette, 1999; 2002; Johnson et al., 2003; Lau et al., 2003), two used telephone interviews (Ayon & Lee, 2004; 2005), and three used mailed written questionnaires (Beeman & Boise, 1999; Ferrari, 2002; Curtis & Denby, 2004; Perry & Limb, 2004). The remaining 13 did not indicate the method of securing the data. Three exploratory studies focused on identifying and describing workers' and providers' perceptions, opinions, and experiences (Beeman & Boise, 1999; Burnette 1999, 2002). Six descriptive studies included topics on overrepresentation of African American children, workers' perceptions of minority families and policy, differential rates of investigation, case disposition, need and provision of services based on race, race matching of workers with clients, and African American fathers' involvement (Ards et al., 1998; O'Donnoll, 1999; Fluke et al., 2003; Curtis & Denby, 2004; Perry & Limb, 2004; Libby et al., 2006).

Only one comparative study was identified (Lu et al., 2004). Nine relational or correlational studies focused on the identification of significant relationships or interactions between demographic characteristics of children and families in out-of-home care concerning assessment measures, abuse type, reporting rates, placement type and duration, relationship with workers; services received, and outcomes (McMurtry & Lie, 1992; Barth, 1997; Keller et al., 2001; Taussig & Talmi, 2001; Lau et al., 2003; Church et al., 2005; Ayon & Lee, 2005; Schuck, 2005; Church, 2006). Causal/explanatory non-experimental studies focusing on racial biases in parenting (Berger et al., 2005) and parents' cultural values impact on parenting (Ferrari, 2002) were located.

There were two population studies (Perry & Limb, 2004; Schuck, 2005). Four used probability samples (Barth, 1997; Curtis & Denby, 2004; Lu et al., 2004; McMurtry & Lie, 1992). Six studies contained sample sizes larger than 1,000 subjects, although they did not use probability random sampling (Fluke et al., 2003; Lau et al., 2003; Berger et al., 2005; Church et al., 2005; Libby et al., 2006; Church, 2006). Five studies had larger than 100 but fewer than 1,000 subjects in their samples (Beeman & Boise, 1999; Ferrari, 2002; Keller et al., 2001; Taussig & Talmi, 2001; Ayon & Lee, 2004). Eight studies had small samples and used convenient or purposive samples procedures (Ayon & Lee, 2005; O'Donnoll, 1999; Burnette, 1999, 2001; Gibson, 1999, 2002, 2002b; Johnson et al., 2003). Overall, nine studies reported exclusively on African Americans and four on Hispanics (Burnette, 1999; 2002; Church et al., 2005; Church, 2006); the remaining 12 reported on at least three groups, usually African American, Caucasian, and Hispanic.

The information obtained from this cohort of studies is impacted by the characteristics and methodology used. The variation of the time periods, the topics, purposes,

designs, samples, and the methodologies further limit the existing body of information. For example, only two studies had comparison groups (Keller et al., 2001; Lu et al., 2004). Lack of comparative equivalent groups across race and ethnicity impedes reaching causal conclusions as questions about other coexisting variables and equivalence of study subjects remain.

Sample sizes are important, particularly when different racial groups, abuse types, placement types, ages, genders, poverty levels, services provided and other variables are in need of control. Rosenthal (2001) indicates that small samples limit the capability for powerful statistical analysis affecting the confidence of findings. They also increase the chances of making the wrong decision concerning a false null since only large effect sizes may be detected. Power refers to the statistical test strength to reject a false null, and it is primarily determined by the sample size (Rosenthal, 2001). As samples increase in size the chances for sampling error decreases; contrarily when samples are small the chances for sampling error increases to the point that the significant test may not detect small effects. Consequently, important effects may not be detected in small samples as they could be obscured by sampling error limiting the power of the statistical test (Rosenthal, 2001).

Overrepresentation of African Americans in foster care is another concern about the samples used. The majority of studies tend to have large African American sample sizes that compromise true comparison across races. Only a few use population studies, stratify, or use equal sized race groups in the samples that would allow for more equitable comparison and in turn, increase confidence in the generalization of their results (McMurtry & Lie, 1992; Ferrari, 2002; Lu et al., 2004; Barth, 1997; Curtis & Denby, 2004).

Operationalization of terms and variables was also limited in some studies. In the study by Johnson-Garner and Meyers (2003) resiliency was not operationalized and the sample of resilient children used was identified according to diverse groups of workers' definitions; this created internal validity challenges.

Race and ethnic issues in out-of-home care seem to be in the initial, although active, stages of research. Seventeen studies were reported during the last four years compared to nine studies reported from 1992 to 2001. The incipient stage of knowledge and research on race/ethnicity issues in out-of-home care is evident in the type of studies available. Exploratory and descriptive designs have provided a large quantity of information; however, these designs are regularly used during the initial stages of exploration of new issues and topics with the goal of generating hypotheses about the phenomena for further verification (Patton, 2002; Rubin & Babbie, 2001). Also, the use of cross-sectional survey and self-reporting data-gathering limits the information to the perceptions and opinions of responding subjects during a particular point in time; they lack empirical verification.

Secondary data studies provide empirical information on the race disparity, services available, placements, policy, permanency, and outcomes of children in out-of-home care. Information is also generated on their socio-educational conditions, behavior, exit rates, and their experiences according to race. The studies with probability and large samples allow comparison and increased capabilities for data analysis that yield powerful statistical models. The rigor of their methods provides more confidence in their findings and results. For those studies with non-probability samples caution should be exerted due to possible limits in the external validity of their results. It is also important to remember that as secondary data analysis studies, the cohort also has limitations. Some of these limitations include the fact

that the exploration of relevant associations or variables is limited to what the data base provides. As ex post facto studies, the researcher is limited to the use of the existing data. The information can only be considered tentative and incomplete because all areas of the subject matter may not be known or included.

The studies in the cohort can be considered pioneers in the topic/population studied. Research in issues of race and ethnicity in out-of-home is limited, and the information reported can only be considered preliminary. The reader must be aware that based on these design limitations and methodological challenges, conclusions about Hispanics, race and ethnic issues in out-of-home care placement cannot be made.

Due to the limited number of studies exclusively addressing Hispanics, race, and ethnic issues in out-of-home care, other studies in foster and kinship care were searched and referred. Information was extrapolated to complement, and support information related to Hispanics, race and ethnicity. Even though these studies addressed diverse topics and had different purposes, designs, and methodologies, their information concurred on several topics. This increased the confidence in the information obtained and reported. For example, many studies reported on the demographics and they concurred in the overrepresentation and disproportionality of children of color in out-of-home care and the characteristics of kinship care providers within families of color. A complete bibliography with all these studies is included at the end of this paper. It is important to clarify that the only studies addressing race and ethnicity in out-of-home placement as a central topic are the 26 studies presented in the previous review; other studies were used to complement and support them.

Findings

Race and Ethnic Differences in Out-of-home Placements

There is no difference in the incidence of child maltreatment across racial/ethnic groups in this country (Fluke et al., 2003). Westat (2006) clarifies that overrepresentation in child welfare refers to the difference between how children are represented at a particular time in the child welfare system compared to how they are represented in the general population during the same time period. Disproportionality refers to comparisons across race/ethnicity. It focuses on the relativity of the ratios of diverse race/ethnic groups of children in child welfare and how they compare to other race/ethnic groups relative to their representation in the general population (Westat, 2006).

There is an overrepresentation and a disproportionality of minority children in out-of-home care that has been identified for some time in child welfare practice (Hill, 2005; McMurtry et al., 1992; Ards et al., 1998, Mills & Ushe, 1996; Barth, 1997; Church et al., 2005; Church, 2005; USDHHS, 2000; Lau et al., 2003; Fluke et al., 2003; Lu et al., 2004; Schuck, 2005; Ehrle & Geen, 2002; McIntosh, 2002; Child Welfare League of America, 2003; AFCARS Report, 2006). In the year 2000, 66% of the children in foster care were children of color (Child Welfare League of America, 2003). The overrepresentation and disproportionality of children of color in child welfare has been repeatedly documented for African American children. Hispanic children, however, are disproportionately placed in foster care in certain states and certain urban areas (Hill, 2003, 2006). Hill (2003) indicates that there is a moderate disproportion of Hispanics in Wyoming, Colorado, South Dakota, Utah, North Dakota, Pennsylvania, Maine, Massachusetts, Connecticut, and New Hampshire.

African Americans, when compared to Caucasians, are more likely to be placed in out-of-home care. They have lower reunification than other groups, even when controlling for age, gender, and reason for referral (Lu et al., 2004) and are ranked first in being open for service, placed out-of-home, and not unified. There is 23.8% greater proportion of African American children to be placed in out-of-home care compared to other groups. Note that the study done by Lu and colleagues was an empirical study that used a large stratified sampling procedure.

Similar findings have been reported in earlier studies about African American children entering and remaining in foster care younger and longer than other children (Dubowitz et al., 1993; McIntosh, 2002; Chase et al., 2004). Wulczyn and Hislop (2002), using the data from the Multistate Foster Care Data Archive maintained by the Chapin Hall Center for Children, reported that during the 1990s adoptions for children in urban areas, in kinship placements, and in African American families were occurring. However, they clearly indicate that independently of those improvements, the overall rates of adoptions of African American children living in urban areas were slower than adoptions of other children. Adoptions of African American children were happening but took longer than those of Caucasian children (Wulczyn & Hislop, 2002). From the cohort of studies reviewed, Fluke et al. (2003), using a large sample from the National Child Abuse Data System and Census data from 2000, found that African Americans were disproportionately referred to and investigated by child welfare. Lau et al. (2003) indicated that the youth in their study did not report variation or differences in their abuse experiences based on race or ethnicity; neither there were differences identified in the reports of the youths across the different sectors of care. Child welfare, however, was an exception, as significant

differences across race /ethnic youth self-reports of abuse were found. African American youth reported lower rates of moderate and severe abuse compared to Caucasians. However; African Americans were 12 times more likely to have foster care placements (Lau et al., 2003).

Taussig and Talmi (2001) documented that there were no differences in demographic, risk behaviors, or psychosocial variables between race groups, but African Americans were found to be less likely to reunify with their parents. Fluke et al., based on their study that included more than 700,000 child welfare cases, reported that the disproportionality of African Americans seemed to occur mainly at the reporting and investigation assessment level; case verification added little to the overrepresentation. Differences between Caucasian and African American exposure to mandated reporters possibly accounted for African American discrepancies and increase of reports (Ards et al., 1998). The problem is affecting more than African American children; researchers have also documented disproportional child abuse and neglect investigations of Hispanics (Church et al., 2005; Church, 2006), Asian Pacific Islanders (Fluke et al., 2003), and Native Americans (Casey Media Kit, 2006).

According to The AFCARS Report for 2004 (U.S. Department of Health and Human Services, 2006), Hispanic children represent 16% of the U.S. child population with 18% of those in foster care. Hill (2003; 2006) documented that Hispanics are disproportional in some states but not in others; there is no information about the reasons behind this phenomenon. Documentation and studies of Hispanics are extremely limited, which is a concern, since this is now the largest and youngest minority group and the one with the fastest growing birth rate in the country (U.S. Department of Commerce, 2003). Hispanics are affected by low educational and socio-economical conditions, which may lead to

increased family difficulties and child welfare placements (U.S. Department of Commerce, 2003; Child Welfare League of America, 2003).

Hispanic children are entering child welfare one year younger than White, non-Hispanic children and staying longer periods of time in state custody. Hispanic children are one year younger both at report, investigation, and substantiation phases. Females account for 66% of placed Hispanics, and adolescents 15 to 19 are more likely to remain in custody. Ethnicity is the best predictor of both out-of-home placement and duration in custody (Church, 2006; Church et al., 2005).

Poor, single-female-headed families and dense poor urban neighborhoods were identified by Schuck (2005) as socio-structural reasons for the overrepresentation and disproportionality of children of color in out-of-home care. Schuck's study of 237,000 cases, using the 1999-2000 population of all Caucasians and African Americans reported and later substantiated as abuse or neglect cases for the entire state of Florida, was the only empirical study that looked exclusively at socio-structural explanations of the overrepresentation and disproportionality of African Americans in child welfare.

Lack of cultural awareness and systemic discrimination may also contribute to the disparity of Hispanic children in the out-of-home care. Younger Hispanic children from poor-single mother households seem to be identified as an increased risk of maltreatment and are promptly removed from the home (Church et al., 2005; Church, 2006; CB Express, 2006). Two possible contributing factors, poverty and racial bias, seem to be linked to findings documented by Berger et al. (2005). The study focused on the parenting assessments of Caucasian and African American workers/interviewers of Caucasian and African American parents; it also included the parents' self-assessments of their skills.

Concerning poverty, even though African Americans were more likely than Caucasians to appear with extreme scores in parenting measures, specifically in parent and child behaviors; when socio-demographic characteristics were considered, the race effect for all of their measures became statistically insignificant (Berger et al., 2005). The authors concluded that socio-demographic characteristics were perhaps better measures to explain the differences between Caucasian and African American maternal and child behaviors. A larger portion of racial differences was explained by socio-economic status associated with race (e.g., family income, maternal education). The researchers concluded that the race of the parents assessed was a proxy for low socio-economic status for interviewers. For those making assessments of the parenting behaviors of minority parents, race was used as an indicator of socioeconomic status. This could lead to bias toward those educated and non-poor minorities (Berger et al., 2005). Concerning racial bias, the researchers concluded that the race of the interviewer or worker mattered more in the assessment of parenting than the race of the parent assessed. Thus, parents' reports on self parenting behaviors were unrelated to the race of the interviewer; however, the ratings of some parenting behaviors, such as harshness, were influenced by the worker's or interviewer's race. Using the HOME scale by Caldwell and Bradley (1984) and Bradley (1993); this study reports that African American interviewers rated both Caucasian and African American parents consistently as less problematic. This was not the case for Caucasian workers who significantly rated African American parents 11.5% points more likely to have problematic scores, compared to Caucasian parents rated only 3.5% points more likely. Those Caucasian parents, if interviewed by African American workers, would have been given increased problematic scores. It is important to clarify that these scales are coded so that the higher scores represent

greater degrees of harshness and less warmth. This permitted the researchers to conclude that in the assessment of certain parent and child behaviors race bias exists which could also affect workers and parents in child welfare. Based on their results, all parents, especially African American parents, could have better evaluations if the interviewer or evaluator were African American.

Furthermore, the researchers confirmed that, in the absence of specific information, racial bias increases, so as the demand to make judgments increases for interviewers unfamiliar with the culture, the potential for racial bias also increases. This reinforces Church's (2006) recommendation to increase cultural sensitivity and awareness training for workers. It is important to add that the study of Berger et al. (2005) used an explanatory design with clear theoretical explanations and measures. This design had a sub-sample of 91 interviewers reporting on a total of 1,417 cases that were both interviewed and observed at home. This sub-sample was selected from a larger representative and longitudinal national study on low income non-marital birth families. The methods of the original study are rigorous, with in-home observations and interviews, standardized measures, and representative sample from the Fragile Families Study, which is currently active. However, the reader must be alert that its findings need to be replicated with actual child welfare and out-of-home samples.

The study by Ferrari (2002) needs to be addressed as it relates to findings from Berger et al. (2005). This study is the only one located that addresses the relationship of childhood history of abuse of diverse race/ethnic parents, their cultural beliefs, and their parenting behaviors. The research is important since it is the only one that not only addresses diversity in race/ethnicity, but also includes cultural values of machismo, familismo, value of

children that have been identified as essential in Hispanic culture (Pinzon & Perez, 2000). Fathers with a lower value of familismo were more likely to use physical punishment to discipline their children; they also engaged less in nurturing behaviors. Machismo predicted the use of physical punishment from fathers, and for Hispanic fathers it correlated negatively with the use of nurturance. Valuing children was related to the “seriousness” of abuse presented in vignettes to parents; lower tolerance of mistreating behaviors was associated with parents that valued children more. However, these same parents seemed to favor verbal punishment, with emotional mistreatment being perceived less serious for fathers than mothers. A history of childhood abuse or neglect was predictive of mother’s (not father’s) use of physical and verbal punishment, but not predictive of abuse. For fathers, a history of childhood abuse/neglect predicted increased use of reasoning and nurturing. These differences may be due to the type and severity of childhood abuse experienced by parents, or even time spent with the child. Finally, there were no differences across ethnic/race groups on how abuse or neglect was defined. This is a clear indication that, independently of the race/ethnicity and cultural values, parents seemed to be clear about what constitutes abuse or neglect, so the overrepresentation of minority children in child protective custody cannot be attributed to a lack of culturally specific maltreatment definitions.

It is possible that reporters have a bias and a lack of differentiation between physical punishment and physical abuse. Differences were found in the races’ nurturing behavior, with African American parents significantly more nurturing. However, these same parents, particularly mothers, also used the most physical and verbal punishment. Caucasian parents were as nurturing as African American parents, but used less physical punishment than African Americans and less verbal punishment than Hispanics. Hispanic parents were less

nurturing, used more physical and verbal punishment than Caucasians, but less than African Americans (Ferrari, 2002). Ferrari's study was a pioneer study and relevant variables may have not been included, so findings should be considered hypothetical and in need of verification. However, the proportional sample of African American, Hispanic, and Caucasian parents allowed the researchers to do comparisons across race/ethnic lines, resulting in important leads for follow-up research. The explanatory survey used a convenience sample of college students that suggests selection bias; consequently, it should be replicated with a sample from child welfare populations.

Birth Parents Information and Racial/Ethnic Differentials

From the literature reviewed, the acceleration of out-of-home placements coincided to the exacerbation of drug and alcohol abuse, increased poverty, and the HIV/AIDS epidemic that resulted in increased numbers of children requiring protective services (Beeman et al., 2000; McIntosh, 2002; Berrick et al., 1976; Courtney, 1994). Maltreatment reports indicated that children placed in out-of-home care were primarily victims first, of neglect, and second, of physical abuse (Courtney, 1994; Chipungo & Bent-Goodley, 2004; Myers et al., 2002). Forty-seven percent of mothers and 39% of fathers were reported to be the primary perpetrator. When they were not the primary perpetrator, then they were found to be the secondary perpetrator the majority of the time (Church, 2006; Church et al., 2005). Extrapolating from the literature, birth parents of placed children in out-of-home care are generally identified as experiencing difficult socio-economic conditions. They are documented to be largely unemployed, poor, primarily a single parent household, affected by physical illness, mental health and substance abuse problems, and domestic violence

(Beeman et al., 1996, Benedict et al., 1996; Gleeson et al., 1995; Altshuler, 1998, Chipungo & Bent-Goodley, 2004). The majority of parents are Caucasian, but minorities of color are overrepresented with African Americans first and Hispanics second (Courtney, 1994; AFCARS Intern Report, 2006).

Very few studies in the literature review address birth parents. O'Donnoll (1999) focused on African American fathers of children in kinship care that mainly described placements with the mother's extended family, since biological fathers of children in kinship care are often unknown and frequently ignored by workers (O'Donnoll, 2001). Only 38% of fathers were sporadically contacted by workers and half of the contacts were over the telephone; there were few face-to-face contacts and even fewer in the fathers' home. Case workers had incomplete demographic information on fathers, but they knew many of the fathers' problems (i.e., substance abuse, incarceration, non cooperation with worker or agency, housing problems, lack of interest in the child, history of child abuse, abuse to the mother, lack of parenting skills). Children placed with the fathers' relatives did have more contact with their fathers, and the fathers were also in more contact with workers and involved in the planning and service delivery for their children. The race, case load, and work experience of the worker did not appear to influence the case worker's practice with fathers. Workers reported that they did not think about the fathers when working the case. According to O'Donnoll's (1999) study, poor, unemployed, struggling fathers were reluctant to get involved with social services, and they felt stressed about their inability to fulfill the provider role. They viewed these agencies as part of an oppressive, unresponsive system. It is important to add that O'Donnoll's study was exploratory, did not have a comparative group, and used a small sample from two private agencies serving kinship families, thus precluding

the comparison across race groups and the generalization of findings. The study is, however, the only one found addressing the involvement of biological African American fathers in the case planning of children in kinship care. It provides initial information in an area that has not been researched, and poses important questions about workers' intentions and the child welfare efforts to include fathers in case work of children in kinship care.

Documentation is lacking concerning Hispanic birth families and particularly parents of children in out-of-home care. Ayon and Lee (2005) reported that their sample was composed of 58% Hispanics who were mainly single women with 3.54 children per family. Hispanics had more children than other research participants. The researchers also reported that 67% of the Hispanic research subjects were monolingual Spanish speakers. Nearly 80% of Hispanics reported some level of high school education. Reporting an annual income of less than \$20,000, Hispanics were the largest group (87%), compared to 77% African Americans and 43% Caucasians. Fifty-seven percent of Hispanics and 57% of African Americans received public assistance compared to 27% Caucasians. These numbers should be considered preliminary since the sample consisted of a small number of cases, self-report data gathered in telephone interviews, and information that occurred two years earlier.

Hispanic and White non-Hispanic children come mainly from "married couple with children" family structure. Twenty percent of Hispanic children with substantiated cases are from "mother only" households, compared to 16% of White non-Hispanic cases. Thirty-three percent of Hispanics and 30% of White non-Hispanics were receiving public assistance. Forty-six percent of Hispanic substantiated cases had no prior reports to child protection, compared to 30% of all sample cases (Ayon & Lee, 2005).

Libby et al. (2006) provided some information on the services received by birth parents investigated for child abuse and neglect. The researchers compared the base line in-home assessment to a later 18-month report. The base line assessment was done at the time of investigation with the caregiver focusing on risk factors and the need for specialized services for the caregiver. It included identification of serious alcohol or substance use, serious mental health or emotional problems, physical impairment, parenting impairment, and domestic violence. The 18-months later report was done by workers indicating if the caregiver received any specialized assessment, referrals, or services since the initial base line. They documented a racial and ethnic disparity in referral to, and receipt of, specialized services for mental health and substance/alcohol abuse problems.

At the national level, Libby et al. (2006) concluded that for all families involved with child protection authorities, parents identified that mental health and substance abuse problems were not provided treatment by child welfare agencies. Caregivers with in-home child welfare cases were nearly 50% less likely to receive services for substance/alcohol abuse and mental health problems than those in out-of-home. Finally, parents of younger children (3-5 years old) were more likely to receive services; this was attributed to the concern for harm to younger children. However, the researchers observed in their report on adolescents and older children, that they were also affected by their parents' or care takers' substance abuse and mental illness. In the study sample, for American Indian caregivers parenting impairment was identified as a risk factor in 30% of the cases. Twenty-two percent had alcohol/drug or mental health problems, but only 15% received an assessment; 25% were referred for services, but only 12% received any alcohol, substance abuse, or mental health services. There were no differences found among American Indian, White and Black non-

Hispanics. Interestingly, Hispanics in this study fared the best mainly because the language specific services required (Libby et al., 2006). They surpassed the other race/ethnic groups in assessment, referral, and prior mental health services.

The study used the data from a longitudinal nationally representative study on children 0 to 14 years of age whose parent was investigated by child protection. A total of 3,340 cases were included, and data were weighted to make national inferences in their results. However, national estimates of minority parents were unable to be generated. The findings need to be confirmed with future studies having overrepresented samples of minorities.

Inadequate substance abuse services to parents were also documented by the National Black Child Development Institute Survey. The Institute reported that drug-abusing parents received inadequate services when compared to parents of children placed in foster care for other reasons (Walker, Zambrillo, & Smith, 1994, in Hill, 2003). Disparities in service delivery to families of color are presented by Hill (2003) after a review of research findings. According to Hill, the study of child welfare by the U.S. Children Bureau (1997) identified racial differences in the services offered to parents. Parenting skills, caretakers substance abuse services, and housing services varied. African American caretakers seemed to receive more substance abuse and parenting services than Caucasian. Housing services were more frequently received by Caucasian caretakers (U.S. Children Bureau, 1997, in Hill. 2003).

Placements and Workers' Characteristics

The studies provided information on: (1) kinship care compared to foster care and (2) workers characteristics.

Kinship Placements

Kinship placement is disproportionately used with minorities of color, especially African American and Hispanic children (Dubowitz, 1993; Ritter, 1995; McMurtry et al., 1992; Altshuler, 1998; Scannapieco et al., 1997; USDHHS, 2000, Leslie et al., 2000; Ehrle & Geen, 2002; Lu et al., 2004). There are approximately 200,000 children placed in kinship care in the country (National Conference of State Legislators, 2004; U.S. General Accounting Office, 2002). Nearly 60% of children in kinship care are African American compared with 45% of non-kin placements (Courtney, 1994; Cook & Ciarico, 1998, in USDHHS, 2000). Hispanics also use kinship placements; the Child Welfare League of America (2003) indicates that 15% of the children in foster care are Hispanic, and 4.4% of Hispanic grandchildren are living with grandparents compared to 0.8% of same age Caucasian grandparents (Burnette, 1999).

Race and ethnicity of the child showed a statistically significant relationship to kinship placement (Grogan-Kaylor, 2000). African American and Hispanic children were consecutively 1.53 and 1.16 times more likely to go into kinship placement than Caucasian children. Beeman et al. (2000) reported that children of African Americans and Native Americans, who are older than two, are more likely than Caucasian children to be placed in kinship care. Keller et al. (2001) found a strong association between kinship placement and race: African American boys are more likely than Caucasian boys to be placed in kinship care, and kinship placements are composed of mostly African American youth (Leslie et al., 2000). Ehrle and Geen (2002) stated that 40% of African American children are in kinship compared to 30% in foster care; 24% of Caucasian children are in kinship care and 48% in foster care.

Lu and colleagues' (2004) recent empirical study uses a cross sectional methodology and provides a great description, correlation, and comparison of children in child welfare across race, ethnicity, and outcomes. The large, stratified sample obtained from a longitudinal study, the use of a normative comparative group, and the power of the statistical data analysis provide solid evidence about the overrepresentation of African American in kinship care.

Workers' Characteristics

Workers serving families and children in out-of-home care have a documented high turnover rate (Chipungu & Bent-Goodley, 2004). Child welfare services are mainly facilitated by Caucasian child protective workers. This contrasts with the large number of minority families and children using the services. Insuasti-Santana (2002) reported that 74.3% of kin providers in their study were African American compared to 25.9% of African American workers; 17.1% kin providers were Caucasian compared with 37% of Caucasian workers; and 2.9% Hispanic caregivers compared with 2.9% Hispanic workers. Beeman and Boise (1999) reported in their study of child protection workers and kinship placements that 79% were Caucasian and 21% were color minority workers. This may have had an impact on the services delivery and communication between workers and kin families (Berrick et al., 1994; Beeman et al., 2000; Peters, 2004).

Perry and Limb (2004) also support the overrepresentation of African American clients in out-of-home care, and under-representation of African American child welfare staff. Hispanic workers have larger Hispanic case loads due to even smaller Hispanic worker-to-client ratios. However, because they share the same ethnicity and language, there are usually better outcomes in discipline and emotional care of children and in solutions to

mandated child abuse cases. The participants of the study by Perry and Limb were mainly Hispanic single women, and the rating of satisfaction in their relationship with workers was reflective of open communication, frequency of visits, and help in securing public assistance. These predictors of quality client-worker relationship enforce the linguistic and cultural characteristic perhaps needed to serve Hispanic clients.

Adding to this, Pecora, in the recent 2006 professional presentation to the Alliance for Children and Families National Leadership Conference in Child Welfare Issues, indicated that child welfare staff turnover drains: (1) financial resources (U.S. General Accounting Office, 2003; Flower, McDonald, Sumski, 2005), (2) organizational knowledge (Ulrich, 1998, in Ramiall, 2004), and (3) lessens program and agency performance due to the impact in placement stability and permanency outcomes for children (Flower et al., 2005; Pecora et al., 2005; Pecora et al., forthcoming; Ryan & Testa, 2004).

The fact that these studies were performed during different time periods and with different methodologies increases the level of trust of their veracity (Berrick et al., 1994; Beeman et al., 2000; Ayon & Lee, 2004b; Peters, 2004; Perry & Limb, 2004). Peters' study is an empirical study of the population of child welfare workers of the state of California that obtained an 80.4% response rate that increases the rigor of the study and confidence of its findings.

Race and Ethnicity: Similarities and Differences among Care Providers

Characteristics and Circumstances of Care Providers

Foster care providers are more likely to be Caucasian, married, more educated, employed outside the home, with higher levels of income (Berrick, 1996; Gebel; 1996;

Scannapieco et al., 1997; Jones et al., 2004; Timmer et al., 2004). More than 75% of foster parents have at least one birth child, and another 30% have adopted at least one child. They live primarily in urban/suburban communities, while 24% live in rural neighborhoods. Overall, they have six years' experience fostering children (National Survey of Current and Former Foster Parents, 1991, in Chipungo & Bent-Goodley, 2004). Berrick (1996) reported that foster care providers have a mean age of 46.4 years and are more likely to own their home. Gebel (1996) added that 55% of non-kin were married and 52% were Caucasian. The number of foster care providers is documented to be in decline since the late 1970s coinciding when there was an increase in the demand for out-of-home placements (Testa, Shook-Slack et al., 2002; McIntosh, 2002, Berrick et al., 1994; Hegar & Scannapieco, 1999). Between 1984 and 1995, the number of foster parents decreased by 4% while the number of children in foster care increased 68% (Child Welfare League of America, 2000). It has been documented that certified foster care givers became dissatisfied and quit fostering within the first year of service (Cox et al., 2002, in Chipungo & Bent-Goodley, 2004).

In contrast, kinship care providers were prominently identified as African American or women of color, grandmothers and aunts in a second-generation parenting role, economically disadvantaged, more likely never to have married, less educated than non-kin care providers, and very likely to be the only adult in the household (Barth et al., 1997; Dubowitz et al., 1993; Pecora et al., 1994; Benedict et al., 1996; Berrick et al., 1994; Keller et al., 2001; Altshuler, 1998; Ritter, 1995; Berrick, 1996, Gebel, 1996, Scannapieco et al., 1997; Kelly et al., 2000; Leslie et al., 2000; USDHHS, 2000; Beeman et al., 2000; Ehrle & Geen, 2002).

Scannapieco et al. (1997), using a research methodology that included the population, triangulation of data sources, and a comparative group, documented a significant difference in caregivers' race across placement types; 49% of kinship providers were African American compared to 25% of non-kin foster parents. Almost 80% of African Americans were kinship care providers compared to 52.5% for non-kin; 20% of kin care providers were reported to be over 60 years old. This study used a random sample and a comparative group. Caputo (2000) reported that minority grandmothers showed an increase in co-residing and parenting grandkids, 1 out of 10 grandparents was assuming the full-time parenting of grandchildren for at least a period of six months, and 64% of these were African American. This study used a national representative sample of women, ages 30 to 44. It provided a clear indication of the dimension of co-residency of minority children with their grandmothers, even on this young cohort of females. The reader, however, must be alert that the study doesn't exclusively address formal kinship placements.

Pecora et al. (1994) and Le Prohn (1994) also reported that relative foster families were more likely to be minority, primarily African American, Native American, and lately, Hispanic. These studies provide some of the more complete descriptions of kinship care providers in the literature while using a rigorous research methodology. The studies use a stratified sample with no replacement. A comparison group—both foster/kin and mothers/fathers—had a clear operationalization of terms and specific inclusion/exclusion criteria, good sample size with high response rate, and data collection done in two stages to allow for both quantitative and qualitative data analysis. These strengths should be balanced with the fact that the studies were conducted in one private voluntary agency serving long-term foster care families across 13 states; this limits the generalization of findings. However,

the general pattern of findings was replicated by using the same survey with a sample of foster parents from a public child welfare agency in Louisiana (Pecora et al., 1998).

Conditions, Motivation, and Needs

Kin caregivers are taking care of an average of two children with ages ranging from 2 to 18 (Gebel, 1996; Burnette, 1999; Beeman et al., 2000). Children placed in kinship care were more likely to have been removed due to neglect and parental substance abuse, and from a younger mother-only household (Testa et al., 2002; Grogan-Kaylor, 2000; Kelly et al., 2000; Altshuler et al., 1998; Ehrle & Gen, 2002). Testa et al. (2002) found that feelings of empathy, religious beliefs, sense of duty, and the financial support or foster care payment were impacting the decisions of kin to take care of their relative's children. Le Prohn (1994) and Le Prohn & Pecora (1994) indicated that relatives often reported feeling obligated to assume the caretaker role, but also viewed caring for their relatives' children as natural. Baum et al. (2001) in Chipungo and Bent-Goodley (2004) indicated that primarily foster parents have a sense of social obligation and a desire to enhance the life of a child. Other reasons include a societal need, religion, supplemental income, foster care as a step toward adoption, increase the size of the family, and substitute a lost child through death (Baum et al., 2001, in Chipungo & Bent-Goodley (2004). The needs experienced by kinship families resemble those experienced by non-relative foster parents and families. They include financial support, physical and mental health services, parenting and managing skills for children affected by abuse, neglect, and perhaps attachment disorders. Childcare and respite, educational support, crisis management, visitation and family of origin work, coordination and assistance with child welfare programs, legal assistance, and permanency planning were also identified as needs by both kinship and foster care providers (Cuddeback & Orme, 2002;

Chipungo & Bent-Goodley, 2004; Burnette, 1999; Pecora et al., 1994; Grogan-Kaylor, 2000; Kelly et al., 2000). According to Berrick and colleagues (1994) 91% of kinship caregivers had no training for caring for children, and less than one-third of foster parents reported being well-prepared to take care of foster children (Cuddeback & Orme, 2002). Gebel (1996) also identified the need for kinship families to receive more economic support and education concerning discipline.

Hispanic Kinship Care Providers

Only two studies reported exclusively on Hispanic providers (Burnette, 1999, 2002) and both were reports primarily of informal kinship placements. These studies were included due to the dearth of information on this race/ethnic group, and were complemented by information from Ayon and Lee's (2004) study. The reader must be aware that as exploratory studies using purposive, small, and self-identified samples their information should be considered inconclusive or in need of further verification.

Burnette (1999) was the only researcher addressing the Hispanic kinship care provider population as the main topic of study. This study reported that one-third of care arrangements within Hispanic families were private or informal, 56% were legal guardianship or legal custody, and only 6% were enrolled in the state kin foster care program. Informal arraignments do not receive governmental assistance, so these families experienced lower levels of support and increased financial pressure. Providers were grandmothers ranging in age from 50 to 78 years of age and caring for an average of two children between 4 months to 18 years old. Language and cultural barriers were specific limitations for Hispanic providers.

Hispanic kin providers are a diverse group of individuals, most of whom have experienced relocation and immigration. They come from Puerto Rico, Dominican Republic, Cuba, Ecuador, Guatemala, Honduras, Nicaragua, and Panama (Burnette, 1999). Language and cultural barriers were documented, even though the length of stay in the United States for the caregivers was an average 35 years. English proficiency was very low; only 1 in 5 responders reported speaking English well, and less than 1 in 3 of the kinship care providers had graduated from high school. Considering the low levels of formal education and the language barrier, it came as no surprise that lack of knowledge and information about available services was identified as a main need. Access to children's services (e.g., parenting education, counseling, day care, transportation) was identified as a glaring need. Another important issue was the economic situation of kinship care providers. The study reported that 93% of responders were close to federal poverty standards. Eighty-one percent of Hispanic kinship care families lived in households with incomes below the poverty line, and almost three-fourths lived in extreme poverty. Like any other pioneer exploratory research, this study provides important information about the life experiences of Hispanic kinship care providers, their circumstances, and special needs for further research and verification. Even though Burnette's (1999) study used standardized measures to assess the Hispanic caregivers, the use of small self-identified sample does not allow for any conclusions beyond the sample itself, as there are threats of external validity and a possibility of selection bias. It is important to remember that from an already small sample of 74 subjects, only 6% were formal kinship placements, which precludes any possible conclusions about this group until other studies with larger samples are conducted. The recent study of Ayon and Lee (2004) provided similar information on Hispanic parents with child protection

experiences. Similarities were noted on socio-economic, educational, and family structure characteristics as well as the need for services, including linguistically appropriate workers that can assist with services accessibility.

Outcomes of Out-of-Home Placements

Placement Type Outcomes

In comparison to foster care placements, kinship placements have been documented to provide several positive outcomes. These positive outcomes include: (1) more stability in placements for children in familiar surroundings, (2) increased visitation and family contact, and (3) reduced trauma and stigma about their status (Chapman et al., 2004; Leslie et al., 2000; Mason & Glesson, 1999; USDHHS, 2000; Keller et al., 2001; Ehrle & Geen, 2002; Kerman et al., 2002). Children in kinship experience fewer placements than children in non-kin (Courtney, 1994; Beeman et al., 1999, Benedict et al., 1996; Leslie et al., 2000; Le Prohn & Pecora, 1994; Dubowitz et al., 1994). They also maintain a better connection to their culture, community, and family compared with non-kin placements, because they are often placed in proximity to their original homes and in their community (Testa et al., 2002; Pecora et al., 1994; Mills & Usher, 1996; USDHHS, 2000; Berrick et al., 1994; Glesson et al., 1997). Visitation and contact opportunities with birth parents and siblings are more frequent and consistent (Barth, 1997; Berrick et al., 1994; Le Prohn & Pecora, 1994). Furthermore, many children have lived with their relatives before removal and formal placement, which makes the experience less traumatizing (Grogan-Kaylor, 1996; USDHHS, 2000). Beeman et al. (1999) and Peters (2004) stated that most workers (76.8%) surveyed agree that children in kinship placements are better off than non-kin placed children; 73% of workers agreed that

kin-placed children are less troubled by their foster placement status than non-kinship; 61.7% agreed that the stigma of foster care is lessened in kinship foster care.

Some of the negative outcomes of kinship placements compared to foster care include longer out-of-home placements, decreased rates of reunification, longer waiting time periods and decreased rates of adoption (Wulczyn & Hislop, 2002; Courtney, 1994 & 1995 & 1997; Link, 1996; McMurtry et al., 1992; Barth, 1997; Wells & Guo, 1999; Leslie et al., 2000, Scannapieco et al., 1997; Mason & Glesson, 1999; James, 2004). There was a 6% increase of children placed in kinship care for two years or longer compared to those in foster care placements (Cook & Ciarico, 1998 in USDHHS, 2000; McIntosh, 2002). Mills and Usher (1996) indicated that 77% of children placed in kinship care remained there. McIntosh (2002), Barth (1997), Brooks et al. (2002) and Lu et al. (2004) reported that age and race have a great effect on chances to be adopted or reunified, and that the odds of African American children being reunified decrease by one-fourth when placed in kinship. Wulczyn and Hislop (2002) reported that adoption for African American children in kinship care occurs, but it requires longer time than the adoption of children of other races.

Permanency Differentials across Race/Ethnicity

According to Burrow et al. (2004) there are no significantly different adjustments in adolescent adoptions whether they are between different races or same-race adoptions. Different-race adoption was not shown to be a significant risk factor for adverse developmental outcomes among adolescents. However, the adoption outcomes for children of color and Caucasian children are different (Wulczyn & Hislop, 2002; Barth, 1997; Leslie et al., 2000; McMurtry & Lie, 1992; Lau et al., 2003; Lu et al., 2004; Church et al., 2005; Church, 2006). These studies performed from 1992 to 2006 included longitudinal, empirical,

cross-sectional, stratified, and probability samples that allowed for increased trust in their results. Consistently, African Americans were reported to be less likely or requiring longer time to be reunified (58% to 41%) or to be adopted (16% to 24%), and more likely to stay in care (33% to 11%) (Lu et al., 2004; and Wulczyn & Hislop, 2002). Using data from the Multistate Foster Care Data Archive that contains data from nine states representing 30 percent of the national caseload at any given time, Wulczyn and Hislop (2002) reported that during the 1990s the unit time likelihood of adoption accelerated for all children in care. Faster adoptions were noted particularly with children from urban areas, African American ages 1 to 5, and kinship placements, especially from 1991 to 1997. However, the researchers clearly indicate that even though improvements, the overall rates of adoption among African American children from urban areas were still slower than those of other children. Time for African American children to be adopted is longer than for other children.

In the study by Lu et al. (2004), while controlling for age, African American children were five times less likely to be adopted than Caucasians, and 2.5 times less likely than Hispanics. Hispanics had an equal chance to remain in care and be adopted when compared to others (17% vs. 17%) (Lu et al., 2004), and Leslie et al. (2000) reported that 80% of Latino children had experienced both kin and non-kin placements. The latest study by Church et al. (2005) and Church (2006) added that for Hispanics, ethnicity was the most significant predictor for time in out-of-home placement. McIntosh (2002) reported that younger children had significantly more likelihood to be reunified than older ones. Church et al. (2005) and Church (2006) corroborated this finding with Hispanic youth who, after age 15, were found to stay the longest in out-of-home placement, having very slim chances for adoption and emancipating from foster care.

Specific Children's Outcomes across Placement

Information about children outcomes across placements is not conclusive, particularly as some of the studies employed both private and formal kinship placements and foster home placements. However, children in kinship care appeared to fare better as compared to children placed in non-kin, but placement compared less favorably than children from the general population and those in informal kinship care arrangements (Chase et al., 2004; Benedict et al., 1996; Barth, 1997; Keller et al., 2001; Lu et al., 2004). Placement with relatives seems to increase the outcomes for children, as studies document fewer physical and mental health problems, truancy, delinquency, education, and overall troubles (Benedict et al., 1996; Berrick et al., 1994; Grogan-Kaylor, 2000; Chase et al., 2004; (Chipungo et al., 1998; Cook & Ciarico, 1998; Iglehart, 1995 in USDHHS, 2000). Keller et al. (2001) added that compared to kinship, children in non-relative placements appeared to have lower levels of competence and higher levels of problem behaviors. This study reviewed the results of standardized measures from a cohort of diverse children obtained across several years. Children in kinship care were reported to have better perceptions of their placement experiences than those in foster care and in group care (Chapman et al., 2004). Positive perceptions were based on the quality of relationship and relatedness to caregiver, but race was not significant concerning the role of placement and the perceptions of children.

Even though children in kinship seemed to do better, studies indicate that some of them also present serious difficulties or sequelae from their experiences. Grant (2000) and Janicki et al (2000) found 11.4% co-morbidity for ADHD and depression, 20.5% for ADHD and oppositional-defiant disorders, and 18.2% diagnosed with both depression and oppositional-defiant behavior. Dubowitz et al. (1994) completed a comprehensive

assessment of the physical/mental health condition and the educational status of children in care. This assessment used triangulation of data sources, triangulation of standardized measures, population sample, and comparative groups; these methods provide confidence to the findings. This study reported that children, particularly boys, placed in both kinship and regular fosters care, experienced behavior, school, and learning difficulties. Health status, anemia, asthma, and dental problems were found to be prevalent (Dubowitz et al., 1994).

In relationship to out-of-home care, using a sample of 17-year-old youths in foster care, Curtis et al. (2005) concluded that the youth have disproportional higher rates of psychiatric disorders. They found that 61% of youth qualified for at least one psychiatric disorder, and 37% met criteria for a psychiatric disorder in the past year. The strongest predictor of psychiatric disorder in that study was the number of maltreatment types experienced. These researchers found no differences between the prevalence of disorders between kinship and non-kinship foster families.

Racial differences were also noted in access to mental health services. Minority youth and families had lower rates of utilizing mental health services than Caucasian youth (Leslie et al., 2004; Courtney, 1996; Garland et al., 2003). Cultural driven differences in help-seeking patterns, receptivity and accessibility to providers, and systematic bias in referral and service delivery patterns were presented as possible reasons (Garland et al., 2003). Leslie et al. (2004) also noted that minority children experienced fewer mental health services than Caucasian children, and 62% of children in care had “suspect” scores on disability tests, particularly those who were older and Hispanic. The study assessed with standardized measures a large sample of children ages three months to five years. Mental health concerns were also identified by Kerman et al. (2002) reporting less positive outcomes

for minority youth and those with family history of mental illness placed in kinship care. Kin families who had children with disabilities or were affected by HIV/AIDS had even more complex health issues due to the increased mental and physical concerns (Linsk & Mason, 2004; McCallion et al., 2000).

Studies of adults with childhood experiences of out-of-home care were also alarming. Kirby and Kaneda (2002) listed more difficulties for skipped generation families trying to secure health insurance coverage and health care, particularly for adolescents. Teenagers make up 30% of all foster care youth and 20,000 leave foster care as they reach 18 years of age (DHHS, 2003). Difficulties in adult functioning in terms of education, employment, physical and mental health, and risk behaviors were found for both youth with kin and foster care experience (Benedict et al., 1996, Berrick et al., 1994; Courtney et al., 1998). Benedict et al. (1996) found few inconsistencies and differences in adult outcomes based on placement history, and concluded that perhaps severity of abuse, not placement type, was associated with adult outcomes. Carpenter and Clyman (2004) reported that kinship was a predictor of anxiety and unhappiness with life for adult African American females when compared to those adopted or raised by at least one biological parent. Women with histories of kinship were more likely to be obese, current smokers and poor, to have had an unwanted first sexual experience, and are less likely to have completed high school. The reader should be aware that the sample use of this study includes females with histories of kinship care compared to females raised by at least one biological or adoptive parent. Kinship care was determined by the care of any relative to the child for at least one month. The study fails to differentiate between formal and informal kinship placements, and precludes determining if differences between the samples are due to early trauma and abuse, or due to placement differences.

Exiting care before age 19 was associated with less positive outcomes in wellbeing; self-sufficiency, and overall scores of kinship care alumni; other covariates such as race, IQ, family psychiatric history, and length of agency service, were insignificant (Kerman et al., 2002). In a comparative study that used a sample of former foster care adults from the Northwest region and the general population, Pecora et al. (2005) compared mental health functioning as measured in the National Comorbidity Study Replication (NCS-R). The Northwest sample of former foster care youth had significantly poorer mental health functioning than the general population, with exceptions being alcohol dependence and anorexia. The prevalence of post-traumatic stress disorder and major depression during the previous year was significantly higher for the former foster care youth than for the general population. The same study reported that even though the high school completion for former placed youth was comparable to the general population, former foster care youth obtained a GED credential 28.5% of the time instead of a high school diploma that is linked to increased successful education and income. The employment rate was significantly lower 80.1% for those with foster care experiences when compared to the national overage of 95% (Pecora et al., 2005). Similar findings are also reported by Curtis et al. (2005), who indicated that older foster care youth presented a three times greater prevalence rate for depression and two times greater prevalence for PTSD when compared to community youth. Using a sample from the Midwest, Courtney et al. (1998) reported that at the time of leaving care 37% of youth had not completed high school, 39% were unemployed, and 32% were receiving public assistance. NASW (1999) reported fewer than half of foster care youth were employed at the time of discharge. Adding to this, there is a great proportion of former foster youth in both the homeless and incarcerated adult population; 60% of non-married females have a baby

within four years after leaving care (Courtney et al., 1998; Barth, 1990; Cook, 1991; NASW, 1999).

Care Providers Outcomes

Providers in kinship care seem to be affected by depression, hypertension, and stress, since they take on the care of kin children affected by abuse, neglect, trauma, and separation (Kelly et al., 2000; Burnette, 1999; Benedict et al., 1996). Kelly et al. (2000) identified 30% of caretakers presenting psychological distress at a clinical range and requiring professional intervention. There are substantial number of diverse gerontological studies documenting health and mental health concerns of caregivers (McLean & Thomas, 1996; Kolomer, 2000; Kivett, 1993; Kirby & Kaneda, 2002; Jones et al., 2004; Gibson, 1999, 2002; Janicki et al., 2000; Johnson et al., 2003; Bullock, 2004; Morrow-Kondos et al., 1997; Timmer et al., 2004; Weber & Waldrop, 2000). Burnette (1999, 2000) identified that the majority of Hispanic kinship families were living below the poverty line while three-fourths were living in extreme poverty. Kin were less able to provide health and education assistance for children in their care, and their resources were fewer (Berrick et al., 1994; Jones et al., 2004; McCallion et al., 2000; Dubowitz et al., 1994; Kirby & Kaneda, 2002; Leslie et al., 2002, Linsk & Mason, 2004). All these stressors appear to affect the parenting abilities of kin. The physical condition of grandparents may have a restrictive physical interaction with the children in care; this is serious when the developmental stages (between 2 and 12 years of age) of children are considered (Benedict et al., 1996; Beeman et al., 2000; Kelly et al., 2000). Timmer et al. (2004) added that kin reported themselves as significantly more distressed, suffering from moderately higher levels of depressive symptoms, parental distress, and abuse potential. Jones et al. (2004) found that kinship providers had more

compromised parental attitudes than foster parents. Kin were reported to display less warmth and respect, more strictness and over protectiveness, and more parent-child conflict and anger.

Workers and Service Delivery Outcomes

Kinship placements receive fewer services and workers contact. Studies providing this information include Barth et al. (1994), using a probability sample of an empirical-longitudinal and comparative study, and Dubowitz et al. (1993), using a population sample and triangulation of data sources, including standardized measures. Workers indicated that they lacked time and skills for assessment, supervision, monitoring, and facilitating continuation of reunification services while working with kinship placements (Dubowitz et al., 1993; Berrick et al., 1994; Beeman et al., 2000; Mason & Glesson, 1999). Workers indicated feelings of inadequacy with their skills to work with triangulations between caregivers, children, and parents, and in general with kinship placements (Peters, 2004). This is confirmed by reports from providers who indicating receiving fewer supporting services, less training, and monitoring for the children in their care (Berrick et al., 1994; Pecora et al., 1994). Caregivers acknowledge the importance of assistance, especially the stipend for the family survival and child needs (Testa et al., 2002; Pecora et al., 1994). Relatives generally reported that foster care was a negative experience (Kolomer, 2000).

Child welfare workers' perceptions of kinship placements and caregivers indicated that workers were mixed in their perceptions of working with kin families (Beeman & Boise, 1999). They expressed difficulties communicating with kinship parents—cooperating in case planning, and assisting them to comprehend their role as foster parents. Some workers expressed that some kinship parents lacked objectivity about the child and the biological

parent, and that kin parents might need more time and support negotiating the system. There were also differences in perceptions between minority and Caucasian workers. Minority workers of color (42%) were more likely to disagree with Caucasian workers (19.3%) on kinship foster parents being more difficult to supervise. They also disagreed on kinship families resisting agency supervision (50% of color workers compared to 27% Caucasian workers). Workers of color also were more likely to indicate that they enjoyed working with kinship families than Caucasian workers (73.1% compared to 52.2%) (Beeman & Boise, 1999).

Conclusion

The goal of this literature review was to identify the existing information on race ethnic issues and Hispanics in out-of-home care. The review of studies support that there is a race discrepancy in out-of-home care with an overrepresentation and disproportionality of minorities, especially African Americans and Hispanics. However, the studies provide information primarily in African American samples with minimum information on other race/ethnic groups in out-of-home care, or issues.

The number of children of color and families affected by foster care is staggering. Kinship care is the main type of out-of-home care within minority communities, especially documented with African Americans. Abused children seemed to be removed from low income mother-only households and placed primarily in relatives' households, particularly grandmothers. Research seems to indicate longer stays in out-of-home care with longer waiting periods for adoption, and fewer possibilities for permanency for minority children. Minority families are more likely to be served by Caucasian workers who expressed challenges and difficulties working effectively with them. Some positive outcomes were

reported. Pecora et al (2005) documented that over 26% of former foster care youth from that study sample had positive outcomes in terms of good mental health, education achievement, employment or personal income. Also, Pecora et al. (2006) reported that overall 72.5% of Casey alumni received a high school diploma or a GED by the time their case closed. However, even the best of documented outcomes continue to present a challenging picture for the children and their caregivers. Mental and physical health problems, low educational achievement, increased stress, and ongoing poverty are consistently documented. The number of reports on the negative impact of care giving for kin is alarming.

Generally, the literature indicates that outcomes for large number of children with out-of-home placement experiences are somber. At best the consequences for children, parents, care providers, workers, and costs to the nation seem to require continued and diligent efforts for improvement. Removal of children affected by abuse and neglect is serious and traumatizing, so finding effective alternatives to care for them is foremost. With kinship care, with fragile, elderly, and poor caregivers, and foster care, with diminishing and disenchanted foster parents, and an organization with an unstable rotating child welfare work force, the need for improvement in the system is understated.

Information is deficient on the adult outcomes after childhood experiences in out-of-home care. The few reports that were located were also documenting mental health, education, employment, and social stability concerns, so information was severely limited in reference to race and ethnicity, which is the main concern of this study. There was a complete lack of studies addressing Hispanic adults who had experienced out-of-home care.

Studies of long term impact and consequences of out-of-home care are not yet conclusive. Decisive evidence on long term impact and outcomes of out-of-home care is hard to research, particularly as one considers the complexity of issues involved (e.g., child developmental stages, severity/type of abuse, trauma of family separation, placement history, quality and continuity of services received). They all form part of the conundrum. The complexity increases as issues of culture, race, ethnicity, gender differences, child welfare practices, and social power imbalances are included. Out-of-home placement should be understood as a multi-complex phenomenon.

At the direct field practice level, effective services require good assessments and evaluations to direct programs and policy. These evaluations and assessments can be challenging with racially and ethnically diverse minority families from whom little information exist. Even though it is reasonable to conclude that all ethnic and race groups are impacted by similar issues, they could have more specific characteristics that impact their later outcome success.

Assessments and evaluations can only be effective if they respond to the characteristics and needs of the target population. Unfortunately, there is not sufficient information about racially diverse families to identify the main issues of concern, the sources of strengths, and the best practice models while dealing with placements, programs, and policies. This is especially true for Hispanics, the main focus of this dissertation. In order to clarify these characteristics and circumstances more information about the different racial/ethnic groups and their outcomes is needed.

CHAPTER IV
HYPOTHESES AND DATA COLLECTION

Introduction

Information about Hispanics with out-of-home placement experiences and information about race, in relationship to child and adult outcome achievement, is limited. The goal of this study is to reduce the information gap by using secondary data on the outcomes of Hispanics compared to racially diverse adults with out-of-home care experiences in childhood.

The hypothetical formulation behind this study is that *there is a set of ecological correlates that distinguishes those more successful from less-successful adults who experienced out-of-home care as children*. Using a sample of Hispanics, African Americans, and Caucasian adults, the study aims also to respond to the following research question: *Do Hispanics who experience out-of-home care as children become successful adults?*

In order to answer the research question and test the research hypotheses, this study uses the data collected by Casey Family Programs in their Casey National Foster Care Alumni Study (Pecora et al., 2003) to describe and compare the outcomes of Hispanic Casey alumni to those of African American and Caucasian alumni.

Agency Information

The Casey Family Programs was founded in Seattle, Washington in 1966 by Jim Casey, the founder of United Parcel Services, and his family. It is currently the largest

national operating private foundation with a current endowment of \$2 billion. The mission of Casey Family Programs is to provide and improve, and ultimately prevent, the need for foster care. After 40 years' experience, Casey Family Programs continue to support families, youth, and children through direct out-of-home care services, collaboration with other agencies and organizations, and by promoting improvements in child welfare practice and policy. Casey Family Programs has, and continues to provide, services to a diverse group of clientele, which includes different ethnic/race, socioeconomic, educational, cultural, gender, physical/mental limitations, and age variations.

In 1998 Casey Family Programs served over 1,500 children, operated 23 offices across 13 states, and served both children and families in rural and urban areas. Until 2003 the program provided comprehensive long-term family foster care services to older maltreated children unable to live with their parents, and for whom adoption or reunification were not viable alternatives (Pecora et al., 2003). The goals of the program were to minimize placement disruptions or changes, and to provide a secure and stable family environment conducive to the children's optimal development while always seeking opportunities for permanency (Pecora et al., 2003). The majority of children and youth served by Casey are referrals from child welfare agencies through participation agreements. Children referred to Casey usually have stayed in public foster care for some years, so they enter Casey older and stay longer than other foster programs (Pecora et al., 2003). Services include adoption, foster care, formal and informal kinship care, guardianship, family preservation, independent living skills, and transition to adulthood preparation.

Casey National Alumni Study Information

In 1998 The Casey National Foster Care Alumni Study was initiated by Casey Family Programs Research Services with the goal to evaluate the long term family foster care model program that had operated from 1966 to 1998. In collaboration with researchers from Harvard Medical School, the University of Michigan Research Center, and the University of Washington, the main purpose of the study was to identify and evaluate the program components most associated with youth intermediate and long-term outcomes for the total 1,609 alumni served by Casey Family Programs during those 32 years (Pecora et al., 2003).

The Casey National Foster Care Alumni Study is a cross sectional survey research that centers on adults served by Casey Family Programs during childhood. In order to be considered a Casey alumnus, individuals had to have been placed with Casey out-of-home care programs for at least 12 consecutive months, and had to have been discharged for no fewer than 12 previous months before the time of data collection. All youth served by Casey between 1966 and 1998 were included in the study sample if they met the stated required criteria. The Casey alumni were between the ages of 20 to 51 at the time of interviews; the proportion of alumni interviewed was 68.0% or a total of 1087 after subtracting alumni deceased 3.9% (62), in prison at the time of contact for interview 3.4% (55), in a psychiatric or other institution at the time of interview contact 0.7% (11), not located by the end of the search period 20.6% (331); and those that refused to participate 3.9% (63) (Pecora et al., 2003). The traditional response rate was 73.2% with only a 3.9% interview refusal rate. It was obtained by subtracting those deceased and those in correctional facilities and in psychiatric institutions restricted by the research board from being interviewed. This is the

RR1 response rate, as defined by the Standard Definitions Manual of the American Association for Public Opinion Research (2000, pp. 20-25; Pecora et al., 2003).

The data collection system included two sources: (1) case record reviews of 1,609 alumni and (2) direct personal interviews with 1,087 alumni that took place from September 2000 to January 2002. The interviews and file reviews were completed in 2001 and focused on securing data on the services and factors linked to alumni outcomes. Data on pre-placement, during placement, and after-placement experiences were obtained. Case records were used to extract data about child maltreatment experiences, family characteristics, and foster care services. In order to streamline and standardize the collection of information several rigorous methodologies were used. The reliability of the case record data was ensured by pilot-testing the case review methodology in a previous research that used a random sample of 24 Casey and 23 Washington State alumni in 1996. This pilot-testing allowed researchers to test the guiding forms, sharpen operational definitions, and determine if the desired elements were captured (Pecora et al., 2006). Also, clear operational definitions for every aspect of the case record data extraction and the use of standardized methods were used to enhance the reliability of the file data (Pecora et al., 2003). The Barnett et al. (1993) and the LONGSCAN (English & LONGSCAN investigators, 1997) coding system for type and severity of maltreatment were used. In addition, in-person and a video training were prepared to ensure consistency of file raters training. These trained file raters individually read and abstracted the information from the case records without knowledge of the study hypotheses. Inter-rater reliability checks were done using various reliability statistical methods such as McNemar's Test, Kappa coefficient, and Pearson correlations, depending on the variable. Only variables that had acceptable inter-rater reliability were retained, which

adds rigor to the methods and validity to the study. Information from records included demographics; dates of entry, placement changes, and exit from care; reasons for placement; maltreatment; birth parents and family; legal case determinations; and medical and psychological history information.

Personal interviews with the alumni were conducted by professionally trained interviewers from the University of Michigan Survey Research Center (Pecora et al., 2003); they required 2½ hours or more to complete. The focus of the interviews was on the current functioning of the alumni and outcomes achieved. They also asked questions concerning birth parents' demographics, risk factors, and foster care experience and services. Questions concerning outcomes were in areas of physical and mental health, education, finances and employment, social supports and relationships (Pecora et al., 2006). Interviews contained supplemental questions from the University of Michigan Institute for Survey Research (Pecora et al., 2003; Pecora et al., 2005; Pecora et al., 2006) and several standardized measures. Standardized scales used several sections of the Composite International Diagnostic Interview, which is a World Health Organization (WHO) approved, non-clinician administered, psychiatric diagnostic interview. The 1996 Version CIDI 2.0 and sections of versions CIDI 2.1 and CIDI 3.0 were primarily the ones used in the alumni interviews (Pecora et al., 2003, 2005). Supplemental sections developed by the University of Michigan Comorbidity Survey Replication (NCS-R) with a national sample of 8,098 persons ages 15 to 54 years were also included (Pecora et al., 2003, 2005). The CIDI 3.0 and its supplements included previously developed instruments. The scales used had high reliability and validity indices, and were found to retain these properties when used as part of the CIDI (e.g., Cottler et al., 1991; Janca et al., 1992a; Janca et al., 1992b; Semler et al., 1987; Wittchen, 1994;

Wittchen et al., 1994; World Health Organization, 1996; Semler, 1989 in Pecora et al., 2003, 2005, 2006). The full CIDI has good inter-rater reliability (Cottler et al., 1991; H. Wittchen et al., 1991); test-retest reliability (Semler et al., 1987; (Wacker et al., 1990), and validity for almost all covered diagnoses as demonstrated by various World Health Organization trials (Farmer et al., 1991; Farmer et al., 1987; Spengler & Wittchen, 1988; Wittchen et al., 1989; Leitmeyer, 1990; Semler, 1989 in Pecora et al., 2003, 2005).

The Conflict Tactics Scale (Straus et. al., 1988) for verbal and physical aggression, the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and Social Function-12 or SF-12 (Ware et. al., 1998) for physical and mental health status assessment were also included in the assessment. The SF-12 was chosen for the study due to its growing use in the physical and mental health fields. In group comparisons, the SF-12 and the SF-36 summary measures have reached the same statistical conclusions about group differences (Wave, Kosinski, & Keller, 1998 in Pecora et al., 2003, 2005).

Information about the Casey National Alumni Study Data Base

The data collected by the Casey National Alumni Study continues to be used. The research team has performed multiple data analysis processes, not only to respond to the initial study questions, but also to facilitate publications about its findings that could assist other programs and ultimately other families and children experiencing out-of-home care. Characteristics of the Casey National Alumni Study data base important to the reader of this study include: (1) the organization of the data into dichotomous and trichotomous format by the Casey research team and (2) the use of an overall composite definition of success (see below).

1. During the data analysis process, multiple variables, particularly those concerning the outcomes of the alumni, needed to be categorized. After the statistical analysis, the Casey research team decided to complete a categorization process for all the variables, including the continuous ones. This extra step was done to create an integrative, consistent, and uniform analysis process of the data sources while preserving the richness of the information obtained. Composite variables scores were created and variables were converted into dichotomous and trichotomous data format. Concerning outcomes, the data was dichotomized in a way to predict the positive outcomes using values of “no=0” or “yes=1.” The higher coding “1” predicted the positive outcome and the lowest code “0” represented the absence of achievement of the outcome. Concerning this proposal, the organization of the data in a dichotomous format influenced the selection of the statistical analysis followed in this dissertation.

2. In order to begin to explore what a success definition entails, and based on the distribution of outcomes data in the alumni population, researchers from the Casey National Alumni Study extended their statistical analysis processes to examine the interrelationships among a number of potential predictors of actual alumni success as defined by certain number of variables (Pecora et al., 2003). Even though there is no universal definition of what constitutes success, nor a feasible comparison between alumni of foster care and the rest of the population; the research team found value in examining some success indicators to test a success definition (Pecora et al., 2005). Based on both previous research and practice knowledge, the research team identified 55 service factors, characteristics, indicators or potential predictors of successful outcome for the alumni (Pecora et al., 2003). Starting with the assumption that most communities and cultural groups value being mentally and

physically healthy, achieving high education, earning sufficient income, having health insurance, and having positive relationships with others (Pecora et al., 2003, 2005), a total of 55 initial success predictors were identified and placed into a stepwise multiple regression analysis that resulted in a summary or success index.

The Casey Family Programs research team was able to examine the relationship among these potential predictors and the actual outcome achievement of the alumni finding a model of variables that in combination best predicted and defined success for the adult alumni (Pecora et al., 2005). The final result of the multiple analyses was the detection of a small set of variables that jointly defined the likelihood of success. The set of 11 success indicators or components were generated and tested; and while few of the alumni achieved all the criteria, a substantial percentage achieved 7 of the 11 criteria used (Pecora et al., 2005). Even though further more comprehensive definitions of what constitutes success need to be developed and tested in future studies, the alumni study was able to document a wide range of the successes of alumni, thus creating a foundation and a precedent for defining success in future research (Pecora et al., 2005). This dissertation uses the same composite model process for defining success, but not the same items used in the Casey National Alumni Study. The items or outcomes used will be according to the goals and hypotheses of this dissertation.

During the time of the study and data collection, the Casey Family Program operated in Arizona (Phoenix, Tucson), California (Walnut Creek/Bay area, San Diego), Hawaii (Hilo, Honolulu), Idaho (Boise), Louisiana (Baton Rouge), Montana (Helena, Missoula), North Dakota (Bismarck, Fort Berthold), Oklahoma (Oklahoma City), Oregon (Portland), South Dakota (Pine Ridge, Rapid City, Rosebud), Texas (Austin, San Antonio), Washington

(Seattle, Tacoma, Yakima), and Wyoming (Cheyenne). The implementation of the same long-term family foster care model in all these locations, the national data collected from all the eligible alumni, and the rigorous research methods used, are all strengths of the data base used in this study to test the research question and hypotheses. It is hoped that this dissertation study will provide leads for further more rigorous research projects on the impact of ecological correlates, such as race, on outcomes for placed children, increase the body of information about Hispanic in the child welfare system, and document family, children, and program characteristics that may be related to desirable outcomes.

Further information about the Casey National Alumni study can be obtained at the website: <http://www.casey.org> or by contacting Research Services of the Casey Family Programs in Seattle, Washington.

Study Design

The proposed research is a non-experimental, ex-post-facto design using secondary data for analysis. Due to the developing but limited state of knowledge regarding Hispanics in out-of-home care, and the role of race in outcome achievement, and with the limits of this dissertation study, a secondary data analysis design is the most thorough and precise that is available.

The unit of analysis for this study is adults with experiences of out-of-home care during childhood. Using a sample of 810 Casey alumni from the 1,087 that were interviewed, which includes all Hispanic, African American, and Caucasian cases, the study goals are to: (1) provide comprehensive information on the outcome success of alumni by measuring success across health, mental health, education, and finance domain, (2) provide descriptive information about the characteristics and outcome success of Casey Hispanic

alumni, and (3) compare the outcome success of Hispanic, African American, and Caucasian alumni to observe if race played any role in outcome achievement. The study looks descriptively to race as one key predictor variable. In order to determine, however, if race plays a role in the outcome success of Casey alumni, many more predictor variables are analyzed and controlled for to determine the strength of the relationship of race on outcomes.

This study uses three predictor/control constructs based on Cicchetti and Lynch's (1993) ecological theory—ontogenetic, microsystem, and exosystem. The ecological transactional theory of Cicchetti and Lynch serves as a guide and framework for the selection of predictor/control variables available in the data base to answer the research question and test the hypotheses. This theoretical model is not being tested, but used as it recognizes a range of ontogenetic, microsystem, exosystems, and macrosystem characteristics interacting and ultimately impacting the functioning or outcome success of placed youths.

Using the ecological transactional theory by Cicchetti and Lynch (1993), predictor measures are organized in demographic, ontogenetic, microsystem, and exosystems constructs. Each construct includes specific variables measured at both nominal and continuous levels accordingly to the characteristics of the data format. Nominal data was “dummy coded” to be later entered into the statistical analysis.

The criterion variable is success in adulthood. Success is measured in four different domains—physical health, mental health, education, and finances. Each of these domains includes several outcome variables. Also, to establish a comparison across the groups of alumni, all four domains were integrated into an outcome composite that was also tested.

In order to define success, this study proposes to use a similar composite definition to the one used in the original Casey study (Pecora, et al., 2003). However, because the original

Casey composite definition of success included data or measures of variables not included in this dissertation, the composite model definition of success used in this study includes 12 variables from the four outcome areas of interest.

Again, the Casey National Alumni Study research team used standardized measures to obtain the information on the outcomes of the alumni. Following a series of data analyses, and in order to make the data manageable, consistent, and conducive for analysis, the data was formatted in dichotomous “yes-1” and “no-0” values. Following this, outcome success will be operationalized by the responses in the data base that indicate the existence or completion of the outcome which equal number “1.” Similarly, the absence of success was operationalized by responses equaling “0.” Measures for the success outcomes are at the nominal level. They are designed to yield only binary “yes-achieved”/“no-achieved” answers. This facilitates the attribution of numerical values to each response option used in the statistical analysis.

Variables

This study used the following variables from the Casey National Foster Care Alumni Study data base (Pecora et al., 2003).

Control Variables

Demographics Predictors

1. Race of Alumni
 - a. Hispanic
 - b. African American
 - c. Caucasian

2. Gender of Alumni
 - a. male
 - b. female

3. Age during data gathering
 - a. 20-25
 - b. 26-29
 - c. 30-34
 - d. 35-49

Predictors Organized Based on Ecological Theory

According to Cicchetti and Lynch's (1993) ecological transactional theory, there are three constructs for predictor variables—ontogenetic, micro-system, and exosystem.

Ontogenetic predictors

The ontogenetic construct refers to the internal resources of parents that may predispose them to respond in certain way while in certain situations (Cicchetti & Lynch, 1993). It includes parents' personal characteristics, strengths, challenges, and parenting skills.

1. Relationship with birth or parent figure as reported by the alumni
 - a. mother only
 - b. father only
 - c. both
 - d. neither

This predictor variable was operationalized when the alumni knew his/her birth mother, birth father, or mother figure, father figure living in birth family while growing up. The response options included: (1) knew neither birth mother nor birth or parental figures growing up, (2) knew birth mother or mother figure only growing up, (3) knew birth father or father figure only growing up, (4) knew both birth parents or mother and father figures growing up.

2. Birth mother/father or mother/father figure functioning while growing up as reported by the alumni
 - a. had good physical health
 - b. had good mental health
 - c. had no substance abuse problems
 - d. had no criminal problems

Microsystem predictors

The microsystem construct refers to the immediate context in which the child exists (Cicchetti & Lynch, 1993). It includes the family system, the personal child characteristics, and the maltreatment experience. Specifically, this construct includes questions related to the child characteristics, and maltreatment experience. Race and gender are variables pertaining to this construct, but for organizational purposes, they were placed under the demographic variables. It is important to clarify that data for these variables were obtained from file records and personal interviews.

1. Child Characteristics: Mental and Physical Health Problems Diagnosed Before or during Care
 - a. physical or learning disabilities
 - b. ADD or ADHD diagnosis
 - c. other impairments (drug exposed, FAE, FAS, visual/hearing impaired)
2. Experienced maltreatment or abuse in childhood

Exosystem predictors

The exosystem refers to those formal and informal structures outside the family (Cicchetti & Lynch, 1993). This includes the program characteristics and components, type of placement and assistance, services to the child, stability of services, resources provided, safety to the child, preparation for independent living, and continuity of services.

It is important to clarify that alumni entered the Casey Family Programs on average at 13.2 years of age after several years of placement in public child welfare programs. The Casey Family Programs goal was to secure stable long-term family placement when reunification and adoption were less likely possibilities for the child. Children stayed longer in The Casey Family Programs than in most other foster care programs. Overall length of

time in foster care, without adjusting for periods of time spent at home or in non-placement living situations, was 10.5 years (Pecora et al., 2003).

The variables included in this construct are:

1. Placement History
 - a. support while in care
 1. had a close confiding relationship with an adult while growing up
 - b. age when entered child welfare
 1. 5 or younger
 2. 6-11
 3. 12 or older
 - c. length of time in care (years)
 1. low (5.9 years or less)
 2. medium (6 to 9.9 years)
 3. high (10 or more years)
 - d. Number of placements
 1. low (4 or less)
 2. medium (5 to 8)
 3. high (9 or more)
 - e. Number of school changes from elementary to high school
 1. low (6 or less)
 2. medium (7 to 9)
 3. high (10 or more)
2. Placement reasons
 - a. child behavior problems
 - b. maltreatment /abuse
 - c. parental substance abuse
 - d. other reason (includes family violence/partner abuse, family stress, primary caregiver unable or unwilling to care, refuge or other reasons)

It is important to clarify that these reasons are not mutually exclusive as alumni could have more than one reason for out of home placement identified.

3. Foster Care Experience
 - a. participated in both fun and religious activities with foster family (this measure is a composite variable from participation in fun and participation in religious activities with foster family)
4. Experienced maltreatment while in care

5. Preparation for leaving care
 - a. degree of preparation for living care
 1. low (0 or 1)
 2. medium (2)
 3. high (3 or 4)

Degree of preparation for leaving care is a sum composite measure of: (1) alumni access and possibility of participating in employment training or job seeking services, (2) access to participate in independent living skills training groups and workshops, (3) alumni reporting they were somewhat or very prepare for independent living, and (4) alumni with health insurance at exit.

Hypotheses and Criterion Variables

Operationalization

This study postulates that there is a set of ecological correlates that distinguishes more successful and less-successful adults who experience out-of-home care as children. The study will present information about the characteristics and outcome achievement of Hispanic alumni in comparison to African American and Caucasian alumni. By identifying the ecological correlates related to the success of these racially diverse adults, the study will determine if race is a significant correlate. The criterion variable success will be tested on four outcome domains—physical health, mental health, education, finances. The physical health will include two outcome or criterion measures as well as the mental health domain. Education will include three measures, and the finance domain will include a total of five criterion measures. The composite construct of success will include 12 outcome measures at the ordinal level. Following are the study hypotheses and the respective operationalizations for each success domain.

Hypothesis 1: Hispanic, African American, and Caucasian Casey alumni differ in their physical health outcome success.

1. Physical Health Outcome Variables
 - a. SF-12 physical health score of 50 or higher
 - b. No disability or chronic health condition

Hypothesis 2: Hispanic, African American, and Caucasian Casey alumni differ in their mental health outcome success.

2. Mental Health Outcome Variables
 - a. No CIDI mental health diagnosis during last 12 months
 - b. SF-12 mental health score of 50 or higher

Hypothesis 3: Hispanic, African American, and Caucasian Casey alumni differ in their education outcome success.

3. Education Outcome Variables
 - a. High school completion (high school or GED)
 - b. Degree/certificate beyond high school
 - c. College degree completion or more

Hypothesis 4: Hispanic, African American, and Caucasian Casey alumni differ in their financial outcome success.

4. Financial Outcomes Variables
 - a. Household income above poverty level
 - b. Household income 3 times greater than the poverty level
 - c. Owns house or apartment
 - d. Is not currently receiving public assistance
 - e. Has health insurance

Composite Definition of Success

The criterion or outcome measures of the four areas of interest—physical health, mental health, education, and finances—will be integrated into a composite of success that includes 12 outcomes or criterion measures. Alumni are not expect to achieve the entire 12

outcome criteria, so a success scale will be created based on the distribution obtained, which will allow to compare the alumni in the group of outcomes tested..

Composite Definition of Success Criteria

Physical and mental health domain

1. Physical health domain
 - SF-12 physical health score above 50
 - No disabilities or chronic health conditions
2. Mental health domain
 - SF-12 mental health score above 50
 - No CIDI DSM diagnosis during 12 months prior data collection
3. Education
 - High school completion (high school diploma or GED)
 - Degree/certificate beyond high school
 - College degree completion
4. Finances
 - Has health insurance
 - Is not currently receiving cash public assistance
 - Has income above the poverty line
 - Has income 3 times greater than the poverty line
 - Owns a house or apartment

Data Collection and Analysis

As a secondary analysis of the data from the National Alumni Study performed by the Casey Family Programs, the data was requested of Dr. Peter Pecora, Senior Director of Research Services at Casey Family Programs Headquarters in Seattle, Washington. The data was made available on a CD Rom in SPSS database format.

Sample Selection Procedures and Size

Using the U.S. Census (2000) categories, the Casey National Foster Care Alumni Study created four race groups: (1) Hispanic, which included all alumni that selected

Hispanic; (2) Non-Hispanic Black, which included alumni that selected Black and did not select Hispanic; (3) Non-Hispanic White, which included alumni that selected White and nothing else; and (4) Non-Hispanic Other, which included alumni that selected any other race, by itself or with White, and did not select Hispanic or Black.

For this study, a total of 810 alumni cases were selected from the Casey National Alumni Study data base of a total of 1,087 interviewed alumni. This is a non-probability disproportional sample that includes all Hispanic (14.0%, a total of 113), all African American or Black Non-Hispanic (15.2%, a total of 123), and all Caucasian or White Non-Hispanic (70.9%, a total of 574) cases. Only these three groups were used in this study; American Indians or Alaskan Natives and any other race alumni were not included. Their low numbers were summed in the “other” category in the data base and precluded their analysis. The use of Hispanic, African American, and Caucasian allows for description and comparison of outcomes among these three groups of Casey alumni. The main goal of this comparison, again, is to determine the characteristics and differences of Hispanic alumni in four domains of outcome success when compared with African American and Caucasian alumni. This should denote if race is a predictor. Hispanics are used as the reference group in the statistical analysis.

Data Analysis

This is a non-experimental secondary data analysis study. Tabachnick and Fidell (2001) and Pedhazur and Pedhazur (1991) indicate that the terminology of independent and dependent variables is appropriate to use only in experimental designs. They suggest in non-experimental designs such as this to refer to variables in terms of predictor and criterion, as no actual manipulation of independent variables or determination of causality occurs.

It is important to reiterate that variables in the Casey National Alumni data base were dichotomized and trichotomized by the Casey research team. Within the characteristics of the data, and to respond to the research question and these study hypotheses, several methods of data analyses are performed. Initially, a series of descriptive, central tendency and dispersion statistical procedures are used to achieve an overall picture of the Casey alumni population. It is important to be clear that due to the non-probability sample used in this study; these distributions may not resemble those obtained from probability samples of the general population of adults with out-of-home placements as children (Pedhazur & Pedhazur, 1991).

Univariate and bivariate statistical data analysis methods are used to identify and describe the specific characteristics of the Hispanic, African American, and Caucasian Casey alumni. This allows descriptions of each race group in terms of their characteristics before and during placement, and their later adult outcome success achievement.

In order to achieve a comparison among the racial/ethnic groups of alumni and detect if significant differences between them exist, multivariate analyses were performed. These procedures allowed comparison and detection of significant differences existing between the predictor/control variables and the criterion variables conveying of outcomes of Casey alumni. The strength of association between race/ethnicity and outcome success was identified to determine the degree to which race is a predictor. The data analysis procedures used in this dissertation were based on the goals of the study, the level of measurement and characteristics of the variables of interest, as well as the particulars of the data base. The variables of interest included a combination of nominal and continuous predictor/control variables, and ordinal criterion variables of success/no-success making logistic and

multivariate linear regression adequate statistical analysis procedures to use, test the hypotheses, and answer the research question.

The physical health and mental health domains have two dichotomous nominal dummy coded criterion variables each. To test the outcome achievement of alumni in these two areas, first the two outcome criterion for each physical health and mental health were integrated into one criterion variable by recoding the measures into one dichotomous integrated criterion for physical health and one for mental health. Logistic regression was selected due to its capability to establish comparisons across the different race/ethnic groups and determine the odds of success in the physical and mental health outcomes while controlling for other variables. Logistic regression is a statistical analysis procedure similar to linear regression, but it is mainly used when the “Y,” or criterion variables, are nominal while the predictor variables can be either nominal or continuous (Vogt, 1999; Pampel, 2000). Dummy coding is a statistical technique that involves changing the nominal or ordinal data into continuous data; it attributes exclusive numerical values of “0” or “1” to each response category (Pedhazur & Pedhazur, 1991). These numerical values are submitted to logarithmic transformation. The log data can then be entered in a logistic regression resulting in a logistic distribution and a regression coefficient. The formula uses “maximum likelihood” goodness of fit ratios instead of the “ordinary least squares” of linear regression. This provides an odds ratio informing of the chances or odds of changes in the criterion variable as the predictor variable increases or changes by one unit (Vogt, 1999; Pampel, 2000). Each predictor was tested and only those significant at $p < 0.05$ were the ones entered in the initial model. For the physical health and the mental health domains, only cases

obtaining successful outcomes in both predictor measures composing the domain were treated as successful-outcome cases in the logistic regressions.

The education and finance outcome domains included criterion variables with more than two categories of responses; thus, general linear model multivariate analysis was selected. General linear model multivariate analysis procedures are used to predict the changes in one criterion variable from a group of predictor variables. It allows one to examine the relation of each predictor variable to the dependent using a linear combination of values while simultaneously controlling for the other predictors. The coefficients in the model are selected so that the sum of squared differences between observed and predictive values is the least possible. The *B* coefficient indicates the expected amount of change in the dependent variable for every one-unit of change in the predictor or independent variable (Rosenthal, 2001; Lewis-Beck, 1980). Each predictor was tested and those significant at $p < 0.05$ were the ones entered in the initial model.

In order to facilitate the comparison of alumni among all outcomes, a definition of success was created by integrating all the outcomes into one composite measure of outcome success. This continuous criterion construct of outcome success includes the scores of 12 different measures from all outcomes or criterion measures of interest—health, mental health, education, and finances. The success composite then included: two dummy coded measures of physical health, two dummy coded measures of mental health, the three measures of education, and the five measures of finance outcomes. Since there are 12 measures, the same model of general linear multivariate regression was used for the success composite.

The data base was set up in a way that predicts the positive outcome by using values of “no=0” or “yes=1” for the criterion or outcome measures. The higher coding (1) predicts the positive outcome while the lower code (0) represents the absence of achievement of the outcome, so a minimum score of “0” is possible if all answers are “no” and a maximum of ‘12’ when all answers are ‘yes’. After adding the “yes” or “1” response of each outcome, a numerical value was obtained, and based on the distribution of alumni across the outcomes, a scale was created to compare the alumni on their outcome success; the scale was establish to include three categories of success: low (0 to 4), medium (5 to 8), and high (9 to 12) successes.

Multivariate analysis as a procedure allowed for both domain specific and overall comparison of outcome success across the alumni; again each predictor in both logistic and linear multivariate regressions was tested and those significant at $p<0.05$ were the ones entered in the initial models. In conclusion, four different regressions for each domain area with controls were done to obtain information about the success of alumni in each domain. A final overall regression with controls on the success composite was done to facilitate comparisons and determine the overall success of the alumni. These procedures were helpful in answering the study question and hypotheses. They provided the necessary information about the success of Hispanics, the factors link to success, and the strength of race/ethnicity in outcome success.

Protection of Human Subjects

Compliance with the requirements of the Institutional Review Board for the Protection of Human Subjects at The University of Texas at Arlington was secured before the

study was initiated. Internal Casey Family Programs requirements for the use of the data base were also completed.

Strengths and Limitations

The National Casey Alumni research is a major and comprehensive research project performed by the Research Services of Casey Family Programs that followed rigorous research methods. The main goal of that research was to evaluate program components and the outcomes of their alumni. Data was collected by independent interviewers from the University of Michigan Survey Research Center on all eligible Casey alumni (1,609 cases) on multiple pre-placement, during-placement, and after-placement measures; the response rate was 73.2% with only a 3.9% refusal rate. Internal validity threats and reliability were controlled by having a comprehensive theoretical review and operationalization process. Concerning minorities, only standardized measures and scales already proved to be effective with Hispanics and minorities of color were used. The collection of data was triangulated to include both personal survey interviews and file data extraction. Construct validity was controlled by: (1) pre-testing the guiding questionnaire that was used to select the data from file and (2) having blind file raters and trained professional interviewers. Using the data from the Casey National Alumni Study enhances the rigor of this dissertation research.

Limitations

The dissertation study is a non-experimental secondary data analysis with a non-probability sample. Independently of the type of study, Pedhazur & Pedhazur (1991) recommend that check for threats to validity of the research be made. In this section, internal validity, and external validity threats are addressed.

Internal Validity

Internal validity refers to the certitude that the results of the study can only be attributed to the independent variables. It applies more to experimental research models because it reflects the confidence that changes observed in the dependent variable are only caused by the independent variable. Alternative explanations are eliminated, so conclusions about the causal effects of variables are valid (Pedhazur & Pedhazur, 1991; Rubin & Babbie, 2001; Vogt, 1999).

This dissertation study is based on a limited amount of research and a limited number of publications concerning Hispanics with placement experiences and the role of race/ethnicity on the outcomes of placed adults. Both topics are incipient in the professional research literature. Relevant interactions and variables may not be known, much less included in the study, and this creates content validity concerns. This is compounded by the fact that the research uses secondary data that pre-determines and limits the variables and associations of the study. Consequently, it is problematical to conclude that the study includes all pertinent variables while excluding all irrelevant ones. Balancing this threat, the study has four control constructs and 38 predictors reducing the possibility of mono-operational bias. In addition to this, the collection of data in the Casey study was triangulated by the use of both personal interviews and file data extraction, reducing the threat for mono-method bias.

History refers to events that occur during the study that influence the changes in the predictor variable (Rubin & Babbie, 2001) or the outcome success of Casey adult alumni from 1966 to 1998. During these 32 years, it is possible that historical events affected alumni and their consequent outcome success. Control over these historical events, however, would

have been questionable. The use of Casey's ethnic alumni, the operationalization of variables, and the use of several control constructs might reduce this concern when trends or significant differences among the alumni become identifiable, making it possible to generate and test further hypotheses in follow-up research.

Maturation threats, which are also related to history, refer to the passage of time in which individuals continue to grow and change, so variations in the predictor variable may be related to that maturation process and not necessarily to predictor variables (Rubin & Babbie, 2001). Casey alumni range from 20 to 51 years of age making this a sample that includes not only different ages, but also different generational groups. The age dispersal creates questions about the role of maturity in the outcome success of alumni. How much success in outcomes was achieved due only to the normal process of human maturation and development versus the predictor variable? For example, younger alumni may not have had the time to achieve some of the outcomes (e.g., education) or older alumni may have increased more financial assets (e.g., owning a house) due to the normal process of working and making payments over a longer period of time. Younger alumni might be involved more in increased drinking and casual relationships in contrast to older alumni. Having the population as a sample and controlling for age minimizes this threat by comparing similar age groups of alumni in their outcome success.

Concerning selection biases, the comparability of equivalent groups in any experimental study is fundamental to securing that findings are based on true differences caused by the independent variable, and not due to the sample initial undetected differences. Group's equivalency is usually ensured by random assignment to control experimental groups, and by pre-testing the groups before intervention (Rubin & Babbie, 2001). Children

enter the Casey Family Programs after having been maltreated and generally having experienced the public child welfare system for some years (Pecora et al., 2005). From the Casey alumni in a prior Northwest study, 89% were referred to Casey Family Programs from a public child welfare agency, and had at least spent time in state care prior to entering the Casey program (Pecora et al., 2005). Generally, Casey Family Programs served children between 10 to 17 years of age for whom reunification or adoption were not the goals.

The experiences of Casey alumni before, during, and after placement, even though similar, are certainly unique. This study, hopes to determine if differences exist in the outcome success of Hispanics in relationship to those of African American and Caucasian alumni as aggregates or groups, and to identify some of the main ecological correlates of success in adulthood. This study does not include an experimental or control group, but certain procedures have been designed to increase the validity of comparisons across alumni:

1. Only cases from the Casey Family Programs were used hoping to increase the chances of alumni having had similar program exposure and experience.
2. The population of Hispanic, African American, and Caucasian cases is included. This increases the sample size, and it provides more power and greater confidence in the findings.
3. A large group of control variables concerning pre-, during-, and after-placement conditions and outcomes are also included, thus increasing the comparability of alumni.

Again, this study aims to provide initial information about possible interaction between ecological conditions and outcome success of diverse adults that could further be explored on follow up studies.

External Validity

Generalization of findings across settings and time can occur because external validity reflects how representative of the general population the sample in the study is (Vogt, 1999; Pedhazur & Pedhazur, 1991; Rubin & Babbie, 2001). In this case, the question becomes, Are Casey alumni representative of the population of adults with out-of-home care in childhood? Generalization refers to the certitude that the study findings are applicable to target populations across settings and time, in this case, to other non-Casey adults with out of home care experiences during childhood. The strength of the external validity of any study is closely related to the type of sample used (Pedhazur & Pedhazur, 1991; Rubin & Babbie, 2001). When a random probability sample is used, there is a certainty that the sample resembles the population, and all subjects with the same attributes of interest to the study had the same opportunity to be selected in the sample. Furthermore, their selection is random or just the result of luck. Randomization ensures the equivalency between the subjects, which ultimately allows for conclusions about the effect or interaction of variables to occur; random assignment relates to internal validity. These conditions combined with an adequate sample size, guarantee that the sample is representative of the population, that it determines causation, and supports findings generalization (Vogt, 1999; Pedhazur & Pedhazur, 1991; Rubin & Babbie, 2001).

Concerning the proposed study sample, the population of Hispanic (14%, a total of 113), African American or Black Non-Hispanic (15.2%, a total of 123), and Caucasian or White Non-Hispanic (70.9%, a total of 574) alumni cases will be used. This is a very large sample including 810 total cases, and as the sample increases in size it also increases in resemblance to the population (Rosenthal, 2001). However, the sample remains a non-

probability, non-random, non-equivalent sample that limits generalization of findings, and poses external validity threats due to both the lack of comparison groups, sample type, and the setting from which it was obtained.

The Casey Family Programs is a privately operated foundation with its own funding sources, including contracts with both small and large state agencies and use of Medicare, program design, standards of care, case load determination, selection criteria, foster care providers, trainings, resources, and values. Casey alumni began entering the program in 1966; consequently they reflect the nation's child welfare placement trends of the 1960s, '70s, and '80s. Placement of minorities of color (e.g., African Americans, Hispanics) in child welfare increased over time, and began to pick up during the late 1970s and 1980s (Erickson, 2000). The Casey alumni population reflects that trend with only 35% of them been minorities of color (Pecora et al., 2003; 2005). There are more Caucasian alumni in the 30 to 49 age group, and the number of African American and Hispanic alumni increases in the 20 to 29 age group. The large number of Caucasian alumni and consequently the limited number of Hispanic and African American alumni makes the sample disproportional and non-equivalent. Findings of the study may not be generalized to non-Casey youth. However, it will be important for the reader to consider that the Casey National Alumni Study collected data that covers a time span of services to youth from 1966 to 1998. Casey alumni include diverse youth from 13 different states, and almost all of Casey youth were referred by state agencies after experiencing public child welfare placements. These are important characteristics for the reader or the research consumer to consider when determining the applicability or generalization of findings to their target population.

The small number of Hispanics in the sample and the lack of information about them in the data base are limitations of this study. The total number of Hispanic alumni in the study is 113, and this reality precludes the observation of potentially important interaction effects. For example, differences of success related to placement type were not tested because there are several categories of placements, and the number of cases in each category was expected to be very small. This impacts the strength of its findings.

Information may be lacking in the data base on topics of crucial relevance for this race/ethnic group. Perhaps, the history of immigration, the primary language in the household, the inter-ethnicity differences among Hispanic groups, the level of cultural adaptation of the youth and family, the family and couple gender roles, the influential characteristics of different generations, sibling group placement, the kinship network and family structure, the characteristics of child protection and maltreatment, and usage of support services are all topics important to understanding Hispanics' outcome success. The use of a secondary data limits the information available for the study, yet provides a foundation for this dissertation study and future follow up research projects.

There are several strengths of the sample that need to be identified. At the time of the data collection, Casey Family Programs operated in 23 offices across 13 states, and served a diverse group of children and families in both rural and urban areas. This provides a diverse sample. Some of the ways in which Casey families and children were diverse included ethnic/racial, socioeconomic, educational, cultural, gender, physical/mental capabilities, and age variations. The services provided by Casey Family Programs included many types of out of home placements such as adoption, foster care, formal and informal kinship care, guardianship, family preservation, reunification, and transitional services. This variety of

services offered to such a diverse clientele across many states represents strength in the Casey sample representation.

The sample size of 810 cases, which includes all the Hispanic, African American or Black Non-Hispanic, and Caucasian or White Non-Hispanic Casey cases, is a strength of this study. The entire population of individuals with the attributes of concern to the study is included in the sample. This is enhanced by the fact that the response rate obtained in the original alumni study was 73.2% after subtracting 8% of alumni not allowed to be interviewed because of human subjects review board restrictions or because of death. From those living alumni that were located and without restrictions from the human subjects review board only 3.9% (63) refused to be interviewed (Pecora et al., 2003). One other strength includes the collection of data that was triangulated. The data included both personal survey interviews that used several standardized measures with those alumni willing and available to participate and file data extraction for the whole population of Casey alumni. The reliability of the case record data was ensured by having clear operational definitions for every aspect of the case record data extraction. The Barnett et al. (1993) and the LONGSCAN (English & LONGSCAN investigators, 1997) coding system for type and severity of maltreatment were used. In addition, in-person and a video training were prepared to ensure consistency of file raters training. These trained file raters individually read and subtracted the information from the case records with out knowledge of the study hypotheses. Inter-rater reliability checks were done using various reliability statistical methods such as McNemar's Test, Kappa coefficient, and Pearson correlations depending on the variable. Only variables that had acceptable inter-rater reliability were retained which adds rigor to the methods and validity to the study. Construct validity threats were also

controlled by using both standardized measures and measures proved to be valid and reliable with minorities of color. These factors are important in comparing Hispanics to African American and Caucasian alumni.

In conclusion, the purpose of this study is to secure information on the outcome success of Hispanics with out of home placement experiences in childhood compared to the experiences of African Americans and Caucasians. It also explores within other ecological conditions, the role and impact that race/ethnicity has on outcomes success. The study is a non-experimental secondary data analysis. Even though, control variables or risk factors have been included in the proposed study, they are not exhaustive. Within the limitations imposed by the stage of knowledge on the topic, the existing data base, the measurement level of the variables, the sample, and as a non-experimental design this dissertation lacks the capability of determining causality. Its findings can't be generalized beyond the Casey alumni, and should be considered partial, preliminary, and exploratory.

CHAPTER V

DATA ANALYSIS RESULTS

Introduction

The goal of this study was to compare the outcome success of Hispanic, African American, and Caucasian adults to childhood experiences of out of home care across: (1) physical health, mental health, education, and finance domain measures and (2) an outcome success composite that integrates all the 12 outcome measures. Controlling for 38 predictors, the study undertook to determine if race played any role in outcome achievement. With Hispanics as the reference group, the study also aimed to contribute information about Hispanics in foster care.

This chapter will first report on the characteristics of Casey alumni. Distributions across the difference race/ethnic groups of alumni are also presented to fulfill the descriptive goal of the study. Second, results will be presented for the outcome domains. Third, results for the integrated outcome measure and success composite for the alumni will be reported.

Description of Study Participants

Demographic Information

This study includes the population of Caucasian, African American, and Hispanic Casey Family Programs alumni who are living, located, willing, and without restrictions from the Research Board to participate in the Casey National Alumni Study (see table 1). Two criteria were used to define alumni: (1) they had to have been placed with Casey

Table 1. Demographics

	Full Sample		Caucasian		African American		Hispanic	
	N=810		N=574		N=123		N=113	
	f	%	f	%	f	%	f	%
Race/ethnicity	810	100.0	574	70.9	123	15.2	113	14.0
Gender								
Male	361	44.6	262	45.6	51	42.5	48	42.5
Female	449	55.4	312	54.4	72	58.5	65	57.5
Age at interview								
20-25	197	24.3	119	20.7	42	34.1	36	31.9
26-29	195	24.1	121	21.1	42	34.1	32	28.3
30-34	208	25.7	160	27.9	25	20.3	23	20.4
35-49	210	25.9	174	30.3	14	11.4	22	19.5

out-of-home care programs for at least 12 consecutive months and (2) to have been discharged no fewer than 12 months before the time of data collection. Eight hundred and ten individuals met the selection criteria for inclusion in this study. The studied population consisted of 574 Caucasian, 123 African American, and 113 Hispanic alumni. Across gender, the participating alumni include 55.4% females. Table 2 presents the alumni educational achievement.

Table 2. Education Achievement

	Full Sample		Caucasian		African American		Hispanic	
	N=810		N=574		N=123		N=113	
	f	%	f	%	f	%	f	%
None	113	14.0	75	13.1	19	15.4	19	16.8
High School	697	86.0	499	86.9	104	84.6	94	83.2
Certificate	305	37.7	214	37.3	53	43.1	38	33.6
College or more	79	9.8	64	11.1	8	6.5	7	6.2

As presented in table 2, an overwhelming majority (86%) of alumni completed a high school education either by a regular high school diploma or by completing the GED, and more than one-third have a degree or diploma of studies beyond high school. Nearly 10% (9.8%) completed a college degree or higher.

Reasons for Out-of-Home Placements

Four reasons for placement in out-of-home-care for alumni were identified for the data base: (1) child behavior problems, (2) child maltreatment, (3) parental substance abuse, and (4) other (e.g., family violence, partner abuse, family stress, primary caregiver's inability or unwillingness to provide care, refugee children). "Other" was the largest category (62%), and child maltreatment was the second largest (54.1%). (Alumni, however, could have more than one identified reason for out-of-home placement). Table 3 presents the reasons for placement.

Table 3. Reasons for Placement

	Full Sample		Caucasian N=574		African American N=123		Hispanic N=113	
	f	%	f	%	f	%	f	%
	Behavior Problems	167	20.6	148	25.8	5	4.1	14
Maltreatment	438	54.1	311	54.2	56	45.5	71	62.8
Parent substance abuse	231	28.5	158	27.5	36	29.3	37	32.7
Other reasons*	502	62.0	345	60.1	94	76.4	63	55.8

*Family violence/partner, family stress, caregiver's inability/unwillingness to provide care, refugee, other

Parental Substance Abuse

More than one-half (56.2%) of alumni reported that their birth mothers had substance abuse problems and 42.3% reported birth fathers had substance abuse problems (see table 4).

Table 4. Parental Substance Abuse

	Full Sample		Caucasian N=574		African American N=123		Hispanic N=113	
	f	%	f	%	f	%	f	%
	Mother	455	56.2	326	56.8	71	57.7	58
Father	343	42.3	260	45.3	30	24.4	53	46.9

Type of Abuse Experienced by Alumni

Slightly over 90% (90.3%) (731) of the alumni experienced maltreatment or abuse as children. The most frequent type reported was sexual abuse, and the second most frequent was physical abuse. A total of 9.8 % of alumni did not experience maltreatment. Alumni could have several types of abuse or maltreatment. Table 5 presents the types of abuse.

Table 5. Type of Maltreatment

	Full Sample		Caucasian N=574		African American N=123		Hispanic N=113	
	f	%	f	%	f	%	f	%
	Abuse/neglect	731	90.3	516	89.9	109	88.6	106
Sexual abuse (w/wo other type)	378	46.7	272	5.4	49	39.8	57	50.5
Physical (w/wo) neglect	198	24.5	143	24.9	28	22.8	27	23.6
Neglect	117	14.4	76	13.2	24	19.5	17	15.0
Emotional	38	4.7	25	4.4	8	6.5	5	4.4

Alumni Physical and Mental Health Problems

Almost 10% of alumni were diagnosed with ADD/ADHD, another 20% have physical or learning disabilities, and 6.4% are diagnosed with other impairments. The “Other” category includes drug exposed, FAE, FAS, visual and hearing problems. Table 6 presents the distribution of alumni with physical and mental health conditions.

Table 6. Physical and Mental Health

	Full Sample		Caucasian		African American		Hispanic	
	294	36.3	N=574		N=123		N=113	
	f	%	f	%	f	%	f	%
ADD/ADHD	80	9.9	65	11.3	6	4.9	9	8.0
Phys/learn disabl	162	20.0	106	18.5	22	17.9	34	30.1
Other impairment*	52	6.4	36	6.3	10	8.1	6	5.3

*(Drug exposed, FAE, FAS, visual or hearing)

Placement History

A total of 32.6% of the adults or alumni were placed in child welfare at the age of five or less; 37.7% entered the child welfare system between 6 to 11 years of age, and 29.8% were placed in state care at 12 years of age and older. It is important to clarify that almost all the alumni were referred to the Casey Family Programs after several years of placement in public child welfare programs. The Casey Family Programs’ goal was to secure stable, long term family placement when reunification or adoption were less likely possibilities for the child. Consequently, children entered older and stayed longer in Casey care than most other out-of-home programs. Almost 70% of alumni (68.2%) were in placement for six or more years; 29.8% of those were in care for 10 or more years. Also, 38.8% of alumni experienced

5 to 8 placement changes during their stay in care; 32.0% reported having experienced abuse or maltreatment while in care. Again, it is important to understand that placement changes and maltreatment while in care could have occurred prior to, during or after services from the Casey Family Programs. Table 7 presents the distribution of alumni according to their age of entrance into child welfare, length of time in care, the number of placements, and the number of alumni that experienced maltreatment while in care.

Table 7. Placement History of Alumni

	Full Sample		Caucasian		African American		Hispanic	
	810	100.0	N=574		N=123		N=113	
	f	%	f	%	f	%	f	%
Age entered CW								
5 yrs or less	264	32.6	176	30.7	55	44.7	33	29.2
6 to 11 yrs	305	37.7	218	38.0	41	33.3	46	40.7
12 yrs or more	241	29.8	180	31.4	27	22.0	34	30.1
Years in care								
5.9 or less	257	31.7	192	33.4	33	26.8	32	28.3
6 to 9.9	266	32.8	186	32.4	36	29.3	44	38.9
10 or more	287	35.4	196	34.1	54	43.9	37	32.7
No. of placements								
4 or less	270	33.3	182	31.7	51	41.5	37	32.7
5 to 8	314	38.8	230	40.1	44	35.8	40	35.8
9 or more	226	27.9	162	28.2	28	22.8	39	31.9
Maltreat in care								
Any type abuse	259	32.0	178	31.1	35	28.5	46	40.6

Statistical Analysis Report

Initially, distributions for each outcome indicator across Caucasian, African American, and Hispanics were obtained to observe the overall percentages of outcome achievement of alumni. Table 8 presents those percentages.

Table 8. Ethnicity by Outcomes

	Full Sample		Caucasian		African American		Hispanic	
	810	100.0	N=574		N=123		N=113	
	f	%	f	%	f	%	f	%
SF-12 phys health score <0.50								
Problematic score	271	33.5	192	33.4	38	30.9	41	36.3
Disable or chronic								
Physical disorder	203	25.1	152	26.5	30	24.4	21	18.6
CIDI DSM Diagnos								
At least 1 diagnos	364	44.9	254	44.3	52	43.3	58	51.3
SF-12 mental health score <0.50								
Problematic score	368	45.4	257	44.8	60	48.8	51	45.1
Education								
No H.S. education	113	14.0	75	13.1	19	15.4	19	16.8
No degree/certif. beyond H.S.	505	62.3	360	62.7	70	56.9	75	66.4
No college or other higher level	731	90.2	519	88.9	115	93.5	106	93.8
Household income								
Poverty level	176	21.7	108	18.8	39	31.7	29	25.7
No income, 3 x poverty level	565	69.8	378	65.9	102	82.9	85	75.2
Does not own house	584	72.1	385	67.1	104	84.6	95	84.1
Public Assistance	86	10.6	53	9.2	17	13.8	16	14.2
No health insurance	232	28.6	158	27.5	41	33.3	33	29.2

To observe the relationship between the predictors and the outcomes, each of the 38 predictors was tested (in 38 separate) multivariate analysis; only those that reached statistical significance at a confidence level of $p < 0.05$ were later entered in the model predicting success. Those not achieving significance at a level of $p < 0.05$ were removed one-by-one from the regression model with the least significant first until only significant predictors ($p < 0.05$) remained.

Logistic regression estimates the coefficients and parameters from the data using a maximum-likelihood method; by calculating the frequencies across the variables in the data it determines the probabilities of their occurrence (Vogt, 1999). Following this, the strength of each predictor in the logistic regression model was determined by its effects on the criterion and its statistical significance. The Wald statistic measures the statistical significance for each predictor variable; those with a $p < 0.05$ are considered significant (Rosenthal, 2001).

Following the individual assessment of each outcome variable and the strength of the predictors, an analysis of outcome domains was performed. In order to analyze and test the outcomes across physical health, mental health, education, and finances, the different success indicators were integrated into four single outcome domain variables. Having one outcome variable per domain permitted entering them into a series of regressions to detect the performance of alumni in each domain. Recoding was used to integrate and create the new success domain variables. The 12 initial outcome variables were then combined into four outcome domains variables—physical health, mental health, education, and finances.

Outcome Domain Analysis Results

In this section, each outcome domain will be analyzed separately to determine which predictors relate to success in the specific domain, and to compare the success in the domain across the different race/ethnic groups of alumni. This will assist in identifying those domains in which race could be a predictor.

Regression was used to determine the odds of alumni to succeed or not in each outcome domain. Because they are dichotomous for physical health and mental health logistic regression was used. The $\text{Exp}B$ in logistic regression indicates the changes in the

odds for an event occurring for one group relative to another group (the reference group which is the “0” category).

Multivariate linear regression was used with the education and finance domains, and later with the outcome composite because they each included more than two categories of responses; it assumes linearity. Multivariate linear regression procedures are used to predict the changes in one dependent variable from a group of independent variables. It allows one to examine the relation of each predictor variable to the dependent using a linear combination of values while simultaneously controlling for the other predictors. The coefficients in the model are selected so that the sum of squared differences between observed and predictive values is the least possible. The B coefficient indicates the amount of change in the dependent variable for every one-unit of change in the predictor or independent variable. The R-square is the variance in the dependent variable explained. The F -test calculates the significance of the model and of each variable at $p < 0.05$ (Rosenthal, 2001; Lewis-Beck, 1980). Predictors were tested across each success domain, and again the reference group is the “0” category.

The physical health and mental health domains have binary outcomes (1=success, 0=no-success). In these domains, the 38 predictor variables were entered in (38 separate) contingency table analyses. Only those predictors achieving significance ($p < 0.05$) were entered in multivariate logistic regressions to predict success. In both domains, predictors were eliminated one by one until only significant ($p < 0.05$) predictors remained in the models.

In the education and financial domains and in the total composite, the criterion or dependent variable is numeric (in essence, a count of the number of successes). For each of these domains, 38 separate one-way ANOVA tests were conducted, significant predictors

from one-way ANOVAs were then entered into (multivariate) ANOVAs and those non significant predictors ($p < 0.05$) were removed one by one.

The outcome domains Chi-square tests and contingency distributions were used for the physical health and mental health outcome domains; for the education and finances domains ANOVA was used. Predictors that achieved significance ($p < 0.05$) in these initial analyses were entered in the subsequent multivariate regressions. These predictors were then removed one by one (starting with the highest predictor with the highest p value) from the regressions until a model in which all predictors were significant ($p < 0.05$) resulted.

Physical Health Outcome Domain Results

First, the Model Chi-square statistic of 23.478 with 4-degrees-of-freedom was significant at 0.000 ($p < 0.05$) for this domain. This indicated that the tested predictor variables are related to the criterion variable of physical health.

The logistic regression Wald statistic indicated that two variables showed significance in predicting the odds of success in the physical health outcome domain at the $p < 0.05$ confidence level while controlling for other variables, alumnus's gender and age at the time of interview. Success in the physical health outcome domain was operationalized by a successful score on both indicators, SF-12 physical score above 50 and no chronic or physical disabilities.

Gender of Alumni

Gender was a significant predictor of the odds of success of alumni in the physical health domain as the Wald=4.931, $p=0.026$. The $\text{Exp}(B)=1.381$ indicates that the predicted odds of success in the physical health domain for male alumni are 1.4 times those of the reference group females. It is important to note that the log of the odds of success (the

statistic B) is 0.32 higher than the one for the reference group females. This indicates that males have significantly increased log-odds of success in physical health relative to female alumni. The chances of success for women alumni in the physical health outcomes are lower than those of males in this model. Table 9 presents the results of logistic regression for the physical health domain

Table 9. Physical Health Domain Regression

	B	S.E.	Wald	df	Sig.	Exp (B)
Male	0.323	0.145	4.931	1	0.026	1.381
Age			19.723	3	0.000	
20-25	0.769	0.203	14.301	1	0.000	2.158
26-30	0.731	0.203	12.958	1	0.000	2.077
31-34	0.678	0.200	11.521	1	0.001	1.970
Constant	-0.495	0.160	9.577	1	0.002	0.610

Note: only predictors significant at 0.05 level are included in the model

Age of Alumni

The age of alumni was also a predictor of success in the physical health outcome domain as indicated by the Wald statistics of all age groups, $p < 0.05$. The $\text{Exp}(B)$ statistic indicates the odds for each age group of alumni relative to the reference group or the alumni 35-49 years old. The predicted odds of success in the 20 to 25-year-old group in the health outcome domain are 2.2 times those in the 35-49 year old group. For the 26 to 29-year-old group, the predicted odds of success are 2.16 times those in the 35-49 age group as indicated by the $\text{Exp}B$ statistic. The 30-34 age group predicted odds of success are 2.0 times those of the reference group or the 35-49 age group. In this case, the log of the odds of success for each age group of alumni is higher than those of the reference group alumni age 35-49

(indicated by the statistic B). The odds of success of the physical health outcome domain decrease as alumni increase in age. This could be due to the normal process of aging.

Race/Ethnicity in Physical Health

The predictors tested in the physical health domain failed to identify significant differences across race/ethnic groups of alumni. The Pearson Chi-Square statistic of 1.641 with two-degrees-of-freedom reached a significance level of 0.440 above the confidence level of $p < 0.05$ acceptable. Contingency tables analysis of alumni across this domain indicates that from all the 810 alumni 54.6% (442) experienced success in this domain. Among the 113 Hispanic alumni 58.4% (66) achieved success, among the 123 African American alumni 57.7% (71) were successful, and among the 574 Caucasian alumni 53.1% (305) experienced success in the physical health domain.

Mental Health Outcome Domain Regression Results

The Model Chi-square statistic with 4-degrees-of-freedom of 74.921 is significant at 0.000 ($p < 0.05$) indicating that the tested predictor variables in the mental health domain are related to the criterion variable, which allows for better prediction.

Success is operationalized by achieving “success” on both mental health indicators, no CIDI DSM diagnosis in the last 12 months prior to the data collection, and the SF-12 mental health score above 50. Controlling for other variables, the Wald statistic identified seven significant predictors at $p < 0.05$ of success in the mental health outcome domain. Table 10 presents the results of logistic regressions for the mental health domain.

Table 10. Mental Health Domain Regression

	<i>B</i>	S.E.	Wald	df	Sig.	Exp (<i>B</i>)
Male	0.657	0.153	18.312	1	0.000	1.928
Age			12.466	1	0.006	
20-25	-0.721	0.223	10.469	2	0.001	0.486
26-30	-0.259	0.213	1.474	1	0.225	0.772
31-34	-0.540	0.214	6.330	1	0.012	0.583
Yes mom had bad mental health	-0.489	0.203	5.833	1	0.016	0.613
Age entered CW			9.690	2	0.008	
0-5	0.551	0.203	7.355	1	0.007	1.735
6-11	0.064	0.193	0.109	1	0.741	1.066
No. placements			6.740	2	0.034	
4 or less	0.484	0.203	5.703	1	0.017	1.623
5-8	0.118	0.195	0.368	1	0.544	1.126
Yes maltreat or abuse in care	-0.385	0.175	4.805	1	0.028	0.681
Prep living care			8.188	2	0.017	
Low	-0.634	0.244	6.751	1	0.009	0.531
Medium	-0.327	0.178	3.356	1	0.067	0.721
Constant	-0.399	0.274	2.114	1	0.146	0.671

Note: only predictors significant at 0.05 level are included in the model.

1. Gender (Wald=18.312, $p=0.000$). The predicted odds of success for male alumni in the mental health domain are 1.928 or almost twice those of the reference group females as indicated by the *ExpB*. Females have significantly fewer odds of success in the mental health domain relative to males.

2. Age (Wald=12.466, $p=0.006$). The regression indicates significance for two of the age groups of alumni—the 20-25 age group $p=0.007$ and the 30-34 age group $p=0.012$. These age groups have fewer predicted odds of success in the mental health domain relative to the reference group, alumni age 35-49. It appears that as the age of alumni increases their odds for success in the mental health score increases too.

a. Alumni ages 20-25 ($\text{Exp}B$ 0.486) have predicted odds of success in the mental health domain of 0.49. The log of the odds of success (B) is 0.72 lower than that of the reference group, alumni age 35-49 years of age.

b. Alumni ages 30-34 ($\text{Exp}B$ 0.583): predicted odds of success for this group are 0.58. The log of the odds of success (B) is 0.54 lower than alumni age 35-49 in the reference group.

3. Age of placement in child welfare ($\text{Wald}=9.690$, $p=0.008$): it was significant for alumni that entered child welfare at age 5 or younger relative to those that entered at age 12 or older ($\text{Wald}=7.355$; $p=0.007$). The predicted odds of success in the mental health domain for alumni that entered child welfare at age 5 or younger are 1.73; their log-odds of success (B) is 0.55 higher than alumni in the reference group that entered at age 12 or older. Younger alumni at entrance in child welfare have increased odds of success in the mental health domain.

4. Degree of preparation for leaving care ($\text{Wald}=8.188$, $p=0.017$): For alumni with low degree of preparation for leaving care $\text{Exp}B$ 0.531, $p=0.009$, the predicted odds of success in the mental health domain are 0.53. The log of the odds of success (B) is 0.63 lower than what it is for the reference group with high degree of preparation to leave care. It appears that as the degree of preparation for leaving care increases the odds of success in the mental health domain increases too.

5. Maternal mental health problems ($\text{Wald}=5.833$, $p=0.016$): the $\text{Exp}B$ of alumni reporting their birth mother having mental health problems predicted odds of success in the mental health domain is 0.61, conveying odds of success 39% lower than that of those whose

birth mother did not have such problems. Having a birth mother with mental health problems decreases the odds of success in the mental health domain for alumni.

6. Number of placement changes while in care (Wald=6.740, $p=0.034$): Alumni that experienced 4 or fewer placement changes had odds of success that were 1.6 times those in the reference group (9 or more). Fewer placement changes appeared to increase the odds of success of alumni in the mental health domain.

7. Maltreatment while in care (Wald=4.805, $p=0.028$): The predicted odds of success in the mental health domain for alumni who were maltreated or abused while in protective care are 0.681 as indicated by the $\text{Exp}(B)$ statistic. Their odds of success are 32% lower than alumni not maltreated in care.

Race/Ethnicity in Mental Health

Race/ethnicity was not identified as a significant predictor for the mental health outcome domain-as indicated by the Pearson Chi-square statistic of 1.010 with two-degrees-of freedom that reached 0.604 level of significance above the confidence level of $p<0.05$ acceptable. Following are the contingency tables results for alumni that did achieved success in the mental health domain across race/ethnicity. Amongst the total of 810 alumni, 39.5% (320) experienced success in the mental health domain. Amid the total of 113 Hispanic alumni 35.4% (40) achieved success; among the 123 African American Alumni 39.0% (48) experienced success; and amongst the 574 Caucasian alumni 40.4% (232) obtained success in the mental health domain.

Education Outcome Success Domain Univariate Analysis Results

The education domain measured if alumni completed high school education, obtained a certificate or degree beyond high school, and completed college or more. Nine predictors were identified as statistically significant at a confidence level of $p < 0.05$. The mean score for alumni on this domain was 1.250 across the 810 alumni. The F -test of significance = 8.235, $p = 0.000$, the R-Square = 0.158 and Adjusted R-Square = 0.139; these scores indicate that the predictors in the model are related to the criterion. They may account for 0.14 of the variance in the criterion variable.

Table 11 presents the predictors, their level of significance, and the results of the multivariate analysis for the education outcome domain.

Supplemental Analysis

ANOVA was done with multi-category (more than two-category) treated predictors as fixed factors and the dichotomous ones as covariates. ANOVA and Pairwise Comparisons allowed observing the specific significant categories of predictors with several response options; it also provided the mean scores of alumni for comparison. The ANOVA F -test of significant is presented for each predictor.

1. The education domain success mean score for alumni with physical/learning disabilities ($p = 0.001$), and placed in care due to maltreatment reasons ($p = 0.011$) is different than those with no such conditions. The differences in scores are statistically significant at a level of $p < 0.05$ and they indicate lower predicted mean scores.

Also, significant score differences were obtained for alumni with a birth mother with mental health problems ($p = 0.014$). For these alumni with a mother with mental health

Table 11 Education Outcome Domain Regression

Parameters	<i>B</i>	Std.Error	T	F	Sig.
Intercept	1.740	0.142	12.237	659.686	0.000
Race/Ethnicity				0.126	0.881
Caucasian	0.040	0.080	0.502		0.616
African American	0.030	0.101	0.298		0.766
Age				14.572	0.000
20-25	-0.340	0.080	-4.232		0.000
26-29	0.039	0.080	0.494		0.621
30-34	0.158	0.076	2.067		0.039
Age entered Child Welfare				3.083	0.046
5 or younger	-0.207	0.089	-2.335		0.020
6-11	-0.166	0.087	-2.162		0.031
Time in care (years)				8.947	0.000
5 or fewer	-0.359	0.086	-4.171		0.000
6-9	-0.136	0.074	-1.832		0.067
No. of placements				5.701	0.002
4 or fewer	0.208	0.075	2.763		0.006
5-8	0.004	0.069	0.064		0.949
No. of school changes				3.769	0.023
6 or fewer	-0.045	0.071	-0.642		0.521
7-9	0.126	0.072	1.759		0.079
Preparation for leaving care				13.551	0.000
low	-0.301	0.083	-3.638		0.000
medium	-0.288	0.063	-4.563		0.000
Yes mom had bad mental health	0.167	0.068	2.462	6.060	0.014
Has physical/learning disabilities	-0.230	0.069	-3.342	11.167	0.001
Has maltreatment as a reason to be placed into care	-0.143	0.056	-2.557	6.539	0.011

Note: Only predictors significant at 0.05 level are included in the model.

R-Square=0.158; Adjusted R-Square=0.139

problems, the predicted education mean score is 0.17 higher relative to other alumni with mothers with no mental health problems. It is a possibility that this result may be due to sampling or random error.

2. Age of entrance in child welfare: The ANOVA F -test=3.083, $p=0.046$ points to predicted significant differences in the education domain success for alumni according to their entrance age into child welfare. Both younger groups of alumni at entrance into child welfare have lower predicted mean scores that are of significant relative to the reference group that entered child welfare at age 12 years or more as indicated by the B statistic. It seems that as the age of entrance into child welfare increases the success in the education domain of alumni increases too.

3. Number of placements while in care (ANOVA $F=5.701$, $p=0.003$): significant differences are expected in the mean scores of alumni in the education outcome domain with the lowest (4 or less) number of placement changes relative to those alumni with 9 or more placement changes. Pairwise Comparison indicate that the predicted mean score of success in the education domain for alumni with 4 or less changes is 0.204 higher than that of alumni with 5 to 8 changes, and 0.208 higher than that of alumni with 9 or more changes. The mean score of success in the education domain appears to increase as the number of placement changes decreases.

4. Degree preparation for living care (ANOVA $F=13.551$, $p=0.000$): ANOVA test indicates that the differences in mean scores are significant for alumni with different degrees of preparation for leaving care. Relative to those with high degree of preparation to leave care, alumni with low degree of preparation have an expected lower mean score of 0.301, and the alumni with medium degree of preparation have an expected mean score decrease of 0.288 in the education domain success; this is indicated by the Pairwise Comparison. As the degree of preparation to leave care increases, the mean score in the education domain increases too.

5. Length of time in care ($F=8.947, p=0.000$): ANOVA identified significant mean differences in the predicted mean scores of alumni according to the length of time they were in care. Pairwise Comparisons indicate that alumni that were in care for 10 or more years had the best predicted mean scores in the education outcomes domain. Relative to the alumni that were 10 or more years in placement, the alumni that were in care for 6 to 9 years had 0.223 less probabilities of success; and the ones that were in care for 6 or less years had 0.0359 fewer probabilities of success. As the years of placement increase, the mean score in the education outcome domain increases too.

6. Number of school changes ($F=3.769, p=0.023$): the expected mean score in the education domain for alumni with fewer than 6 school changes is significantly different from those alumni with 7 to 9 changes. There is a -0.171 difference between the group with fewer changes (6 or less) relative to the group with middle number of school changes (7 to 9) in the education domain success on the Pairwise Comparisons.

7. Age at interview, the ANOVA F statistic ($F=14.572, p=0.000$) indicates that differences in the predicted mean score of alumni in the education domain is significantly lower for the 20-25 year old alumni relative to other age alumni. Their score is expected to be 0.379 lower than the 26-29 age group, 0.498 lower than the 30 to 34, and 0.340 lower than the 35 to 49 age group. As the age of alumni increases, the mean score increases too.

Race/Ethnicity in Education Outcome Domain

The test failed to detect statistically significant differences across the mean scores of Caucasian, African American, or Hispanic alumni in the education outcome domain. This was indicated by the F test of significance of 0.126, $p=0.881$ high above the accepted level of $p < 0.05$.

Finance Outcome Domain Results

This domain measures achievement with five indicators: (1) household income above the poverty line, (2) household income 3 times the poverty line, (3) owns a house or an apartment, (4) not receiving public assistance, and (5) has health insurance. The success score in this domain represents a sum of the indicators with one point for each success. For this domain, 7 predictors were identified as significant at a $p < 0.05$. The mean score in the financial outcome domain is 2.766 across the total of 810 alumni. The F test of significance for the model is 14.360 indicating a significance of 0.000, and the R-Square is 0.165 and 0.154 for Adjusted R-Square. These scores point to a model that includes variables that

Table 12. Finance Domain Regression

Parameters	<i>B</i>	Std.Error	T	F	Sig.
Intercept	3.274	0.144	22.676	1609.864	0.000
Race/Ethnicity				8.218	0.000
Caucasian	0.272	0.121	2.225		0.024
African American	-0.175	0.152	-1.156		0.248
Age at interview				26.759	0.000
20-25	-0.843	0.119	-7.074		0.000
26-29	-0.479	0.119	-4.022		0.000
30-34	0.109	0.114	0.955		0.340
Degree of prep to leave care				4.013	0.018
low	-0.237	0.124	-1.917		0.056
medium	-0.235	0.094	-2.501		0.013
Yes dad had criminal prob	0.244	0.092	2.663	7.089	0.008
Has physical/learning disabilities	-0.267	0.103	-2.596	6.738	0.010
Has other impairments (FAE, FAS, visual, hearing, drug exposed)	-0.514	0.167	-3.067	9.405	0.002
Has child behavior problems as reason for placement	-0.290	0.103	-2.814	7.918	0.005

Note: only predictors significant at 0.05 level are included in the model.
R-Square=0.165; Adjusted R-Square=0.154

relate to the finance outcome domain and that may explain 0.15 of its variance. Table 12 presents the results of the multivariate analysis of the finance outcome domain.

Multivariate analysis with fixed factors and covariates was performed to obtain more detailed information about the predictors relating to the finance outcome domain. ANOVA and Pairwise Comparisons allowed observing which categories were significant for predictors with several response options. The ANOVA F significant test is presented for each predictor with continuous data.

Supplemental Analysis

1. The predicted mean scores in the financial outcome domain are significantly lower for alumni with physical learning disabilities ($p=0.010$), alumni with other impairments ($p=0.002$), and alumni placed in care due to behavior problems ($p=0.005$). For alumni with a birth father with criminal problems ($p=0.008$), the predicted odds of outcome success are 0.24 higher; this could be due to random or sampling error.

2. Degree of preparation for leaving care ($F=4.013$, $p=0.018$): The ANOVA F statistic indicates significant predicted differences in the financial domain mean score of alumni relative to the degree of preparation for leaving care they had. Pairwise Comparisons indicate for alumni with medium degree of preparation predicted mean score in the finance domain is 0.235 lower than the alumni with high degree of preparation ($p=0.013$). As the degree of preparation increases from medium to high, the mean score in this domain is expected to increase.

3. Age of alumni was organized into 4 age groups, the ANOVA F statistic ($F=26.759$, $p=0.000$) indicates that the expected differences in the mean scores of alumni in the finance outcome domain are significantly lower for the youngest groups of 20-25 years of

age alumni and the 26-29 years of age. Based on Pairwise Comparisons results, alumni ages 20-25 have a predictive mean scores of -0.363, -0.951, -0.843 relative to the 26-29, 30-34, and 35-49 age groups of alumni. The expected mean score of alumni ages 26-29 is -0.588 and -0.479 relative to the 30-34 and 35-49 age groups. Financial success seems to increase as alumni age.

Race/ethnicity in Financial Domain

The ANOVA F -test of significance ($F=8.218$, $p=0.000$) indicates that the predicted mean scores of success in the financial domain are significantly different for Hispanic and African American alumni relative to Caucasian alumni that have a mean score of 3.006. Pairwise Comparison test indicates that compared to the mean score of African American alumni of 2.559, Caucasian have 0.447 higher mean score ($p=0.000$). Relative to Hispanic alumni that have a mean score of 2.734, Caucasians mean score is 0.272 higher which is a significant difference at 0.024 ($p<0.05$). There is no significant mean score differences between African American and Hispanic.

Outcome Composite Univariate Analysis Results

There were 12 outcomes tested in the study across the physical health, mental health, education, and finance outcome domains. A total outcome composite was created by integrating the outcomes into one variable with the goal of testing the outcome success composite across all predictor measures. Multivariate analysis, ANOVA, Pairwise Comparisons, and contingency tables were used. This section will present the results of those procedures.

The significance of the study predictors was determined by testing each predictor against the outcome composite in a series of regressions. Only significant predictors from the bivariate analysis at $p < 0.05$ were entered in the final regression; then one-by-one elimination was carried out. A total of 10 significant predictors at a confidence level of $p < 0.05$ were identified. The mean score for the composite across all 810 alumni is 6.817. The F -test of significance for the model is 11.629, $p = 0.000$, the R-Square = 0.180, and the

Table 13. Outcome Success Composite Results

Parameters	<i>B</i>	Std.	t	F	Sig
Intercept	7.483	0.363	20.596	11.629	0.000
Race/ethnicity				6.262	0.002
Caucasian	0.423	0.207	2.048		0.041
African American	-0.240	0.257	-0.934		0.350
Age at interview				15.345	0.000
20-25	-0.807	0.210	-3.849		0.000
25-29	-0.045	0.205	-0.219		0.826
30-34	0.569	0.195	2.914		0.004
School changes				4.545	0.011
4 or fewer	0.123	0.175	0.703		0.482
5-8	0.508	0.182	2.800		0.005
Preparation to leave care				17.507	0.000
Low	-0.960	0.211	-4.549		0.000
Medium	-0.774	0.161	-4.806		0.000
Male	0.593	0.144	4.108	16.872	0.000
Yes has ADD/ADHD diagnosis	-0.656	0.245	-2.680	7.181	0.008
Has physical/learning disable	-0.497	0.179	-2.770	7.675	0.006
Has other impairments (FAE, FAS, visual, hearing, drug exposed)	-0.640	0.285	-2.245	5.040	0.025
Has child behavior problems as reason for placement	-0.629	0.176	-3.562	12.688	0.000
Yes maltreated or abused	-0.740	0.241	-3.066	9.403	0.002

Note: Only predictors significant at 0.05 level are included in the model.
R-Square=0.180; Adjusted R-Square=0.165

Adjusted R-Square=0.165. These scores point to a model that has at least some predictors that relate to the criterion in a significant manner, and they account 0.165 of the variation in the composite. Table 13 presents the results of the multivariate analysis.

ANOVA and Pairwise Comparisons provided more information about the predictors' interaction and the specific categories that related significantly. This allowed examination of the mean differences across groups of variables, and it clarifies the relation of race/ethnicity to the outcome composite.

Supplemental Analysis

1. The predicted mean scores in the outcome composite success are significantly different for alumni with physical learning disabilities ($p=0.006$), alumni with FAE, FAS, visual, hearing, or drug exposed impairments ($p=0.025$), alumni with diagnosis of ADD/ADHD ($p=0.008$), alumni with experiences of maltreatment or abuse ($p=0.002$), alumni with a reason for placement due to behavior problems ($p=0.000$). Also, there are significant differences between the mean scores expected among male and female alumni in the success composite measure. Male alumni have a predicted mean score 0.593 higher than the one expected for the female alumni.

2. Degree of preparation for leaving care ($F=17.507$, $p=0.000$): According to the ANOVA test results; the expected mean scores in the outcome success composite are significantly different for alumni with low or medium degree of preparation for leaving care relative to those in the reference group-alumni with high degree of preparation. Pairwise Comparison indicate a 0.960 decrease in the mean score of those with low degree of preparation, and a 0.774 decrease for the alumni with medium degree of preparation relative

to the group with high degree. As the degree of preparation for leaving care increases, the mean score of alumni in the composite outcome success also increases.

3. Number of school changes ($F=4.545$, $p=0.011$): According to ANOVA test results, the mean scores of alumni in the success composite varied significantly according to the number of school changes experienced. Pairwise Comparisons indicate that alumni with the medium number of school changes 7 to 9 is the group associated with the best outcomes in the composite success. Relative to this group with 7 to 9 school changes, the predicted mean score for the group with low number of school changes 6 or less is -0.385 , and the group with the high number of school changes 10 and more have -0.508 lower mean scores.

5. Alumni age at interview ($F=15.345$; $p=0.000$): There are significant differences in the expected mean scores of alumni in the success composite according to their age. Alumni 20-25 years old predicted mean score in the outcome success composite is 5.630 which is significantly lower relative to any other age group of alumni. Alumni age 26-29 with a predicted mean of 6.393, and alumni 35-49 with a predicted mean of 6.438 have significant lower means than alumni in the 30-34 age group whose predicted mean is 7.007.

Race/Ethnicity and Predictors

The results of multivariate analysis, ANOVA ($F=6.262$, $p=0.002$) and Pairwise Comparisons point to predicted significant mean score differences in the success outcome composite for Caucasian alumni relative to both African American and Hispanic alumni. African American alumni have a predicted mean of 6.066 in the outcome success composite; this expected score is 0.664 less than the expected Caucasian mean score of 6.729. The difference is significant at a $p=0.001$. The mean score predicted for Hispanics is 6.306 in the outcome success composite; this mean score is 0.423 less than the predicted score for

Caucasian alumni at a significance level of $p=0.041$. No significant differences were detected between Hispanic and African American alumni.

Success Definition

A success index score was formed by summing the responses to the 12 outcome items tested with 1 point given to each outcome successfully achieved. By attributing a value of 1 to each outcome, a success summary score for each race/ethnic group of alumni was obtained.

The distribution of alumni across the success index indicate that the mean of outcome success for alumni is 6.82 with a standard deviation=2.14. For Caucasian alumni, the mean score is 6.98 and standard deviation of 2.15; African American have a mean score of 6.41 and standard deviation of 2.11, Hispanics mean score is 6.43 and standard deviation of 2.01. At the time of interview, there were 14.4% (117) alumni with 4 or fewer outcomes achieved, 63.2% (512) alumni have achieved 5 to 8 outcomes, and 22.3% (181) have achieved 9 to 12 outcomes.

Contingency table analysis provided information about the distribution in the outcome achievement of alumni across the different race/ethnic groups. A classification table was created to organize the information into three categories of outcome achievement: (1) low 0-4 outcomes, (2) medium 5-8 outcomes, (3) high 9-12 outcomes. According to that table, Caucasian alumni have the highest percentage of outcome success and the lowest percentage of low success relative to Hispanic and African American alumni. Hispanics have lowest percentage of low success and a larger percentage of medium outcome success relative to African American alumni. The mean score of Hispanic alumni is slightly higher than the African American mean score in the outcome success composite; relative to African

American Hispanic alumni have more success. Table 14 presents the outcomes success of each race/ethnic group of alumni.

Table 14. Outcome Success Composite across Race/Ethnicity

Success Level	Low Success		Medium Success		High Success		Total
	0-4		5-8		9-12		
Alumni	N	%	N	%	N	%	
Caucasian	76	13.2	354	61.7	144	25.1	574
African American	23	18.6	78	63.4	22	17.9	123
Hispanic	18	15.9	80	70.7	15	13.3	113
Full Sample	117	14.4	512	63.2	181	22.3	810

Success Index

Exploring the relationship between potential predictors and the actual alumni success across domains and composite can be useful to identify conditions, characteristics, and services that may be relevant or predictive of success. The predictors identified as significant in the domains and composite were entered in a series of multivariate analysis to detect the significant ones to create a success index. Results from univariate analysis, identified 10 significant predictors at $p < 0.05$. From this group of predictors the following conditions, characteristics, and service components could add to the chances of success of children and youth in out of home placement:

1. No ADD/ADHD diagnosis
2. No physical or learning disabilities
3. No visually/hearing, drug exposed, FAS, FAE impairments
4. No maltreatment or abuse during childhood

5. No behavior problems as a reason for placement in out of home care
6. A maximum of school changes ranging from 7 to 9 (from primary to high school)
7. A high degree of preparation for leaving care
8. Male gender
9. Caucasian race/ethnicity

Demographic indicators of age point in part to outcomes for which the youngest groups of alumni may not be of sufficient age to have acquired a college degree or ownership of a house, which usually occur later than age 20. They also point to expected developmental outcome results, such as a decline in physical health according to increasing age. Beside those, they may also point to the challenges and struggle that alumni in certain age groups may be experiencing.

Hypotheses Results

Hypothesis 1: Hispanic, African American, and Caucasian Casey alumni differ in their physical health outcome success.

The study failed to detect significant differences across Caucasian, African American, and Hispanic alumni on the physical health outcome domain.

Hypothesis 2: Hispanic, African American, and Caucasian Casey alumni differ in their mental health outcome success.

The study failed to detect significant differences across Caucasian, African American, and Hispanic alumni on the mental health outcome domain.

Hypothesis 3: Hispanic, African American, and Caucasian Casey alumni differ in their education outcome success.

The study failed to detect significant differences across Caucasian, African American, and Hispanic alumni on the education outcome domain.

Hypothesis 4: Hispanic, African American, and Caucasian Casey alumni differ in their financial outcome success.

The data obtained identified statistically significant differences across Caucasian, African American, and Hispanic alumni on the finance outcome domain. Success was highest for Caucasian alumni. The probability of error are 5 in a 100 ($p < 0.05$).

Hypothesis 5: Hispanic, African American, and Caucasian Casey alumni differ in the outcome success composite.

The data documented significant differences in the composite outcome success for Caucasian, African American, and Hispanic; success was highest for Caucasian alumni. The probability of error are 5 in a 100 ($p < 0.05$).

CHAPTER VI

DISCUSSION

The goals of this secondary data study were to increase information on Hispanics with placement experiences, compare their outcome achievement to that of African American and Caucasian adults in areas of mental and physical health, education, and finances, while also considering the contribution of race to outcome success. The ecological theoretical model of Cicchetti and Lynch, (1993) served as a guide for the selection of predictors to be used in the study from the data base used. The research literature on minority children in out-of-home care provides ample support to the overrepresentation and disproportionality primarily of African Americans nationwide and of Hispanics in several states.

However, there is a lack of information concerning Hispanics and the role of race/ethnicity in child welfare. The lack of information in the research literature limits integration and comparison of this study's results to previous research findings. This study did not include all pertinent issues relevant to Hispanic and race issues in out-of-home care; findings from this dissertation study are based on a non-probability disproportional sample of Hispanic, African American, and Caucasian cases from a private foundation long term program, so they should be considered preliminary, exploratory, and inconclusive.

The study was based on five hypotheses, and one main research question. Significant findings are presented on the areas of: physical health, mental health, education, finances,

and the total composite. Information provided by the theoretical references and the literature review is incorporated.

Physical Health

The findings of this study corroborated information reported in the research literature that revealed increased physical health difficulties for children, youth, and later, adults with out-of-home care experiences. Race/ethnicity, however, was not a significant predictor (Zimmerman, 1982; Dubowitz et al., 1994, Kirby & Kaneda, 2002; DHHS, 2003; Benedit et al., 1996; Berrick et al., 1994; Courtney, et al., 1998; Westat, 2006; Courtney, et al., 2004; Pecora et al., 2005; Kerman et al., 2002).

In this study two predictors were identified as significant for the success in the physical health area—age and gender. Females and older age alumni were the ones that had fewer predicted chances of success in the physical health domain outcomes. Based on Cicchetti and Lynch (1993), gender and age are both microsystem characteristics. From a developmental point of view, the process of aging is expected to bring a decline in physical health, so it is possible to consider age as a risk factor for physical health for aging alumni. The findings of this study point to the consideration of gender for female alumni to be considered as a risk factor for success in the physical health domain.

The literature in out-of-home care and transitioning youth documents gender variations in physical health. Females with out-of-home care experiences seemed to face pregnancies a few years before or after their exit from care (Courtney et al., 1998; Barth, 1990; Cook, 1991, NASW, 1999; Courtney et al., 2004, 2005, 2006; Barth & Needell, 2000). Recently, Courtney et al. (2006) reported in their second wave longitudinal study of young

adults transitioning out of care in Illinois, Iowa, and Wisconsin. One-half of the women in this study reported using condoms during their last sexual intercourse experience, and 18% reported having had intercourse with a partner with a sexually transmitted disease during the last 12 months. Of the females still in extended care, 22% reported ending a pregnancy in an abortion.

Including both gender, Courtney et al. (2006) reported that approximately 25% of young adults had limiting health conditions precluding them from engaging in vigorous activity, another 10% was restricted to engage in moderate activity, and one-third reported going to the emergency room at least three times in the last five years. The most frequent and significant conditions reported were stomach aches, skin problems, muscle or joint aches, trouble sleeping, trouble relaxing, and moodiness perhaps related to stress.

Mental Health

The study was not able to detect significant differences across Caucasian, African American, and Hispanic alumni on this outcome domain. However, the study identified seven predictors of mental health for alumni: gender, age, age of entrance in child welfare, maternal mental health problems, maltreatment while in care, number of placement changes, and degree of preparation for leaving care.

Mental health problems have been abundantly documented in the out-of-home care research literature (Zimmerman, 1982; Dubowitz et al., 1994; Grant, 2000; Janicki, 2000; Kerman et al., 2002; James, 2004; Carpenter & Clyman, 2004; Leslie, et al., 2004; Courtney, et al., 2004, 2005, 2006; Curtis et al., 2005; Pecora et al., 2005; Flores et al., 2005; Chipungu & Bent-Goodley, 2004; Hill, 2003; Taussig & Talmi, 2001). Consistently research findings have revealed that family psychiatric history or mental health problems may increase the

chances for youth and adults to develop mental health problems themselves or less positive outcomes (Beeman et al., 1996; Benedict et al., 1996; Gleeson et al., 1995; Altshuler, 1998; Chipungo & Bent-Goodley, 2004; Kerman et al., 2002; Grant, 2002; Janicki, 2000; Levy & Orlans, 1998; Rutter, 1985; Rak & Patterson, 1996).

Type of abuse was not tested in this study, but descriptive information documented that 90.3 % of alumni experienced maltreatment, almost half were sexually abused, 56.2% were exposed to maternal substance abuse, and 32% were abused while in protective care. These conditions and situations emphasize the need for specialized mental health services (Benedict et al., 1996; Perry, 2000, 2001; Levy & Orlans, 1998; Rutter, 1985; Rak & Patterson, 1996 ; Curtis et al., 2005; Bilaver et al., 1999; Garland et al, 1996; Leslie et al., 2004; Libby et al., 2006; Walker et al., 1994; Courtney et al., 2004, 2005, 2006; Chipungo & Bent-Goodley, 2004; Taussig & Talmi, 2001; Pecora et al., 2005; Flores et al., 2005).

Rutter (1978) reported that children and youth are capable of resiliency, but their resiliency response declines when forced to confront a cluster of adverse situations. Transitioning out of care reveals an increased level of stress for young adults; they face two main problems—financial instability (i.e., cost demands of housing, transportation, food, insurance) and limited education and skills to access a secure a steady job (Collins, 2001; Courtney et al., 2004, Pecora et al., 2005; Wade & Dixon, 2006; Stein, 2005, 2006; Courtney et al, 2005, 2006). Courtney et al. (2006) report that 1 in 3 of young adults suffer from depression, dysthymia, post-traumatic stress disorder, social phobia, alcohol abuse, alcohol dependence, substance abuse, or substance dependence when transferring out of care. Similar stressors and mental health challenges likely contribute to the expected lower scores of the youngest group of alumni in the mental health outcomes relative to the oldest group.

Age of entrance into child welfare and the number of placements experienced are particularly relevant predictors (Lau et al., 2003). Barth (1997) documented that children entering child welfare at age five or younger have better mental health outcomes, and children entering child welfare at older age remain in care longer. The odds of success in mental health for the alumni seem to be congruent with the research findings: as the age of entrance into care increases, outcomes in mental health decreases. Also, as the number of placement changes increase, the outcomes in the mental health seem to decrease. (Conversely, the lower the number of placements, the more the youth increases a sense of emotional security.)

At a minimum, the possibility of a sense of emotional security decreases when maltreatment is experienced while in protective care; this is the reality of 32% of alumni. Benedict et al. (1996) report that maltreatment in care was associated with exacerbation of existing problems or the precipitation of new ones; mental health problems were associated with sexual abuse and neglect in care. In their study, females were more likely to have been perpetrated. Being female, is also identified as a factor for less outcome success in the mental health domain for alumni. Female gender differences in mental health diagnostic conditions were documented in prior studies (Lau et al., 2003; Courtney et al., 2004; Burrow et al., 2004; Carpenter & Clayman, 2004). Courtney et al. (2006); in that recent study, a total of one-third of young adults presented mental health diagnosed conditions. However, alcohol and substance abuse were more prevalent among males while major depression and post-traumatic stress disorders afflicted females. The prevalence of alcohol and substance related problems increased for the young adults' no longer receiving services compared to

those in extended care. It is important to document the mental health impact of both genders, especially since they appear to have very different symptomatic expressions.

In contrast, alumni with a high degree of preparation for living care had increased odds for success in mental health outcomes. The reader needs to be aware that this predictor is operationalized as the sum of access of: (1) “could participate in” employment training or job location services, (2) access to independent living training groups and workshops, (3) being somewhat or very prepared for independent living, (4) had health insurance at exit.

Education

The study was unable to identify significant differences among race/ethnic groups of alumni in the education domain. A group of 9 predictors was identified as significant for the outcome success in the education domain: age, age of entrance in child welfare, time in care, number of placement changes, preparing to leave care, maltreatment or abuse as a reason for placement, physical or learning disabilities, maternal mental health problems.

The impact of education on the overall functioning and outcome achievement for adults with placement experiences has been long documented (Zimmerman, 1982). Education has been linked to increase overall success; it is associated with increased employment opportunities and financial stability. Children and youth in out-of-home care placement have been identified as originating from low education family backgrounds and exacerbated for monolingual Hispanic parents (Ehrle & Geen, 2002; Schuch, 2005; Berger et al., 2005; Gibson, 1999, 2002, Child Welfare League of America, 2003; Ards, et al. 1998; Berger, 2005; Altshuler, 1998; Church, 2006; Church et al., 2005; Burnette, 1999, 2002; Ayon & Lee, 2004, 2005).

Low education achievement for youth in placement has been a concern expressed in the child welfare literature. Youth in both foster care and kinship care were documented reaching similar education outcomes in adulthood (Iglehart, 1994; Berrick et al., 1994). On transitioning young adults, Courtney et al., (2006) reported that at 19 years of age, 63.9% had completed their high school education, 39% were enrolled in high school completion programs, 18% were attending college, and 37.1% of their sample had not completed high school. The youth who remained in extended care were enrolled in school training programs at more than double the rate of those discharged.

The high level of 86% high school education completion of Casey alumni is a remarkable achievement and is in contrast to the educational challenges reported by the research on children and young adults in care or transitioning out. (Perhaps the percentage of graduation for Casey alumni has even increased since the data collection in 2001-2002.) At that time, almost 25% of alumni were 20-25 years of age, perhaps too young for some to have completed their education. Some of the factors associated with the alumni achievement of education outcomes in this study have already been identified in previous studies such as those of McMurty and Lie (1992) and Zimmerman (1982). Alumni that entered child welfare placement after age 12 were associated with the best education outcomes. Those in placement for 10 or more years fared better in education than those with fewer years in placement. However, stability of placement was also associated with education success, so the lower number of placement changes the better outcomes. Another related predictor for education success was a high degree of preparation for leaving care. Late entrance into care, long term stable placement, and a high degree of preparation for leaving care seemed to provide alumni with the stability, emotional support, and long term resources and preparation

for education achievement. The opposite of these situations is also link to reduced probabilities of success.

Additional risk factors for education achievement included physical or learning disabilities and maltreatment or abuse experiences in childhood. This corroborates information provided by Grant, (2000), Janicki et al, (2000), and Dubowitz et al. (1994). This study did not control for differences in high school completion with a regular diploma or a GED certificate; these two alternatives were not separated. However, this may be important to consider because a GED has been associated with less outcome success than a high school diploma (Green & Foster, 2003, in Pecora et al., 2003).

Finances

Within other predictors, race/ethnicity was statistically significant in the finance outcome success. Race/ethnicity was perhaps more salient as we observed the group of predictors within that rose to significance. A total of seven predictors were identified relating to success in the financial domain: age, race, physical and learning disabilities, medical impairments, behavior problems of the alumni, father criminal problems, and degree of preparation for leaving care.

Many of these predictors are not new to the research literature. Physical and learning disabilities and medical impairments (FAS, drug exposed, visual and hearing) were identified as risk factors for the outcome achievement of alumni in the finance domain as well as in other studies (Grant, 2000; Janicki et al., 2000, Kirby and Kaneda, 2002; Westat, 1988). A total of 36% of alumni had these conditions.

Behavior problems were identified as a risk factor for placement for 20.6% of alumni, and this behavior later impacted on their financial situation. James (2004) posits that

numerous placement changes could exacerbate youth acting out if they are children and youth with behavior problems and placement disruptions, older, and externalizing behavior. Taussig and Talmi, (2001) indicate that some risk behavior problems were different across a racially diverse sample of adolescents; Hispanic adolescents were found to experience less parental support and involvement, and they tended to engage in all risk behaviors including delinquency.

Concerning youth, Courtney et al. (2006) reported that transitioning young adults were limited by unemployment or very low earning wages. They were also twice as likely to report not having money to pay the rent or mortgage and to pay the utility bills, 1.5 times more likely to have their telephone disconnected, and 4 times more likely to report being evicted. Of the females in the sample, 37% and 11% were receiving government assistance such (i.e., food stamps, WIC, rent assistance, public housing, TANF, SSI, emergency assistance, Cuban/Haitian or Indian assistance payments). Similar conditions and difficulties could be part of the reason for younger alumni having fewer predicted chances of positive outcomes in the finance area. Age increase and a high degree of preparation for leaving care were related to more predicted possibilities for desirable outcomes.

Hispanic and African Americans have significant lower mean scores in the predictive odds of success in the finance arena compared to Caucasian alumni. While this study did not focus on the reasons of this discrepancy, and the literature is incipient on the topic of race/differences in outcomes; some studies suggest links with poverty of families of origin and the kinship families where many youth are placed, and social structural barriers preventing access of minority adults and particularly single parent women to higher financial stability (Schuck, 2005; Gibson, 1999, 2002; Burnette, 1999, 2002; Barth, 1997; Chipungo &

Bent-Goodley, 2006; Fluke et al., 2003; Keller et al., 2001; Lau et al., 2003; Robert, 2002; Church et al., 2005; Church, 2006; Hill, 2004, 2005, 2006; Berger et al., 2005; Ayon & Lee, 2005; Ayon & Lee, 2004; Lu et al., 2004).

This is pertinent in light of the Casey Family Programs' outstanding education achievement with this group of alumni; a remarkable 86% of high school completion was achieved. However, many Hispanic and African American alumni seemed to have lower predicted finance outcome achievement on the measures used in this domain: (1) household income above the poverty line, (2) household income above the poverty line 3 times, (3) having health insurance, (4) owning a house or apartment, (5) receiving public assistance.

At the national level, Hispanic and African American are more likely to have incomes under the poverty line and live in poor neighborhoods and communities; poverty is a measure of income (U.S. Census, 2002). Poor or deprived neighborhoods are associated with increased exposure to environmental hazards, violence and crime, fewer services, reduced employment opportunities, and limited supportive institutions that result in added risk and isolation for economically disadvantaged minorities of color (Schuck, 2005; O'Donnoll, 1999; Lee & George, 1999; Burnette, 1999, Robert, 2002; Hill, 2004, 2005, 2006; Acevedo et al., 2006). Hispanic and African American alumni may have increased risk factors for reduced finances and overall success due to aggravated neighborhood and community disadvantages.

Outcome Composite

Gender and Ethnicity Predictors

The integrated measure of outcomes detected a total of 10 significant predictors: alumni race/ethnicity, age, gender, physical and learning disabilities; other physical

impairments (e.g., FAS, drug exposed, visual or hearing), diagnosis of ADD/ADHD, abuse or maltreatment during childhood, behavior problems as reason for placement in out-of-home care, number of school changes, and degree of preparation for leaving care. The predicted mean scores in the outcome composite are significantly lower for alumni: age 20 to 25 years old, female gender, African American, Hispanic, with physical or learning disabilities, other physical impairments (e.g., FAS, drug exposed, visual, hearing), diagnosis of ADD/ADHD, with experiences of maltreatment or abuse during childhood, behavior problems as a reason for out of home placement, and low degree of preparation for leaving care. For the contrary, the predicted mean scores for outcome success in the composite seem to increase significantly for alumni age 30 to 34 years old, male gender, Caucasian, that did not experienced more than 7 to 9 total school changes, and that had high degree of preparation for leaving care.

These predictors have been identified by previous studies and discussed early in this report.

Gender Predictors

The findings from the composite outcome measure identified significant gender differences in success. Female alumni were found to have fewer probabilities of success in physical health, mental health, and total outcome composite relative to male alumni.

Race/ethnicity Predictors

Caucasian alumni were identified with increased outcome achievement in the financial domain and in the total outcome composite relative to Hispanic and African American alumni. No significant differences were identified between Hispanic and African

American finance and composite outcomes. Race/ethnic differences were also noted in the total success index. Caucasian alumni had high outcome success, Hispanics had medium outcome success, and African Americans had low outcome success. It is important to be aware that the differences across race/ethnicity in the outcome success composite are also due to the number of outcomes measured in the finance domain; this domain had a total of five outcomes measured compare to three or two in the other physical health, mental health, and education domains. Also, differences across the race/ethnic groups of alumni in the composite could be pointing to a disparity that began early for Hispanic and African American alumni. As stated above, this study did not control for high school completion with a regular diploma or with a GED certificate. However, relative to the GED, a regular high school diploma has been linked to increased outcome success (Green & Foster, 2003, in Pecora et al., 2003). It is possible that high school education for African American and Hispanic alumni was primarily achieved through a GED instead of a diploma. This factor could have influenced the later finance and overall outcomes of alumni.

Hispanic Outcomes

This dissertation study was guided by the following question: *Do Hispanics who experience out-of-home care as children become successful adults?* Within the limitations of this study, the response to this question is partially yes. No differences were identified in physical health, mental health, and education outcomes for the Hispanic alumni. However, differences in the finance domain that also impacted the overall outcome composite results were found predicting fewer probabilities of success for Hispanic alumni. The success index showed that Hispanics have less number of success outcomes than Caucasian alumni, and

greater number of success outcomes than African American alumni. Consequently, the research question is partially supported by the findings.

It is important for the reader to remember that this study is exploratory, so all findings need to be considered preliminary and requiring further verification. In addition, the use of the term success is rather academic. The developmental condition and social functioning of individuals denotes an ongoing process of further outcome acquisition throughout life.

Success Outcomes

The hypothetical formulation behind this study is that there is a set of ecological correlates that distinguish those more successful from less-successful adults who experienced out-of-home care as children. The study findings support this hypothesis that predictors and risk factors link to the more or less success of alumni and were detected not only across race/ethnic groups, but also across gender, different age groups of alumni, and service components.

Summing Up

The different levels from the ecological transactional model of Cicchetti and Lynch (1993) provided a structure to guide the inquiry and select the predictors to test in the study of outcomes of adults with childhood experiences of placement. Both risk and protective factors related to success were detected. At the ontogenetic or birth parents level maternal mental health problems is one example of a risk factor for mental health success. Microsystem or child characteristics, conditions, and experiences resulted in several risk and protective factors related to outcome achievement. For example the impact of physical and learning disabilities on education outcome success was a risk factor while late entry into care

was a protective factor for education. Exosystem protective and risk factors were also identified. One protective factor related to increased outcome success in mental health, education, and finance was to have a high degree of preparation for leaving care. A risk factor at the exosystem level for success in education included high number of placement changes.

There were connections of some of the theoretical concepts reviewed in the literature. Resiliency theory added to the conceptual definition of risk and protective factors; the relevance of understanding them in the interaction of the individual's perception and characteristics, social or interpersonal relationships, and in the existing environmental conditions. This is important while considering the need for effective intervention for minority families, children, and transitioning youth that could prevent trauma, moderate its impact, and enhance re-adaptation.

Implications Practice, Research, and Policy

The study indicates that race/ethnic differences exist in outcome achievement for adults with childhood experiences of out-of-home care. Main differences were identified in areas of finance and overall outcome success. Hispanic and African Americans had less success relative to Caucasians.

While the documentation identifying the overrepresentation of Hispanics in out-of-home care in several states and of African Americans nationwide is rather consistent, there is a scarcity of studies on Hispanic and race/ethnicity issues in child welfare. Several authors and researchers have reached the conclusion that perhaps there is racism, discrimination, oppression, bias, and lack of cultural sensibility at the roots of this complex issue of a disproportional number of minorities in out-of-home care affecting not only Hispanics,

African Americans, Native Americans, and perhaps also women (Church et al., 2005; Church, 2006; Roberts, 2002; Hill, 2005, 2006; O'Donnoll, 1999; Chipungo & Bent-Goodley, 2004; Berger, 2005).

While this study did not focus on the complexities of sexism, racism, and discrimination, it is important to consider those alternatives. Berger et al. (2005) provide information on the role of racial bias on parenting measures, and socio-economic status differences that get correlated or associated with race. On a similar line, the study of Ferrari (2002) added information and questions about the response of culturally diverse parents on identifying abusive behaviors, and the influence of cultural beliefs and parents' own abuse experiences in child rearing practices. These two studies contribute to understanding the intricate relationship between race, culture, socio-economic status, and trauma in child welfare issues; but there is a need for more information. The need for research on race/ethnicity and Hispanic issues pertaining to child welfare is abysmal. As the Hispanic population continuous to increase, their need for social services also increases.

Social workers are the leading providers of services for children and families. Knowledge of race/ethnic issues and Hispanics is important to advocate for fair policy, to design responsive programs, and to implement effective field interventions. In addition to those important reasons, inherent in our professional tradition and as a key motivator to reducing disproportionality and race-based differences, is the purpose and commitment to promote social justice.

Specific service and direct practice recommendations include:

1. Training social workers in race/ethnicity issues and power imbalance in child welfare and effecting cross cultural work, effective family engagement of case planning and

monitoring; family dynamics, gender differences; and effective cross-racial and cross-gender work, since as a group they conform primarily to a Caucasian female group;

2. Provision of effective, culturally relevant, and accessible programming targeting the physical and mental health services for placed, transitioning youth, and adults;

3. Inclusion and participation of diverse youth and families in case planning and decision making;

4. Secure early and consistent assistance education support services to minority and linguistically diverse children and youth in care to enhance the possibilities of high school completion with a diploma and further level of education.

5. Increase emphasis on development and acquisition of work skills for placed youth that could later assist minority adults secure adequate employment and finance stability;

Research

Social sciences professionals, child welfare specialists, ethnic groups' advocates, aging organizations, and mental health professionals are united in identifying issues affecting minority families and children in placements as problematic (Hill, 2004, 2005, 2006; Keller et al., 2001; Geen & Berrick, 2002; Roberts, 2002). The recent increase in disproportionality publications is an indicator of the concern by society and professionals about the large number of African American, Native American, and Hispanic children placed in out-of-home care and the later youth and young adults' outcomes. The level of knowledge of race/ethnicity has increased (Faulkner & Perez-del-Aguila, 2005; Miller & Cross, 2006). However, studies and publications of Hispanics, Native Americans, and African Americans in care are still very limited, and are characterized by small samples, lack of comparison groups, exploratory designs, or the use of race/ethnicity primarily in description indicating

early stages of research development. Most information concerns African Americans since they are overrepresented in foster and kinship care and over-sampled in the studies reviewed with limited information about the other race/ethnic groups. The need is not to reduce the research in one group versus another, but increase and integrate the research base information on matters of race/ethnicity pertaining to the sectors of the population directly affected by out-of-home care. Hispanics are the focus of this study, and it is evident that future research projects need to include larger samples and advanced or more rigorous research methods to provide information about the intra-racial/ethnic issues related to maltreatment, placement, and out-of-home care. The inclusion of variables concerning culture, immigration, adaptation process, and the generational differences among Hispanics may yield important information to enact policy that could guide institutions and best practice models to intervene.

Research aiming to understand race/ethnicity cultural variations of minority families regarding child maltreatment and child welfare issues is not only needed, but in addition discerning the dynamics of socio-economics and gender is also important. Discerning culture and race/ethnicity components from poverty, challenges in achieving higher education, and survival mode may assist in reducing bias and determining priorities for intervention.

The information on the psychological functioning after maltreatment, placement, and transitioning among diverse racial/ethnic children and youth is needed. The few studies reviewed indicated differences among race/ethnicity. Children react to trauma and abuse, but it seems with variations according to each race/ethnicity, that could be important for effective treatment.

Further evaluation of transitioning and independent living skills programs are also in need. The link between longer placement options, a higher degree of preparation for leaving care, and increased outcomes warrant research and program evaluation aiming to determine the components effective among race/ethnic and gender groups of youth and later adults.

Policy Implications

The implications for policy include the clear recognition that while consistent and diligent work needs to continue to provide and improve/increase services and opportunities for children and youth in care; it seems to be a need to revise policy concerning services to low income women and their access to financial stability.

Policy development and resource allocation for preventive accessible medical and mental health services for low income minority families and children is urgently needed.

There is a need for the revision of policies concerning time limiting transitional services, placement and program discharge age. Studies linked increased outcomes with extended care and service options.

REFERENCES

- Acevedo-Garcia, D., McArdle, N., Osypuk, T., & Lefkowitz, B. (2006). *Children left behind: How metropolitan areas are failing America's children*. First report from diversitydata.org., Center for the Advancement of Health, Harvard School of Public Health.
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.
- Altshuler, S. (1998). Child well-being in kinship foster care: Similar to, or different from, non-related foster care? *Child and Youth Services Review, 20*(5), 369-388.
- Altshuler, S. (1999). Children in kinship foster care speak out: "We think we're doing fine." *Child and Adolescent Social Work Journal, 16*(3), 215-235.
- Ards, S., Chung, C., & Myers, S. (1998). The effects of sample selection bias on racial differences in child abuse reporting. *Child Abuse and Neglect, 22*(2), 103-115.
- Ards, S., & Harrell, A. (1993). Reporting of child maltreatment: A secondary analysis of the national incidence surveys. *Child Abuse and Neglect, 17*, 337-344.
- Ayon, C., & Lee, Cheryl. (2004). Is the client-worker relationship associated with better outcomes in mandated child abuse cases? *Research on Social Work Practice, 14*(5), 351-357.

- Ayon, C., & Lee, C. (2005). A comparative analysis of child welfare services through the eyes of African American, Caucasian, and Latino parents. *Research on Social Work Practice, 15*(4), 257-266.
- Barth, R. (1997). Effects of age and race on the odds of adoption versus remaining in long-term out-of-care. *Child Welfare, 76*(2), 285-309.
- Baum, A., Crase, S., & Crase, K. (2001). Influences in the decision to become or not become a foster parent. *Families in Society, 82*, 202-213.
- Behl, L., Crouch, J., May, P., Valente, A., & Conyngham, H. (2001). Ethnicity in child maltreatment research: A content analysis. *Child Maltreatment, 6*(2), 143-147.
- Beeman, S., & Boisen, L. (1999). Child welfare professionals' attitudes towards kinship foster care. *Child Welfare, 78*(3), 315-337.
- Beeman, S., Kim, H., & Bullerdick, S. (2000). Factors affecting placement of children in kinship and nonkinship foster care: Children and youth. *Services Review, 22*(1), 37-54.
- Belsky, J. (1980). Child maltreatment: an ecological integration. *American Psychologist, 35*, 320-335.
- Benard, B. (2004). *Resiliency: What we have learned*. San Francisco: WestEd.
- Benard, B. (1993, November). Fostering resiliency in kids. *Educational Leadership, 44*-49.
- Benedict, M., Suravin, S., & Stallings, R. (1996). Adult functioning of children who lived in kin versus nonrelative family foster homes. *Child Welfare, 75*(5), 529-549.

- Benedict, M., Suravin, S., Somerfield, M., & Brandt, D. (1996). The reported health and functioning of children maltreated while in family foster care. *Child Abuse and Neglect, 20*(7), 561-571.
- Berger, L., McDaniel, M., & Paxson, C. (2005). Assessing parenting behaviors across racial groups: Implications for the child welfare system. *Social Service Review, 654-688*.
- Berrick, J. D., Barth, R. P., & Needell, B. (1994). A comparison of kinship care foster homes and foster family homes: Implication for kinship foster care as family preservation. *Children and Youth Services Review, 16*(1/2), 33-64.
- Berrick, J. (1996). Assessing quality of care in kinship and foster family care. *Family Relations, 46*(3), 273-280.
- Bilaver, A., Keinberger, P., & Koepke, D. (1999, September). The health of children in foster care. *Social Service Review, 401-417*.
- Bowlby, J. (1982). *Attachment and loss* (Vol. I, rev. ed.). New York: Basic Books.
- Brazelton, T. B. (1981). *On becoming a family: The growth of attachment*. New York: Delacorte.
- Brazelton, T. B., Koslowski, B., Main, M. (1974). The origins of reciprocity: The early mother-infant interactions. In M. Lewis & Resenblum (Eds.), *The effect of the infant in its caregiver* (pp. 68-93). New York: Wiley.
- Brazelton, T. B., & Cramer, B. G. (1990). *The earliest relationships*. New York: Addison-Wesley.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge MA: Harvard University Press.

- Brooks, D., James, S., & Barth, R. (2002, December). Preferred characteristics of children in need of adoption: Is there a demand for available foster children? *Social Service Review, 575-602*.
- Brown, A., & Bailey-Etta, B. (1997). An out-of-home care system in crisis: implications for African American children in the child welfare system. *Child Welfare, 76(1)*, 65-83.
- Buehler, C., Cox, M., & Cuddeback, G. (in press). Foster parents' perceptions of factors that promote or inhibit successful fostering. *Qualitative Social Work*.
- Bullock, K. (2004). The changing role of grandparents in rural families: The results of an exploratory study in southeastern North Carolina. *Families in Society: The Journal of Contemporary Social Services, 85(1)*, 45-54.
- Burnette, D. (1999). Custodial grandparents in Latino families: Patterns of service use and predictors of unmet needs. *Social Work, 44(1)*, 22-34.
- Burrow, A., Tubman, J., & Finley, G. (2004). Adolescent adjustment in a national collected sample: Identifying group differences by adoption status, adoption subtype, developmental stage and gender. *Journal of Adolescence, 27*, 267-282.
- Caputo, K. R. (2000). Second-generation parenthood: A panel study of grandmother and grandchild co-residency among low-income families, 1967-1992. *Journal of Sociology and Social Welfare, 27(3)*, 3-20.
- Carpenter, S., & Clyman, R. (2004). The long-term emotional and physical wellbeing of women who have lived in kinship care. *Children and Youth Services Review, 26*, 673-686.
- Cashmore, J., Paxman, M. (2006). Predicting after care outcomes: the importance of 'felt' security. *Child and Family Social Work, 11*, 232-241

- Chapman, M., Wall, A., & Barth, R. (2004). Children's voices: The perceptions of children in foster care. *American Journal of Orthopsychiatry*, 74(3), 293-304.
- Chase-Goodman, C., Potts, M., Mayers-Pasztor, E., & Scorzo, D. (2004). Grandmothers as kinship care providers: Private arrangements compared to public child welfare oversight. *Children and Youth Services Review*, 26, 287-305.
- Child Welfare League of America. (2000). *Child abuse and neglect: A look at the states*. Washington, DC: CWLA, 1997; U.S. House of Representatives, Committee on Ways and Means. Washington, DC: Government Printing Office.
- Child Welfare League of America. (2003). *Children of color in the child welfare system: Overview, vision and proposed action steps*. Washington, DC: Government Printing Office.
- Child Welfare League of America. (2003). *Out-of-home-care*. Washington, DC: Retrieved August 20, 2006 from http://ndas.cwla.org/research_info/minority-child/.
- Children's Bureau Express. (2005). *Children find permanency in subsidized guardianship*. New Child Welfare Information Gateway Publications, Department of Family and Protective Services, Administration & Child Welfare Systems. Retrieved August 20, 2006 from <http://cbexpress.acf.hhs.gov>.
- Children's Bureau Express. (2003). *Seeking causes: Racial disproportionality in child welfare*. New Child Welfare Information Gateway Publications, Department of Family and Protective Services, Administration & Child Welfare Systems. Retrieved August 20, 2006 from <http://cbexpress.acf.hhs.gov>.

Children's Bureau Express. (Dec2005/Jan2006). *Two studies of racial disproportionality.*

New Child Welfare Information Gateway Publications, Department of Family and Protective Services, Administration & Child Welfare Systems. Retrieved August 20, 2006 from <http://cbexpress.acf.hhs.gov>.

Chipungo-Stukes, S., & Bent-Goodley, T. (2004). Meeting the challenge of contemporary foster care. *Future of Children, 14*(1), 75-93.

Christiansen, E., Evans, W. (2005). Adolescent victimization: testing models of resiliency by gender. *Journal of Early Adolescence, 25*(3), 298-316.

Church, W. (2006). From start to finish: The duration of Hispanic children in out-of-home placements. *Children and Youth Services Review, 28*, 1007-1023.

Church, W., Gross, E., & Baldwin, J. (2005). Maybe ignorance is not always bliss: The disparate treatment of Hispanics within the child welfare system. *Children Youth Services Review, 27*, 1279-1292.

Church, W., Gross, E., & Baldwin, J. (2005). Maybe ignorance is not always bliss: The disparate treatment of Hispanics within the child welfare system. *Children Youth Services Review, 27*, 1279-1292.

Cicchetti, D., & Lynch, M. (1993). Toward an ecological/transactional model of community violence and child maltreatment. *Psychiatry, 56*, 96-118.

Cicchetti, D. (1989). How research on child maltreatment has informed the study of child development: perspectives from developmental psychology. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes of child abuse and neglect* (pp. 377-431). New York: Cambridge University Press.

- Cicchetti, D., & Carlson, V. (1989). *Child maltreatment: Theory and research on the causes of child abuse and neglect*. New York: Cambridge University Press.
- Cicchetti, D., & Toth, S. T. (2000). Developmental processes in maltreated children. *Mt. Hope Family Center, University of Rochester, 46*, 85-160.
- Cohen, N. (2000). Child welfare history in the United States. In N. Cohen (Ed.), *Child welfare: A multicultural focus* (2nd ed., pp. 15-39). Needham Heights, MA: Allyn & Bacon.
- Collins, M. (2001). Transition to adulthood for vulnerable youths: A review of research and implications for policy. *Social Service Review, 271-291*.
- Cook, R., & Ciarico, J. (2000). Analysis of kinship data. *Report to the Congress in kinship foster care*. Washington, DC: Department of Health & Human Services, U.S. Government Printing Office.
- Courtney, M. (1994). Factor associated with reunification of foster care children with their families. *Social Service Review, 81-105*.
- Courtney, Mark. (1995). Reentry to foster care of children returned to their families. *Social Service Review, 226-241*.
- Courtney, M., Piliavin, I., & Wright, B. (1997). Transitions from and returns to out-of-home care. *Social Service Review, 652-667*.
- Courtney, M., Piliavin, I., & Grogan-Kaylor, A. (1998). *The Wisconsin Study of Youth Aging Out of Out-of-Home Care: A portrait of children about to leave care*. Available online at <http://polyglot.1ss.wisc.edu/socwork/foster/fcreport.html>.

- Courtney, M., Terao, S., & Bost, N. (2004). *Midwest Evaluation of the adult functioning of former foster youth: Conditions of youth preparing to leave care*. Chapin Hall Center for Children at the University of Chicago.
- Courtney, M., Dworsky, A., Ruth, G., Keller, T., Havlicek, J., & Bost, N. (2005). *Midwest evaluation of the adult functioning of former foster youth: outcomes at age 19*. Chapin Hall Working Paper, Chapin Hall Center for Children at the University of Chicago.
- Courtney, M., & Dworsky, A. (2006). Early outcomes for young adults transitioning from out-of-home care in the USA. *Child and Family Social Work, 11*, 209-219.
- Cox, M., Buehler, C., & Orme, J. (2002). Recruitment and foster family service. *Journal of Sociology and Social Welfare, 29*, 151-177.
- Cuddeback, G. (2004). Kinship family foster care: A methodological and substantive synthesis of research. *Children and Youth Services Review, 26*, 623-639.
- Cuddeback, G., & Orme, J. (2002). Training and services for kinship and non-kinship foster families. *Child Welfare League of America, 81*(6), 879-909.
- Curtis, C., & Denby, R. (2004). Impact of the Adoption and Safe Family Act (1997) on families of color: Workers share their thoughts. *Families in Society: The Journal of Contemporary Social Services, 85*(1), 71-79.
- Curtis, P., Alexander, G., & Lunghofer, L. (2001). A literature review comparing the outcomes of residential group care and therapeutic foster care. *Child and Adolescent Social Work Journal, 18*(5), 377-392.
- Danzy, J., & Jackson, S. (1997). Family preservation and support services: A missed opportunity for kinship care. *Child Welfare, 76*(1), 31-45.

Delgado, L. (2001). *Kinship care: The life experiences and unmet needs of care providers.*

Thesis presented to the School of Social Work for the completion of master's degree,
California State University, Long Beach.

Donley, M. G. (1993). Attachment and the emotional unit. *Family Process, 32*(1), 3-20.

Dubowitz, H., Feigelman, S., & Zuravin, S. (1993). A profile of kinship care. *Child Welfare, 72*(2), 153-169.

Dubowitz H., Feigelman S., Harrington D., Starr R., Zuravin S., & Sawyer R. (1994).

Children in kinship care: How do they fare? *Children and Youth Services Review, 16*(1/2), 85-106.

Ehrle, J., & Geen, R. (2002). Kin and non-kin foster care-findings from a national survey.

Children and Youth Services Review, 24(1/2), 15-35.

Enchautegui, M. (1997). Latino neighborhoods and Latino neighborhood poverty. *Journal of Urban Affairs, 19*(4), 445-467.

Erickson, P. (2000). Federal child abuse and child neglect policy in the United States since 1974: A review and critique. *Criminal Justice Review, 25*(1), 77-92.

Farley R. (1971). Family types and family headship: A comparison of trends among Blacks and Whites. *The Journal of Human Resources, 6*(3), 275-296.

Ferrari, A. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse and Neglect, 26*, 793-813.

Flores, E., Cicchetti, D., & Rogosch, F. (2005). Predictors of resilience in maltreated and non-maltreated Latino children. *Developmental Psychology, 41*(2), 338-351.

- Fluke, J., Yuan, Y., Hedderson, J., & Curtis, P. (2003). Disproportionate representation of race and ethnicity in child maltreatment: Investigation and victimization. *Children and Youth Services Review, 25*(5/6), 359-373.
- Flower, C., McDonald, J., & Sumski, M. (2005). Review of turnover in Milwaukee, WI: Milwaukee County Department of Social Services (Mimeograph).
- Garbarino, J. (1977). The human ecology of child maltreatment: A conceptual model for research. *Journal of Marriage and the Family*.
- Garland, A., Lansverk, J., & Lau, A. (2003). Racial/ethnic disparities in mental health service use among children in foster care. *Children and Youth Services Review, 25*(5/6), 491-507.
- Garmezy, N., & Tellegen, A. (1984). The study of stress and competence in children: a building block for developmental psychopathology. *Child Development, 55*, 97-111.
- Gebel, T. (1996). Kinship care and non-relative family foster care: A comparison of caregiver attributes and attitudes. *Child Welfare, 75*(1), 5-14.
- Geen, R., & Berrick, J. (2002). Kinship care: An evolving service delivery option. *Children and Youth Services Review, 24*(1/2), 1-14.
- Greene, R., Gallambos, C., Lee, Y. (2003). Resiliency theory: theoretical and professional conceptualizations. *Journal of Human Behavior in the Social Environment, 8*(4), 75-91.
- Greene, J. P., & Forster, G. (2003). *Public high school graduation and college readiness rates in the United States*. New York: Center for Civic Innovation, The Manhattan Institute.

- Gleeson, J., O'Donnell, J., & Johnson-Benacutter, F. (1997). Understanding the complexity of practice in kinship foster care. *Child Welfare League of America*, 76(6), 801-826.
- Gibson, P. A. (2002). Caregiving role affects family relationships of African American grandmothers as new mothers again: A phenomenological perspective. *Journal of Marital and Family Therapy*, 28, 341-353.
- Gibson, P. A. (2002). African American grandmothers as caregivers: Answering the call to help their grandchildren. *Families in Society: The Journal of Contemporary Human Services*, 83(1), 35-43.
- Gibson, P. A. (1999). African American grandmothers: New mothers again. *Affilia*, 14(3), 329-343.
- Gilligan, R. (2001). *Promoting resiliency: A resource guide on working with children in care systems*. London: BAAF.
- Grant, R. (2000). The special needs of children in kinship care. *Journal of Gerontological Social Work*, 33(3), 17-33.
- Green, M. (2002, November/December). Minorities as majority: Disproportionality in child welfare and juvenile justice. *Children's Voices*, 11, 8-13.
- Green, R., Galambos, C., & Lee, Y. (2003). Resiliency theory: Theoretical and professional conceptualizations. *Journal of Human Behavior in the Social Environment*, 8(4), 75-91.
- Grogan-Kaylor, A. (2000). Who goes into kinship care? The relationship of child and family characteristics to placement into foster care. *Social Work Research*, 24(3), 132-141.
- Hays, W., & Mindel, C. (1973). Extended kinship relations in Black and White families. *Journal of Marriage and the Family*, 35(1), 51-57.

- Hwa-Ok, H. (2006, June). The economic well-being of households headed by a grandmother as caregiver. *Social Service Review*, 264-295.
- Hegar, R., & Scannapieco, M. (1999). *Kinship foster care: Practice, policy, and research*. New York: Oxford University Press.
- Hill, R. (2006). *Synthesis of research on disproportionality in child welfare: An update*. Seattle, WA: Casey-CSSP Alliance for Racial Equity in the Child Welfare.
- Hill, R. (2005). *Overrepresentation of children of color in foster care in 2000*. Working paper for The Race Matters Consortium. Retrieved on September 2006 from <http://www.racemattersconsortium.org/whopapers.htm>
- Hill, R. (2003). Disproportionality of minorities in child welfare: Synthesis of research findings. Paper for The Race Matters Consortium. Retrieved on September 2006 from <http://www.racemattersconsortium.org/whopapers.htm>
- Hofferth, S. (1984). Kin networks, race, and family structure. *Journal of Marriage and the Family*, 46(94), 791-806.
- Holland, S., Faulkner, A., & Perez-del-Aguila, R. (2005). Promoting stability and continuity of care for looked after children: A survey and a critical review. *Child and Family Social Work*, 10, 29-41.
- Howard, S., Dryden, J., & Johnson, B. (1999). Childhood resiliency: review and critique of literature. *Oxford Review of Education*, 25(3), 307-323.
- Iglehart, A. (1995). Readiness for independence: Comparison of foster care, and non-foster care adolescents. *Children and Youth Services Review*, 17, 417-432.

- Insuasti-Santana, M. (2002). *Kinship care givers and child welfare workers: The challenge of collaboration*. Thesis presented to the School of Social Work; California State University, Long Beach. for the requirements for a master's degree.
- James, S. (2004). Why do foster care placements disrupt? An investigation of reasons for placement change in foster care. *Social Service Review*, December, 601-627.
- Janicki, M., McCallion, P., Grant-Griffin, L., & Kolomer, S. (2000). Grandparents caregivers I: Characteristics of the grandparents and the children with disabilities for whom they care. *Journal of Gerontological Social Work*, 33(3), 35-55.
- Johnson-Garner, M., & Meyers, S. (2003). What factors contribute to the resilience of African American children within kinship care? *Child and Youth Care Forum*, 32(5), 255-269.
- Jones Harden, B., Clyman, R., Kriebel, D., & Lyons, M. (2004). Kith and kin care: Parental attitudes and resources of foster care and relative care givers. *Children and Youth Services Review*, 26, 657-671.
- Julian, T., McKenry, P., & Mckelvey, M. (1994). Cultural variations in parenting. *Family Relations*, 43(1), 30-50.
- Kadushin A., & Martin J. (1988). *Child welfare services*. New York: Macmillan.
- Kane, C. (1998). Differences in family of origin perceptions among African American, Asian American, and Hispanic American college students. *Journal of Black Studies*, 29(1), 93-105.
- Kaufman, J., & Grasso, D. (2006). The early intervention foster care program: A glass half full. *Child Maltreatment*, 11(1), 90-91.

- Karen, Robert. (1994). *Becoming attached: First relationships and how they shape our capacity to love*. New York: Warner Books.
- Karen, Robert. (1990, February). Becoming attached. *The Atlantic Monthly*, 35-70.
- Kerman, B., Wildfire, J., & Barth, R. (2002). Outcomes for young adults who experience foster care. *Children and Youth Services Review*, 24(5), 319-344.
- Keller, T., Wetherbee, K., Le Prohn, N., Payne, V., Sim, K., & Lamont, E. (2001). Competencies and problem behaviors of children in foster care: Variations by kinship placement status and race. *Children and Youth Services Review*, 23(12), 915-940.
- Kelley, S., Whitley, D., Sipe, T., & Crofts, Y. B. (2000). Psychological distress in grandmother kinship providers: The role of resources, social support, and physical health. *Child Abuse and Neglect*, 24(3), 311-321.
- Kivett, V. (1993). Racial comparisons of the grandmother role. *Family Relations*, 42(2), 165-183.
- Kirby, J., & Kaneda T. (2002). Health insurance and family structure: The case of adolescents in skipped-generation families. *Medical Care Research and Review*, 59(2), 146-165.
- Kolomer, S. (2000). Kinship foster care and its impact on grandmother caregivers. *Journal of Gerontological Social Work*, 33(3), 85-102.
- Kopera-Frye, K., & Wiscott, R. (2000). Intergenerational continuity: Transmission of beliefs and culture. In B. Hayslip, Jr. & R. Golberg-Glen (Eds.), *Grandparents raising grandchildren: Theoretical, empirical, and clinical perspectives*. New York: Springer.

- Lau, A., McCabe, K., Yeh, M., Garland, A., & Landsverk, J. (2003). Race/ethnicity and rates of self-reported maltreatment among high-risk youth in public sectors of care. *Child Maltreatment, 8*(3), 183-194.
- Lemon Osterling, K. & Hines, A. (2006). Mentoring adolescents foster youth: Promoting resilience during developmental transitions.. *Child and Family Social Work, 11*, 242-253.
- Le Prohn, N. (1994). The role of the kinship foster parent: A comparison of the role conceptions of relative and non-relative foster parents. *Children and Youth Services Review, 16*(1/2), 65-84.
- Le Prohn, N. & Pecora, P. (1994). *The Casey foster parent study: Research summary*. Seattle, WA: The Casey Family Program.
- Leslie, L., Landsverk, J., Horton, M., Ganger, W., & Newton, R. (2000). The heterogeneity of children and their experiences in kinship care. *Child Welfare, 79*(3), 315-334.
- Leslie, L., Gordon, J., Ganger, W., & Gist, K. (2002). Developmental delay in young children in child welfare by initial placement type. *Infant Mental Health Journal, 5*(23), 495-516.
- Leslie, L., Hurlburt, M., Landsverk, J., Barth, R., & Slymen, D. (2004). Outpatient mental health services for children in foster care: A national perspective. *Child Abuse and Neglect, 28*, 697-712.
- Levy, T., Orlans, M. (1998). *Attachment trauma and healing: Understanding and treating attachment disorders in children and families*. Washington, DC: CWLA Press.
- Libby, A., Orton, H., Barth, R., Webb, M., Burns, B., Wood, P., Spicer, P. (2006). Alcohol, drug, and mental health specialty treatment services and race/ethnicity: A national

- study of children and families involved with child welfare. *American Journal of Public Health, 96*(4), 628-631.
- Link, M. (1996). Permanency outcomes in kinship care: A study of children placed in kinship care in Erie County, New York. *Child Welfare, 75*(5), 509-528.
- Linsk, N., & Mason, S. (2004). Stresses on grandparents and other relatives caring for children affected by HIV/AIDS. *Health and Social Work, 29*(2), 127-136.
- Little, L., & Kufman, G. (2002). Using Ecological Theory to understand intimate partner violence and child maltreatment. *Journal of Community Health Nursing, 19*(3), 133-145.
- Lu, Y., Landsverk, J., Ellis-Macleod, E., Newton, R., Ganger, W., & Johnson, I. (2004) Race, ethnicity, and case outcomes in child protective services. *Children and Youth Services Review, 26*, 447-461.
- Mason, S. J., & Gleeson, J. P. (1999). Adoption and subsidized guardianship as permanency options in kinship foster care: Barriers and facilitating conditions. In J. P. Gleeson & C. F. Hairston (Eds.), *Kinship care: Improving practice through research* (pp. 85-115). Washington, DC: CWLA Press.
- Masten, A., Best, K., & Garmezy, N. (1990). Resiliency and development: contributions from the study of children that overcome adversity. *Development of Psychology, 2*, 425-444.
- McCallion, P., Janicki, M., Grant-Griffin, L., & Kolomer, S. (2000). Grandparents carers II: Service needs and service provisions issues. *Journal of Gerontological Social Work, 33*(3), 57-84.

- McMillen, C., Zima, B., Scott L., Auslander, W., Munson, M., Ollie, M., & Spitznagel, E. (2005). Prevalence of psychiatric disorders among older youths in the foster care system. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(1), 88-96.
- McMurtry S., & Gwat-Yong. (1992). Differential exit rates of children in foster care. *Social Work Research and Abstracts, 28*(1), 42-51.
- McLean, & Thomas. (1996). Informal and formal kinship populations: A study in contrasts. *Child Welfare, 75*(5) 489-505.
- McInstosh, M. (2002). Barriers to reunification in the child welfare system: an analysis of kinship and non-kinship placements. Thesis presented to the Department of Social Work at the California State University Long Beach: CA
- Miller, A., & Cross, T. (2006). Ethnicity in child maltreatment research: a replication of Behl et al.'s content analysis. *Child Maltreatment, 11*(1), 16-26.
- Mills, C., & Usher, D. (1996). A kinship care case management approach. *Child Welfare, 75*(5), 600-618.
- Miltenberger, P., Hayslip, B., Harris, B., & Kaminski, P. (2004). Perceptions of the losses experienced by custodial grandmothers. *Omega, 48*(3), 245-261.
- Moffatt, P., & Thoburn, J. (2001). Outcomes of permanent family placement for children of minority ethnic origin. *Child and Family Social Work, 6*, 13-21
- Morrow-Kondos, D., Weber, J., Cooper, K., & Hesser, J. (1997). Becoming parents again: Grandparents raising grandchildren. *Journal of Gerontological Social Work, 28*(1/2), 35-46.

Multiple Regression. Retrieved January 31, 2003 from <http://www2.chass.ncsu.edu/garson/pa765/regress.htm>

National Association of Social Workers (1999). Bills seek to extend safety net for foster teens. *NASW News*, 44(7), 7.

Newman, T. (2004). *What works on building resiliency?* Barnados, Barkingside.

Norusis, M. (2003). *SPSS 12.0 Statistical Procedures Companion*. New Jersey: Prentice Hall .

O'Donnoll, J. (1999). Involvement of African American fathers in kinship foster care services. *Social Work*, 44(5), 428-441.

O'Donnoll, J. (2001). Paternal involvement in kinship foster care services in one father and multiple father families. *Child Welfare*, 80(4), 453-479.

Patton, M (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Pecora, P. (2006). The Alliance for Children and Families National Leadership Conference on Child Welfare Issues. *Building an Organization Practice Wisdom and Research to Increase Staff Satisfaction, Performance, and Retention*. Paper presented at Clearwater Beach, January 2006).

Pecora, P., Le Prohn, N., & Nasuti, J. (1994). *The Casey foster parent study-research summary. Role perceptions of kinship and other foster parents in family foster care*. Seattle, WA: The Casey Family Program.

Pecora, P. J., Williams, J., Kessler, R. J., Downs, A. C., O'Brien, K., Hiripi, E., & Morello, S. (2003). *Assessing the effects of foster care: Early results from the casey national alumni study*. Seattle, WA: The Casey Family Programs, Website: <http://www.casey.org>

- Pecora, P., Kessler, R., Williams, J., O'Brien, K., Downs, C., English, D., White, J., Hiripi, E., Roller, C., Wiggins, T., & Holmes, K. (2005). *Improving family foster care: Findings from the Northwest Foster Care Alumni Study*. Seattle, WA: The Casey Family Programs. www.casey.org
- Pecora, P. J., Williams, J., Kessler, R. J., O'Brien, K., Hiripi, E., Emerson, J., Herrick, M. A., & Torres, D. (2006). Assessing the educational achievement of adults who formerly were placed in family foster care. *Child and Family Social Work*.
- Pedhazur, E., & Pedhazur Schmelkin, L. (1991). *Measurement, design, and analysis: An integrated approach*. Hillsdale, NY: Lawrence Erlbaum.
- Perry, B. (2001). Bonding and attachment in maltreated children. *The Child Trauma Center*, V 3.0, 1-17.
- Perry, B. (2000, July). Neurodevelopmental cost of adverse childhood events. *The Child Trauma Center*, 1-30.
- Perry, R., & Limb, G. (2004). Ethnic/racial matching of clients and social workers in public child welfare. *Children and Youth Services Review*, 26, 965-979.
- Peter, J. (in press). True ambivalence: Child welfare workers' thoughts, feelings, and beliefs about kinship foster care. *Children and Youth Services Review*.
- Pietrowiak, D., & St. Pierre, M. (2002). Foster care: Recent legislation helps states focus on finding permanent homes for children, but long-standing barriers remain. In *United States Congressional Registers* (GAO-O2-585). Washington, DC: General Accounting Office (USGAO).

- Pinderhughes, E., Nix, R., Foster, M., Jones, D., Bierman, K., Coie, J., Dodge, K., Greenberg, M., Lochman, J., & McMahon, R. (2001). Parenting in context: Impact of neighborhood poverty, residential stability, public services, social networks, and danger on parental behaviors. *Journal of Marriage and the Family*, 63(4), 941-959.
- Pinzon, H. L., & Perez, M. A. (2000). Cultural characteristics of the “traditional Latino family.” *Multicultural Issues in Health Education Programs for Hispanic-Latino Populations in the United States*
- Rak, C., & Patterson, L. (1996). Promoting resiliency in at-risk children. *Journal of Counseling and Development*, 74, 368-373.
- Ramiiall, S. (2004). A review of employee motivation theories and their implications for employee retention within organizations. *The Journal of Academy of Business*, 5(1/2), 52-63.
- Rastogi, M., & Wampler, K. (1999). Adult daughters’ perceptions of the mother-daughter relationship: a cross cultural comparison. *Family Relations*, 48(3), 327-345.
- Richarson, G. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307-321.
- Ritter, B. (1995, October). Children on the move: Placement patterns in children’s protective services. *Families in Society*, 69-477.
- Roberts, D. (2002). *Shattered bonds. The color of welfare*. New York: Basic Civitas Books.
- Rosenthal, J. (2001). *Statistics and data interpretation*. Belmont, CA: Brooks/Cole.
- Rosenthal, J., Groze, V., & Curiel, H. (1990). Race, social class, and special needs adoption. *Social Work*, 35(6), 532-539.

- Rubin, A., & Babbie, E. (2001). *Research methods for social work*. Pacific Grove, CA: Brooks/Cole.
- Ruggles, S. (1994). The origins of African American family structure. *American Sociological Review*, 59(1), 136-151.
- Rutter, M. (1979). Protective factors to children's responses to stress and disadvantage. In M. W. Kent & J. E. Rolf (Eds.), *Primary prevention of psychopathology: (Vol. 3). Social competence in children* (pp.49-74). Hanover, NH: University Press of New England.
- Rutter, M. (1999). Resiliency concepts and findings: Implications for family therapy. *Journal of Family Therapy*, 21, 119-144.
- Rutter, M. (1985). Resiliency in the face of adversity: protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598-611.
- Ryan, J., & Testa, M. (2004). *Child Maltreatment and juvenile delinquency: Investigating the role of placement and placement stability*. Champaign-Urbana, IL: University of Illinois at Urbana-Champaign School of Social Work, Children and Family Research Center.
- Saleebey, D. (1992). *The strengths perspective in social work*. New York: Longman Publishing Group.
- Scannapieco, M., Hegar, R., & McAlpine, C. (1997). Kinship care and foster care: A comparison of characteristics and outcomes. *Families in Society: The Journal of Contemporary Human Services*, 480-487.
- Schofield, G. (2001). Resiliency in family placement: A lifespan perspective. *Adoption and Fostering*, 25(3), 6-19.

- Schuck, A. (2005). Explaining Black-White disparity in maltreatment: poverty, female-headed families, and urbanization. *Journal of Marriage and Family, 67*, 543-551.
- Sedlak, A., & Broadhurst, D. (1996, September). *Third national incidence study in child abuse and neglect*. U.S. Department of Health & Human Services.
- Stein, M. (2006). Young people aging out of care: the poverty of theory. *Children and Youth Services Review, 28*, 422-434.
- Stein, M. (2006). Research review: Young people leaving care. *Child and Family Social Work, 11*, 273-279.
- Strozie, A., Elrod, B., Beiler, P., Smith, A., & Carter, K. (2004). Developing a network of support for relative caregivers. *Children and Youth Services Review, 26*, 641-656.
- Taussig, H., & Talmi, A. (2001). Ethnic differences in risk behaviors and related psychosocial variables among a cohort of maltreated adolescents in foster care. *Child Maltreatment, 6*(2), 180-192.
- Tabachnick, B., & Fidell, L. (2001). *Using multivariate statistics*. Needham Heights, MA: Allyn & Bacon.
- Testa, M., & Shook-Slack, K. (2002). The gift of kinship foster care. *Children and Youth Services Review, 24*(1/2), 79-108.
- Texas Health and Human Commission. (2006, January 2). *Disproportionality in child protective services*. New Child Welfare Information Gateway Publications, Department of Family and Protective Services, Administration & Child Welfare Systems. Retrieved August 4, 2006 from <http://www.dfps.state.tx.us/documents/about/pdf/2006-01-02disproportionality.pdf>

- Tienda, M., & Angel, R. (1982). Headship and household composition among Blacks, Hispanics, and other Whites. *Social Forces*, 61(2), 508-531.
- Timberlake, E., & Stukes Chipungo, S. (1992). Grandmotherhood: Contemporary meaning among African American middle-class grandmothers. *Social Work*, 37(3), 216-221.
- Timmer, S., Sedlar, G., & Urquiza, A. (2004). Challenging children in kin versus non-kin foster care: Perceived cost and benefits to caregivers. *Child Maltreatment*, 9(3), 251-262.
- Toledo, J. R., Hayslip, B., Emick, M., Toledo, C., & Henderson, C. (2000). Cross-cultural differences in custodial grandparenting. In B. Hayslip, Jr., & R. Golberg-Glen (Eds.), *Grandparents raising grandchildren: Theoretical, empirical, and clinical perspectives*. New York: Springer.
- Triseliotis, J. (2002). Long-term foster care and adoption: The evidence examined. *Child and Family Social Work*, 7, 23-33.
- Stein, T. (2000). The Adoption and Safe Families Act: Creating a false dichotomy between parents' and children's rights. *Families in Society*, 81(6), 586-592
- Stein, T. (2003). The Adoption and Safe Families Act: How Congress overlooks available data and ignores systemic obstacles in its pursuit of political goals. *Children and Youth Services Review*, 25(9), 669-682.
- U.S. General Accounting Office. (2002). *Foster care: Recent legislation helps states focus on finding permanent homes for children, but long-standing barriers remain* (GAO-02-585). Washington DC: U.S. Author.
- U.S. General Accounting Office. (2003). *Foster care: States' early experiences implementing the Adoption and Safe Families Act* (GAO-03-626T). Washington DC: Author.

- U.S. General Accounting Office. (2003). *Child welfare: HHS could play a greater role in helping child welfare agencies recruit and retain staff*. Washington, DC: Author.
- U.S. Department of Health and Human Services (USDHHS). (2004). *Child maltreatment 2001: Reports from the states to the national child abuse and neglect data systems*. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services (USDHHS). (2006). The AFCARS Report- Preliminary Estimates FY 2004. www.acf.hhs.gov/programs/cb.
- U.S. Department of Health and Human Services. (2000). *Report to the Congress in kinship foster care*. Washington, DC: U.S. Government Printing Office.
- Viner, R., & Taylor, B. (2005). Adult health and social outcomes of children who have been in public care: Population-based study. *Pediatrics*, *115*(4), 894-899
- Vogt, P. W. (1999). *Dictionary of statistics and methodology: A nontechnical guide for the social sciences*. Thousand Oaks, CA: Sage.
- Wade, J. & Dixon, J. (2006). Making a home, finding a job: investing early housing and employment outcomes for young people leaving care. *Child and Family Social Work*, *11*, 199-208.
- Walker, C. D., Zangrillo, P., & Smith, J. (1994). Parental drug abuse and African American children in foster care. *Child Welfare Research Review*, *1*, 109-122.
- Weber, J., & Waldrop, D. (2000). Grandparents raising grandchildren: Families in transition. *Journal of Gerontological Social Work*, *33*(920), 27-46.
- Wells, K., & Guo, S. (1999). Reunification and reentry of foster children. *Children and Youth Services Review*, *21*(4), 273-294.

- Werner, E., & Smith, R. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell.
- West, D. J., & Farrington, D. P. (1973). *Who becomes delinquent? Second report of the Cambridge Study in Delinquent Development*. London: Hienemann.
- Westat, Inc. *Addressing disproportionality in the child welfare system: Defining the issue*. Developed by Casey Family Programs with input from Children and Family Research Center, SSW, University of Illinois at Urbana-Champaign and Westat.
- Woodley Brown, A., & Bailey-Etta, B. (1997). An out-of-home care system in crisis: Implications for African American children in the child welfare system. *Child Welfare League of America, 76*(1), 65-83.
- Wulczyn, F., & Hislop, K. B. (2002). *Adoption dynamics: Comparative results for subpopulations, Topic #4*. Chicago: The University of Chicago. The Chapin Hall Center for Children.
- Yussen, S., & Santrock, J. (1982). *Child Development: An introduction*. Iowa: Wm. C. Brown.
- Zielinski, D., & Bradshaw, C. (2006). Ecological influences on the sequelae of child maltreatment: A review of the literature. *Child Maltreatment, 11*(1), 49-62.
- Zigler, E., & Hall, N. (2000). *Child development and social policy: Theory and applications*. Boston, MA: McGraw-Hill.
- Zimmerman, R .B. (1982). Foster Care in Retrospect. *Studies in social welfare, (Vol. 14)*. New Orleans, LA: Tulane University Press.
- Zimmerman, M., & Arunkumar, R. (1994). Resiliency research: implications for school and policy. *Social Policy Reports: Society for Research on Child Development, 8*, 1-20.

BIOGRAPHICAL STATEMENT

Susy Villegas de Chaverri was awarded her Ph.D. degree from The University of Texas at Arlington in May 2007. She received a Master in Social Work from the University of Kansas in 1993, and obtained a post-graduate degree in clinical psychology from the University of Costa Rica in 1985. Her undergraduate degree in psychology and sociology was obtained at Hearst University in North Ontario, Canada. Dr. Villegas has also completed a two-year training specialization in Family and Marriage Therapy and a two-year post-graduate specialization course in Human Sexuality from the Menninger Foundation in Kansas. She speaks Spanish, French, and English.

She is currently licensed by the state of Oklahoma as a Clinical Social Worker and State Board Certified Clinical Supervisor. Her areas of specialty include family, couples, and group direct clinical work, couple relationship dynamics and cultural adaptation process for Latinos, human diversity, teaching, and clinical supervision. She is currently an adjunct faculty at the School of Social Work at the University of Oklahoma. Her special interests are direct field practice, teaching, and research.

On her free time, Doctor Villegas enjoys traveling, visiting with friends, reading Latin American novels, and taking long outdoors walks.