

PUBLIC CHILD WELFARE ADOPTION: THE ADOPTIVE PARENT AND
ADOLESCENT ADOPTEE PERCEPTION OF ADOPTION OUTCOMES

by

ZOË BREEN WOOD

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Dissertation Chair: Victor K. Groza, PhD

Mandel School of Applied Social Sciences
CASE WESTERN RESERVE UNIVERSITY

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Abstract

With adoption being viewed as an intervention, it becomes increasingly important to be clear about what outcomes are being sought from the intervention and from whose perspective success is defined. This cross sectional study of public child welfare adoptions examines the definition of adoption outcome from the points of view of both the adoptive parent and the adopted adolescent. Using a secondary analysis of survey responses from 146 adoptive parents and their eldest adopted child, the factors that most contributed to three different conceptualizations of success (adoptive parent satisfaction, adoptive parent perception of the parent-child relationship, and child perception of the parent-child relationship) were identified. The majority of adoptees and their adoptive parents view their adoption relationship very positively, however they define success differently. Other key findings included that although child related factors contributed the largest percentage of the variance in all three definitions, three family process factors (communicative openness, family functioning style and adoptive parent perceived stress) also had an impact on at least one of the definitions. While structural openness did not have an impact on any of the definitions of success, communicative openness in the family was the one factor that significantly impacted all three of the outcomes. Implications for practice and policy are discussed.

Key words: Public child welfare adoptions, adoption outcome, openness in adoption, communicative openness, child's point of view.

CHAPTER 1

Scope of the Problem

Introduction

Adoption has been practiced worldwide for as long as human history has been recorded. Yet, adoption philosophy has changed over time; it has moved in the US from finding a child for a family to finding a family for a child. As adoption philosophy has changed, so too have ideas about the characteristics of children who are adopted. Current adoption practice includes placing older children, children with a history of maltreatment, children with physical disabilities and children who are part of a sibling group in families. This chapter presents information about the scope of the challenge of creating successful outcomes for youngsters adopted from the public child welfare system. Data are presented that identify the number of children adopted from the public sector and the ways in which outcomes for these adoptions have been defined and assessed. The importance of this topic to social welfare and the purpose of the current study are also addressed.

Incidence and prevalence of adoption

While adoption has long been part of the picture of U.S. family formation, data on the frequency and extent of adoption have not been systematically gathered until recently. An early survey conducted as part of a national health survey found that approximately 2% of the population of children under age 18 was children raised by nonbiological relatives (Brodzinsky, 1993). Then, for the first time in 2000, the U.S. Census Bureau (2003) collected information about adoption in America. Key among the findings was that 2-1/2% (over two million) of all children in the U.S. are connected to a family by adoption. Of those, approximately 50% were step-parent adoptions, 15% private infant

adoptions, 15% intercountry adoptions, and 20% adoptions from the public child welfare system (U.S. Census, 2003). Using a series of different data sources, including state courts, state bureaus of vital statistics, AFCARS, and the Department of State, the Child Welfare Information Gateway (2011) estimated that 41% of all adoptions in 2008 came from the public child welfare system. This discrepancy in how adoptions are classified and counted is a major barrier to being able to accurately track adoption trends over time (Miller, Fan, & Grotevant, 2005). While there are characteristics and clinical themes that are considered common to all types of adoptions (Groza & Rosenberg, 2001), this study will focus specifically on the last group of children – those adopted from the public child welfare system.

Adoptions from the public child welfare system

Early estimates of public child welfare adoptions projected that 14,095 children were adopted from the public child welfare system in 1990 (U.S. Department of Health and Human Services, 2010). With the advent of key federal legislation, most notably Public Law 96-272, the Adoption Assistance and Child Welfare Act of 1980 and the Adoption and Safe Families Act of 1997, the number of children adopted from the public child welfare system rose sharply in the last three decades. Adoptions increased to 51,000 in 2001, an increase of 65% over the number of child welfare adoptions reported in 1997 (DeVooght, Malm, Vandivere, & McCoy-Roth, 2011). This number remained relatively stable until 2008, when the number of children adopted from the public child welfare system slightly increased to 55,303 (Child Welfare Information Gateway, 2011b; DeVooght et al., 2011). The U.S. Department of Health and Human Services reports

preliminary data for 2010, the last year data are available, that 52,891 children were adopted from the public child welfare system (Children's Bureau, 2011).

The average age of these children at the time of adoptive placement was 6.4 years, with the average time from termination of parental rights to adoption being 13.7 months. The majority of the children are nonwhite (57%), and 90% of them received a post adoption subsidy by virtue of being classified as having special needs. Special needs is defined as being older (depends on the state but typically considered to be age 5 or older), having a physical or mental handicap, a serious medical issue, a behavioral or emotional problem, or having any other characteristic that would make them "hard to place for adoption." Other children, who may be defined as having special needs, depending on the state, are those who are members of a sibling group needing placement together, and children of color (Dance & Rushton, 2005; Rosenthal & Groze, 1994). Post adoption subsidy can include a monthly stipend given to the family after the adoption is finalized for living or other expenses, or it may include funding to cover specific needs, such as counseling, special educational supports, or other special services.

Prior to the 1970s, most children with special needs that were in the custody of a public child welfare agency would not have been placed for adoption and would have grown up in foster care or group care (Lawder, Lower, Andrews, Sherman, & Hill, 1969; Kadushin, 1970; Hartman, 1979). Public Law 96-272, the Adoption Assistance and Child Welfare Act of 1980, while emphasizing family preservation and reunification also sought to reduce the number of children in foster care by seeking permanency for all children in custody of the state public child welfare agency.

The children adopted from the public child welfare system are part of a larger pool of youngsters who enter that system every year as a result of reports of abuse or neglect. Children enter foster care when it is determined that the situation is such that the family cannot provide for the child's basic care and protection, and the state must intervene to assure basic safety (Child Welfare Information Gateway, 2011a; Rycus & Hughes, 1998). The goal for these children is most frequently reunification with the family of origin, which is the most prevalent outcome. On September 30, 2010, the most recent year for which data are available, there were 408,425 children in foster care, 254,375 (62%) of whom had entered care during the previous year. During that same period, 254,114 children exited the foster care system; the majority (59%) returned to parents or extended family members, while 11% were emancipated or legally declared to be adults prior to the age of 18. Only 21% exited to adoption (Children's Bureau, 2011). Thus, adoption of children in the public child welfare system may be viewed as an intervention of last resort – reserved only for those situations for which no other permanency alternative is available. One of the questions that arises when reviewing these data is, *What is the result or outcome that is being sought from this intervention?*

Outcomes in adoption

Adoption has been characterized as a personal act, a legal process, and a social service (Cole & Donely, 1990). The desired outcomes of adoption have changed over time, as social, political and economic circumstances have evolved. In earlier U.S. history, adoptions were characterized as successful when they (a) helped to meet a labor shortage (Pfeffer, 2002; Porter, 2002), (b) rescued poor immigrant children from urban poverty and crime (University of Oregon Adoption History Project retrieved on May 15,

2008 from <http://www.uoregon.edu/~adoption/topics/orphan.html>), (c) allowed members of society to fulfill their Christian duty by rescuing poor, unfortunate children (Berebitsky, 2002; Hutchinson & Charlesworth, 2000), or (d) allowed families to replace young children killed by the epidemics of cholera and other diseases that swept urban centers in the mid-1800s. Later in U.S. history adoption was seen as a means of assuring care for a large number of infants who were born out of wedlock, while at the same time assuring that the families experiencing infertility and adopted them were not stigmatized, either by having an illegitimate family member or by disclosing their inability to have a “natural child.” Success involved integrating the child so completely into the family that adoption need not be acknowledged or discussed (Carp & Leon-Guerrero, 2002).

Since the 1970s, the supply of healthy infants available for adoption has steadily declined. This is due to many factors, including the rise in birth control and abortion, increasing acceptability of single parenting, and decreased stigma of bearing a child out of wedlock. At the same time, the number of older children needing adoptive placements has increased. Again, a number of factors contribute to this trend. The breakdown of the extended family and pressures placed upon nuclear families have resulted in increasing numbers of children being identified as abused or neglected and in need of adoptive placement when the situation that brought them into care cannot be rectified (Rosenthal & Groze, 1994). These youngsters are not the youngsters upon whom previous adoption practice and philosophy were based. They have experienced extensive trauma, have been in multiple placements, and have been exhibiting a range of behavioral and emotional problems (Hollows & Nelson, 2006; Staff & Fein, 1992; Howard, Livingston, Smith, & Ryan, 2004; Landsverk, Litrownik, Newston, Ganger, & Remmer, 1998; Shapiro &

Shapiro, 2006; Tasussig, 2002; Ward, 1984; Whelan, 2003). They are causing adoption professionals to rethink goals and outcomes in adoption to meet the needs of this new population.

Issues unique to adoptions from the public child welfare system

Child welfare policy and law sought adoption as a permanency solution for those for whom reunification was not possible, and encouraged transracial placements, placements of older children, sibling groups, and children with other special needs. Families were offered post adoption subsidies to minimize the financial strain placed on them by adoption, and child welfare caseworkers were taught to look to nontraditional families as options for some of the more challenging to place children. Adoption was no longer seen as the placement of an infant with a middle-class, two-parent, childless couple of the same race. It became a process of placing children up to the age of 18, many of whom had developed special needs as a result of risk factors in utero, trauma, neglect or abandonment, in adoptive placements with adults who were older, single, gay, lesbian or bisexual, perhaps experienced in parenting, but with fewer economic resources and some special needs of their own. Applicants with criminal or psychiatric histories were not automatically ruled out and an emphasis was placed on finding a family for every child. Success was defined by the achievement of legal permanency – the child being adopted through a legal proceeding and leaving the foster care system.

The public child welfare system seeks legal permanency for the benefit of the child but also for its own benefit. There are financial incentives for moving youngsters out of the child welfare system and into adoptive homes. For example, the federal Adoption Promotion Act of 2003 (P.L. 108-145) provides incentive payments to states

that increase the number of children adopted from the foster care system. Costs for keeping a child in foster care far surpass the costs of placing a child for adoption, even when post adoption subsidies are provided. Hansen's (2007) study of the value of adoption reported that "a dollar spent on the adoption of a child from foster care yields about three dollars in benefits" (p 65). These benefits are seen as accruing to the adopted child, the public agency and to society as well.

The family with whom the child would ultimately be placed is said to be the one which can best meet the greatest number of the child's needs (Rycus & Hughes, 1998). One of the current concerns is that while there are many families who wish to adopt, most want to adopt healthy infants (see Groza, Brindo, Fox, & Garcia, 2009). The child welfare system does not have the capacity to recruit, prepare, and support the types of families needed by the children who are waiting to be adopted (Kernan & Lunsford, 2004). Placing an older child with special needs with a family wanting to adopt a healthy infant is indeed a poor match, with the potential to lead to high rates of disruption (ending the adoption before it is legalized) or dissolution (going to court after legalization and ending the adoption). Identifying families that can be successful with the children currently available for adoption continues to be a challenge (Hanna & McRoy, 2011).

There are some who would argue that adoption is not a solution, but is itself an indicator of a social problem (Hutchinson & Charlesworth, 2000), and that adopting the children of poor and vulnerable populations is exploiting one of the few commodities available to these groups (Della, Cava, Kolko, Phillips, & Engel, 2004). Hutchinson and Charlesworth (2000) argue that resources should be invested in providing these individuals with the resources to enable them to adequately and safely provide for their

own children. Given the current political and economic climate with the shrinkage of safety nets for vulnerable families, this is not likely to occur in the foreseeable future. Thus, adoption remains the best option for children in the public child welfare system who cannot be returned to birth family or kin.

Child welfare adoption outcomes

Disruption/dissolution. Children adopted from the public child welfare system after having experienced maltreatment pose special challenges. One indicator of these challenges is differing disruption/dissolution rates between child welfare adoptions and adoptions in the private sector of children placed from infancy. *Disruption* is defined as the adoptive parent asking to have a child removed from the home after adoptive placement but prior to finalization in court. *Dissolution* is defined as the adoptive parent asking to have the child removed or asking to “give him/her back” after the adoption has been legalized (Festinger & Maza, 2009; Rosenthal, 1993). In many child welfare settings, and in some child welfare adoption research, “disruption” is commonly used to refer to both outcomes.

Although adoption is viewed as a solution to a social problem by permanently providing a safe, loving home to waiting children, stories of adoptions disrupting or dissolving abound. While the disruption/dissolution rate for all adopted children is estimated to be between less than 1% to 3%, the disruption rate for older children with special needs is estimated to be between 7 to 27% (Partridge, Hornby, & McDonald, 1986; Barth & Barry, 1988; Rosenthal, 1993; University of Southern Maine, 1999; Festinger, 2002), with some studies (Boyne, et al., 1984, as cited in Barth & Barry, 1988; Kagan & Reid, 1986) showing much higher rates of disruption/dissolution in the range of

41 to 53% for specific groups of children (typically those placed as teenagers). Although disruption/dissolution is an often used indicator of adoption outcome, it only reports whether there is still a legal relationship between the child and parent. It does not describe the child's current living arrangements. It also does not describe the quality of the relationship or the degree to which the child's development was enhanced by living with the adoptive family. In that sense, disruption/dissolution is more an indicator of the status of a legal relationship than of the quality of that relationship.

Family related outcomes. While adoption disruption/dissolution rates have been most frequently used to delineate adoption outcomes, other outcomes also have been used. Some focus on the perceptions of the adoptive parent. For example, parental satisfaction with the adoption (Gerard, 1994; Groze, 1996; Kadushin, 1970; Rosenthal & Groze, 1992; Smith-McKeever, 2006), acceptance of the adoptive parent role, and warmth and affection toward the child (Lawder et al., 1969) have been described as indicators of positive adoption outcomes. Positive family function has also been used as an indicator of adoption outcome (Groze, 1996).

Child related outcomes. Many variables that describe characteristics of the child are used to depict adoption outcome, as well. The extent to which the adopted child demonstrates externalizing and/or internalizing behaviors, as manifested on instruments such as the (a) Achenbach (1991) Child Behavior Checklist (Brodzinsky & Brodzinsky, 1992; Groze, 1996), (b) the child's development of a conscience and the child's social development (Lawder et al., 1969), (c) child development in general (Johnson, 2002), (d) the child's classroom behavior and academic achievement (Brodzinsky & Brodzinsky, 1992; van Ijzendoorn, Juffer, & Poelhuis, 2005), and (e) the child's development of a

positive racial identity (Grotevant, 1997) are all examples of other commonly used child-related indicators of adoption outcome. Just as child adjustment in general is manifested differently at each developmental stage (Gallagher, 2002), a child's adjustment to his/her adoptive family is likely to look different at different stages of development.

Adoption adjustment. Another indicator of adoption outcome is often used but loosely defined; it is adoption adjustment. The *Oxford Universal Dictionary* (1933) defines "to adjust" as to "arrange suitably in relation to its parts"; "to adapt"; "to arrange, compose, harmonize differences, discrepancies"; and, "to come to terms". Unlike the earlier adoption outcome indicators focusing primarily on the individual or family, adoption adjustment has the potential to be conceptualized as an interactive construct. In a study by Lawder and colleagues (1969), multiple child and parent related factors were used to predict adoption outcome indicating that the adjustment had to be reciprocal. From a systems perspective (Reitz & Watson, 1992), the child does not just adjust to the adoptive family, the adoptive family also adjusts to the adopted child, and both parties are changed in the process. Brodzinsky (1983) developed the Adoption Adjustment Scale (AAS). It is a parent report measure consisting of 18 questions that yield six independent factors: 1) child's adoption adjustment; 2) child's curiosity and questioning about adoption; 3) child's separation anxiety; 4) parent's adoption adjustment; 5) parent's involvement with the child regarding adoption issues; and, 6) parent's confidence in handling adoption issues. This author was not able to find any studies using this scale other than those by Brodzinsky and colleagues. Other studies by Brodzinsky and Brodzinsky (1992) and Brodzinsky (1993) conceptualize adjustment as the cumulative effect of multiple child and parent related factors. A study by Rushton, Dance, & Quinton

(2000) also sought to examine placement outcome beyond disruption rates. This was a prospective study of the first year of placement of 61 children from the public child welfare system placed for adoption during middle childhood. The authors found that a complex interaction of factors related to the parent and the child was more apt to predict placement instability. The study confirmed the findings of others that “the major risks for placement were not the level of behavioral difficulties, per se, but rather the propensity of the child and family to develop a relationship within which these can be managed or controlled” (p. 68).

Parent-child relationship. The development of a healthy attachment between the adoptive parent and adopted child is a cornerstone of adoption practice. Parent-child interactions are key areas explored for adoption outcome, with the most notable indicator being the development of attachment between the adoptive parent and child, frequently used as an indicator of positive adoption outcome (Groze & Rosenthal, 1993; Hodges, Steele, Hillman, Henderson, & Kaniuk, 2005; Oosterman & Schuengel, 2008; Steele, Hodges, Kaniuk, Hillman, & Henderson, 2003). Other adoption studies have used parent child relationship as a predictor variable (Groze, 1992; Whitten & Weaver, 2010). While attachment is difficult to measure directly (Edens & Cavell, 1999; Groze & Rosenthal, 1993), this concept will be more fully explored in the following chapter.

Child’s point of view.

Notably, very few studies of adoption outcome have explored success from the perspective of the adopted child when the child was still a minor living in the family. Ryan and Nalavany (2003) have characterized post adoption research as “parent focused and child neglected” (p.31), identifying only one other U.S. study (Smith & Howard,

1999) representing the voice of the adopted child. In their study, Ryan and Nalavany (2003) examined the feelings that adopted children had about their adoptions, specifically asking them to describe the challenges that they faced vis-a-vis their adoptions, how they coped with those challenges, and what barriers they had experienced in seeking help. Since the Ryan and Nalavany study was published, a few other studies have examined adoption outcome from the child's perspective. Gillum & O'Brien (2008) studied Black children's satisfaction with their adoption, Dance & Rushton (2005) and Biehal, Ellison, Baker, and Sinclair (2010) both used the child's sense of belonging to the adoptive family as the outcome. While the number of studies from the child's perspective is increasing, the voice of the minor adoptee concerning adoption outcome continues to be faint at best.

Adoption as an Intervention.

For some children who have experienced abuse, neglect, or other forms of maltreatment in their birth families, adoption is now being characterized in a different manner. From the perspective of the child who has been maltreated, placement in an adoptive family is designed to be a solution that provides "a remarkable environment for healing emotional and physical trauma and reversing developmental deficits" (Johnson, 2002, p. 39). Indeed, studies show that adopted children fare better in areas such as cognitive recovery, developmental catch up, academic achievement, and attachment than those who remain in foster care or those who are reunified with birth families (Johnson, 2002; Kernan & Lansford, 2004; van Ijzendoorn & Juffer, 2006). Some authors (van Ijzendoorn & Juffer 2006, Della Cava et al., 2004) argue that adoption should be characterized as an intervention designed to help children catch up in many domains of development, and that it should also be characterized as a solution to a social problem.

They express the notion that healing for traumatized children best occurs in families. From the perspective of adoption as an intervention, adoption is successful when the child heals from trauma and developmental lags are mitigated, because he or she moves from an abusive or neglectful environment to the uncertainty of foster care to a safe and stable “forever family” environment provided by at least one loving parent. When adoption is viewed as an intervention, the needs of all individuals involved (birth parent, child, and adoptive parent) and the types services required become important in defining success. As a solution to a social problem, adoption is the most radical of interventions with the potential to heal individuals and reverse the effects of societal problems related to poverty, violence, and addiction.

Current Questions

As the number of children awaiting adoption from the public child welfare system increases, several important questions arise. At societal and policy levels, one might ask the following questions: Should we be satisfied with using disruption rates as the gauge of adoption success? What are the desired outcomes for children adopted from the public child welfare system and their families? From whose perspective should these outcomes be defined? Once defined, what child and family factors contribute to success?

For parents who have adopted children from the public child welfare system and who deal with a range of child behaviors, as well as for the social work professionals who provide them with post adoption services, the questions are of a different sort: Why do some parents remain committed to adopted children who exhibit major behavior problems, while other parents give up on children with issues that are much less severe? Why does a particular child “disrupt” from one family, yet thrive in another?

Palacios & Brodzinsky (2010) argue that adoption research is moving from comparing outcomes for adopted children with those who are not adopted, to describing the ability of the adopted child to recover from adversity to the need for understanding the processes through which these outcomes occur. Seeking answers to the questions articulated above more accurately reflects the current adoption landscape and has great implications for adoption policy and practice.

Thus, this study will seek to answer the following questions:

1. What child factors, family process factors, and family structural factors are associated with parental satisfaction with the adoption?
2. What child factors, family process factors, and family structural factors are associated with parental perception of the quality of the parent-child relationship?
3. What child factors, family process factors, and family structural factors are associated with the child's perception of the quality of the parent-child relationship?
4. What differences exist among the factors that are associated with parental satisfaction with the adoption, parental perception of the quality of the parent-child relationship, and the child's perception of the quality of the parent-child relationship?

Chapter 2

Review of the Theoretical and Empirical Literature Related to Adoption Outcomes

There are a number of theoretical perspectives that can help with understanding the processes through which successful outcomes can occur for children adopted from the child welfare system. This chapter reviews the major theoretical and empirical literature related to adoption outcomes for children adopted from the public child welfare system, focusing especially on attachment and ecological systems theories. Empirical studies related to factors predicting successful outcomes in adoption from the public child welfare system are reviewed. Gaps in previous research and the conceptual model for the study are identified. Finally the research questions and hypotheses for this study are delineated.

Attachment Theory

Attachment has long been associated with positive outcomes in adoption. The development of a strong relationship or bond between parent and child is seen as crucial for the child's growth and development (Edens & Cavell, 1999) and is often considered to be evidence that the adoption is successful.

Bowlby (1969, 1973) first developed this theoretical framework related to attachment after studying the impact of separation and loss on children. Using an ethological approach, he studied interactions in the animal world as well as the behavior of young children who were separated from their parents due to experiences such as hospitalizations or placement in foster care. As opposed to a theory that postulated that

behavior was motivated by internal drives, Bowlby argued that his theory was biologically based.

According to Bowlby (1969, 1973, 1980, 1982), attachment refers to a significant emotional bond that infants develop with their caregivers during the first year to 18 months of life. It has further been defined as the social, psychological and affective relationship between a child and one or more specific persons with whom he or she interacts regularly; it is a mutual and reciprocal emotional connection between child and caregiver (Groza & Rosenberg, 1998). Schore (2000) states that attachment theory is a “regulatory theory” and defines attachment as “the interactive regulation of biological synchronicity between organisms.” It should be noted that an “attachment” is a specific style of relating with a limited number of individuals as opposed to a trait inherent in an individual. The infant begins with one attachment relationship with the primary caregiver, usually the mother (Morton & Browne, 1998). As the child grows, a series of secondary relationships develop so that there may be a network of caregiving figures, each of whom has a unique attachment relationship with the child (Carlson, Sampson, & Sroufe, 2003).

Each attachment relationship develops through a series of repeated interactions between child and caregiver, in which the infant exhibits “attachment behaviors” to which the caretaker does or does not respond. Attachment behaviors are triggered especially during times of fatigue, fear, pain or illness, and by the caregiver being, or appearing to be, accessible (Bowlby, 1969). They are strategies that children develop in the relationship to gain proximity to and contact from the caregiver; they are a response that is activated when the child perceives him/herself to be in danger and in need of

protection (Crittenden, 1999). The function of attachment is to increase the infant's chances of survival (Bowlby, 1969). Attachment behaviors are learned (Bowlby 1969, 1973, 1980, 1982, 1988). The infant is born equipped with a repertoire of attachment proximity seeking behaviors, such as smiling, reaching, or crying, that attract the caregiver and are designed to assure protection when there is a risk of physical or psychological harm (Crittenden & Ainsworth, 1989). However, over a series of interactions with the caregiver, the child learns which of those behaviors are most effective in gaining a positive response from the caregiver and, thus, uses those behaviors more frequently.

According to attachment theory, infants are genetically predisposed to form attachments between 6 and 12 months of age (Niemann & Weiss, 2011). The infant seeks to explore and learn from his environment, while, at the same time, having a *secure base* in an attachment figure who can provide protection from danger, as well as nurturance. The infant alternates between exploration and seeking protection. The attachment relationship starts to form around the age of 6 months as the infant becomes able to move away from the caregiver on his/her own. Bowlby (1969) stated that the quality of the attachment between infant and caregiver was dependent upon the appropriateness and promptness of the caregiver's response to the proximity and contact seeking signals of the infant. Infants become securely attached to individuals who consistently and appropriately respond to their attachment behaviors/signals.

According to James (1994), the primary attachment figure must play three important roles for the child – protector, provider, and guide. The child must see the attachment figure as able to intervene when the child is in danger and keep him safe. The

attachment figure must be seen as able to provide the basic necessities for survival, both physical and emotional, such as adequate food and shelter as well as emotional regulation. The attachment figure must be seen as the individual who helps the child learn who he/she is, who the caregiver is, how the world works, and what relationships are like.

Over the course of development, attachment progresses from the level of observable interactions to internally represented conceptualizations about relationships. Bowlby (1969, 1973, 1980, 1982, 1988) and Ainsworth, Blehar, Waters, and Wall (1978) posited that the child's experiences with attachment figures form an internal working model of how the child views him/herself and the world that forms the basis for future relationships with others. He/she also forms an internal model for affect regulation. In a psychobiologically attuned relationship, the caregiver helps the child learn how to minimize negative affective states and maximize positive ones (Schore, 2000). As the child increasingly experiences a pattern of responses from primary caretakers, there becomes a sense that this is the way that the world operates. The child forms a view of self, a view of others, a view of what and who can be trusted, and a view of how best to get ones needs met for protection, basic necessities, and guidance.

Bowlby (1980), Ainsworth (1978) and Main (1981) classified these perspectives into three basic typologies – secure, anxious-avoidant, and anxious-resistant (ambivalent). Main and Weston (1981) added a fourth category – a disorganized/disoriented pattern of attachment. This internal working model becomes increasingly established as the child experiences the world. Eventually, information about people and interactions becomes filtered by this world view. Children who are raised in an environment that yields a particular internal working model may well carry that model

with them when moving to another environment or to another relationship. Ultimately it is posited, this internal representation is carried into adulthood and influences the way in which the adult approaches his or her own parenting role (Edens & Cavell, 1999; Perris & Anderson, 2000).

Children rely on these working models to develop strategies for getting their needs met. When faced with dangerous or neglectful situations, these behaviors become the best way to survive. The child of a responsive parent becomes secure. The child of an abusive parent becomes overly compliant. The child of a neglectful parent learns to become manipulative in finding someone else to meet his/her needs. The child of a distracted parent learns to become entertaining or insistent. Children who have experienced trauma have a disruption in their process of forming secure attachment relationships; they may have more difficulty organizing their attachment behavior around a caregiver or may develop pathological attachments to those who have harmed them (Herman, 1992; James, 1994).

The development of a secure attachment bond between adoptive parents and their maltreated child is complicated by the impact that these prior experiences have had on the child's view of relationships and development of attachment behaviors. Attachment theory offers an explanation for difficulties that older children may have adjusting to their adoptive families. If children had abusive, neglectful or traumatic experiences, attachment theory posits that these children internalize a model from prior caregiving relationships that taught them that caregivers cannot be relied upon for protection or to meet basic needs. The child would filter the adoptive parent's actions through the prior working model and interpret the adoptive parent's actions through an old lens,

preconsciously or consciously believing that the new parent is like the former one(s). Thus, the child placed for adoption after infancy may enter the adoptive family and behave as if he/she continues to reside in a dangerous environment that requires protection, and continue to use the same survival mechanisms that worked in the previous environment(s). The survival and self-protection mechanisms that served the child well in his/her previous settings are no longer effective, yet the internal working model is not easily changed (Hodges et al., 2005; Morton & Browne, 1998).

Many adoptive parents of older children report that they have difficulty gaining the children's trust and, despite their best efforts, the children cannot trust in the relationship or use the relationship with the adoptive parents as a source of safety and nurturance (Barth, Crea, John, Thoburn, & Quinton, 2005; Brodzinsky & Pinderhughes, 2002). Instead, the children try to remain in control of the relationships by being bossy, angry, rageful, aggressive and seductive – survival behaviors that have worked for them previously. In response, the adoptive parents may feel helpless and angry and conclude that they are not needed by the children and retreat from attempting to provide a nurturing environment but maintain the placements (Barth et al., 2005; O'Connor & Zeanah, 2003; Steele et al., 2003). In many instances, the children may continue to reside with the adoptive parents so that the adoptions do not legally disrupt or dissolve. However, there is little emotional connection or the emotional bond is a troubled one (Stovall & Dozier, 1998; Howe & Fearnley, 2003).

Attachment theory can also be used to examine the parental component of attachment between the adoptee and his/her adoptive parents. A key consideration in current attachment theory is that the caregiver's mental representation of relationships is

an important determining factor in the quality of interaction with the child and of the type of relationship that subsequently develops (Pederson, Gleason, Moran, & Bento, 1998). These authors cite a number of studies that have found evidence for a strong association between a parent's attachment representations and the infant-parent relationship. Studies of the association between adult attachment style and several aspects of parenthood (Mikulincer & Florian, 1998) revealed that attachment style moderated the impact of parenthood on mental health, flexibility, and coping strategies.

The security of the relationship between parent and child is seen to be strongly influenced by the way in which the parent themselves was parented (Cowan & Cohn, 1996). Applying this concept to adoption of older children, adoptive parents with a secure internal working model enter the parent-child relationship as more responsive to the needs of their children. If the parent has a secure attachment template, this leads to more positive outcomes for the child, which in turn strengthens their relationship and increases the likelihood of adoption success. On the other hand, if there is a mismatch between the adoptive parent working model and the adoptee working model, this increases the likelihood of negative adoption outcomes.

The concept of internal working models has received much attention in explaining the link between the quality of the parent-child relationship and later social development, personality development, cognitive development, and the incidence of behavior problems (Stams, Juffer, & vanIJzendoorn, 2002). Steelman, Assel, Swank, Smith and Landry (2002) found that early warm maternal responsiveness has a direct effect on the child's later social skills.

Although many efforts have been made to provide empirical support for attachment theory, a major difficulty has been operationalizing the concept of attachment and finding a method of assessing attachment that is both reliable and valid, particularly for older children. Studies seeking to assess attachment representations face several major challenges. The first is that there is no agreement among major theorists about the classifications of attachment. There are generally six different methods for determining the quality of attachment across the life cycle. These include 1) laboratory observation, 2) naturalistic observation, 3) narrative assessment, 4) play therapy techniques, 5) clinical interviews, and 6) self-report type measures (Fairchild-Kienlen, 2001). Ainsworth (1978), Marvin and Whelan (2003), Crittenden (1992) and O'Connor and Zenah (2003) each have their own classification systems for assessing attachment in children. Some children, who appear to be secure in one system, show as insecure or even disorganized in another (Crittenden, Claussen, & Kozłowska, 2007). A similar situation exists in measuring attachment representation in adults (Crittenden et al 2007). The Adult Attachment Interview (AAI) (Main & Goldwyn, 1998) and Hazan and Shaver's (1990) romantic attachment questionnaire are all forms of self-report rather than means of documenting observable behaviors. It is argued that the AAI "measures how well and how much attachment issues were discussed in the family as the person was growing up" – more a function of how one thinks about attachment vs. how one behaves (Karen, 1998, p. 368). Another major concern is that the instruments were not correlated with one another (Karen, 1998), which raises the question again of just what they are measuring. It has been argued that they measure two different domains – parent / child relationships

and peer relationships (Bartholomew & Shaver, 1998). The construct of attachment then would need to be more clearly explicated for it to be testable using quantitative measures.

While it is beyond the scope of this work to review all of the available measures and strategies, it should be noted that many of the measures used to directly assess attachment in the parent-child relationship with children over the age of 5 have been found to be lacking (Fairchild-Kienlen, 2001). There is also concern as to whether the construct of attachment is sufficiently explicit to be translated into a valid and reliable measure, or whether it might be viewed more as a heuristic construct. It may indeed be more appropriate to assess the parent-child relationship, rather than to seek to assess attachment directly.

Several studies using attachment theory to examine adoption outcome are of note. The first, a prospective longitudinal study (Hodges et al., 2005), studied changes in mental representations of attachment in 62 children placed for adoption from foster care at ages ranging from 4 years to 8 years 8 months (mean= 6 years). All had experienced prior abuse and neglect and multiple moves before adoptive placement. Interviews were conducted within 3 months of the adoptive placement for the older adoptees' group and then again at two 1-year intervals following the adoptive placement. This older-adopted sample was compared with a group of 48 children adopted in infancy. Mental representations of attachment were gathered through narrative assessments using a structured series of 13 story stems designed to elicit themes concerned with the relationship between parents and children, including those related to security of attachment. After being given the story stem, the children were instructed to "tell me and show me what happens next." The authors found that the maltreated children placed in

adoptive families were able to become more secure in their representations, but that the differences between the maltreated and the early adopted groups remained significant.

The older adopted children progressed but had not closed the gap. A striking finding was that

“ . . . over the two years studied, children made significant progress in terms of their underlying expectations and perceptions of family relationships *and* still displayed significant, lasting damage, representing continuing vulnerabilities for the child and potential difficulties for the parents. As new and more positive representations had begun to develop, it appeared that they did not automatically transform the already established negative representations. This . . . suggests that children develop new and more positive sets of mental representations *in competition* with the existing negative representations rather than the new replacing the old” (pp.114-115).

This study possessed much strength. First, it was a prospective longitudinal study versus a cross-sectional one, although the time studied was relatively short. It used a technique that has become increasingly recognized as having merit in assessing attachment with older children and is one of the few studies done specifically with older adopted children. Weaknesses of the study include the small sample size and limited range in ages at which children were placed for adoption. While the story stem completion method is becoming recognized, nearly all of the studies involving this technique have been conducted by the same primary authors – Steele and Hodges. In order for the merits of the method to be further validated, its use would need to be replicated by other unrelated researchers. Also, as the authors themselves point out, the emphasis in this study is solely on the child’s side of the equation and does not take into consideration what adoptive parents bring to the relationship.

This group of authors used the same sample to study another side of the attachment relationship – the link between the attachment representations of adoptive

parents and their later adopted children (Steele et al., 2003). Using the Adult Attachment Interview (AAI) (Main & Goldwyn, 1998), the attachment representations of adoptive mothers was assessed at three months after placement. These were compared with the children's attachment related responses to the story stem completions to determine whether there may be some early signs of influence of the mother's state of mind regarding attachment on the newly placed child's attachment representation. Specifically, the authors "wondered whether mothers who provide Adult Attachment Interviews rated as secure would convey that felt security to the child as compared to those mothers who provided narrative transcripts rated as insecure or unresolved with respect to past loss or trauma" (p. 190). The authors reported both quantitative and qualitative results. They found that the mothers' attachment representations accounted for 22% of the variance in the children's story stem completions. They also reported low to moderate correlations (range $r=-0.17, p<0.10$ – $r=.30, p<0.05$) between whether the adoptive mothers were rated as resolved ($n=50$) or unresolved ($n=11$) regarding past trauma, and themes in the children's story completions. In their qualitative findings, the authors shared portions of an AAI and child story stem completion for two pairs of parents and children – one for a parent rated as secure and one for the parent rated as insecure. The authors concluded that there were "strong and significant influences of maternal state of mind regarding attachment upon their adopted children's story completions" (187). In other words, maternal attachment was having an effect on child attachment.

A number of flaws are apparent in this study, as well. In addition to the small sample size, limited age range of the adopted children, and the questions remaining about the instruments used, there is concern about the low to moderate correlations found, the

manner in which they were interpreted, and the apparent equation of correlation with causation. The authors also used these findings to suggest that there might be a clinical use for the AAI as an assessment instrument for prospective adoptive parents. Given the limitations of the study, this could be problematic. The authors do raise an interesting possibility related to the likelihood that adopted children begin to organize their attachment strategies around their adoptive parents relatively early in the placement. They also speculate that children who have had multiple moves may develop different representations of caregiving, requiring more psychic energy to maintain and function, and perhaps explaining the findings from the earlier reported study that one model of caregiving does not replace another after a child is adopted. Later work based on this data set (Steele, Hodges, Kaniuk, & Steele, 2010) reports similar findings.

A third study involving attachment, conducted by Rushton, Dance, and Quinton (2000), also sought to examine placement outcome beyond disruption rates. This was a prospective study of the first year of placement of 61 children placed from foster care into adoptive homes during middle childhood. The authors assessed psychosocial functioning of the child and development of new family relationships via interviews with the parent. They also compared children for behavioral outcomes using a standardized instrument against a sample of children from the general population. The study was notable, first, for its finding that certain child related factors were not associated with placement stability. They included age at placement, sex and ethnicity, number of previous moves and form of abuse or neglect experienced. The finding of no association with age at placement was explained as more a reflection of a restricted range of placement age in the sample (5 to 9 years). The finding related to type of abuse/neglect

was explained as due to the fact that all of the children in the sample had experienced some form of abuse. A number of parental factors were also negative for predicting outcome. They included structural factors such as age, ethnicity, employment, social class, educational level and previous parenting experience. They did find that problems in warmth and sensitivity to the child were predictive of less stable placements. “The greater the degree of difficulty in maintaining a warm and sensitive approach to the child in the early weeks of placement, the greater the likelihood that the placement was classified as less stable after a year” (p. 64). The authors found that a complex interaction of factors related to the parent and the child was more apt to predict placement instability. They concluded that for the sample under study, poorer outcomes were more likely for those children who had histories of rejection, especially when this was combined with overactive distractible behavior and low levels of parental responsiveness in the early months of placement. The study confirmed the findings of others that “the major risks for placement were not the level of behavioral difficulties, per se, but rather the propensity of the child and family to develop a relationship within which these can be managed or controlled” (p. 68).

This study possessed multiple strengths of being prospective, longitudinal, and interview based, but the authors noted that there were no well-established methods for directly measuring attachment beyond infancy and in non-birth families. In order to assess attachment, they developed a 53-item questionnaire based on developmental literature suggesting that children with attachment difficulties exhibited a limited range of emotions, showing mostly anger or sadness, or expressing other emotions in a mimicking or superficial manner (Rushton, Mayes, Dance, & Quinton, 2003). The questionnaire

sought to capture information on the children's ability to express positive and negative feelings, their social behavior, their ability to give and accept comfort from their parents, and their capacity for trusting and caring. No other studies could be located that used this same questionnaire to assess attachment so its generalizability to other studies could not be assessed. However, it should be noted that the questionnaire was based on an extensive review of developmental literature and was able to discriminate between sample children and a comparison group of children recruited from the general population.

Dance and Rushton's (2005) follow up longitudinal study of 99 public child welfare children placed for adoption during middle childhood in Great Britain, found that the children's degree of attachment to the adoptive mothers predicted adoption outcome three years post placement. Here the degree of attachment was assessed using the parents' self-reports of the levels of attachment. It also looked only at the children's perceived attachment to the parents and did not examine the parents' attachment styles or their perceived levels of attachment to the children.

While not focusing on adoptive families, an important study using an attachment framework with foster caregivers is also noteworthy to mention, because it provides additional support for the role parental factors play in placement outcomes. Dozier, Stovall, Albus, and Bates (2001) studied the concordance between foster mothers' attachment state of mind (studied using the Adult Attachment Interview) and foster infants' attachment quality (studied using the Strange Situation Procedure) for 50 foster mother-infant dyads. The children were assessed at between 12 and 24 months of age, three months after placement. These authors found a 72% match between the attachment

classifications of the foster mothers and their foster children versus a 52% match expected on the basis of chance alone. They report that this is similar to the level of concordance found among biologically related dyads. This study gives further support for the notion that success in created families, whether through foster care or adoption, is dependent as much on the parent as the child.

Stovall and Dozier (1998; 2000) found that infants placed in foster care began to show signs of attaching to their foster mothers relatively early in the placement. In their study of ten foster infants, Stovall and Dozier (2000) found that attachment behaviors with the foster mother began to emerge within two months of placement. One key factor was age at placement; foster children placed before 12 months of age were more likely to display more secure attachment strategies. In addition, regardless of the child's age at placement, children whose foster parents had a secure attachment representation were more likely to be securely attached.

Hodges and Tizard (1989) studied children who had spent their early years in an institution, and found they were capable of developing strong attachments with adoptive parents despite having been deprived of close and lasting attachments as infants. Interestingly, this study compared institutionalized children who were later adopted with institutionalized children who were later reunified with their birth families, and then both groups were assessed against a comparison group of never institutionalized children raised in their birth families. Adopted children were rated as being more closely attached to their adoptive parents than were children reunified with their birth parents, considered to be closely attached to the parent with whom the child had been reunified. Tizard and Hodges concluded that it was not enough for the institutionalized child to be placed in a

family, but the family had to be one in which the adults involved work to nurture attachments and, in essence, “make up” for earlier deprivation. Of course this process is much easier for those parents who have a secure attachment working model.

The results of the studies cited above provide marked contrast to other studies that have shown limited change in attachment strategies for children placed for adoption at an older age when the adoptions were intercountry adoptions and the children had had an experience of being institutionalized. For example, Rutter and colleagues (2007) found that children who had been institutionalized continued to display disinhibited attachment over a period of years. Vorria and colleagues (2006) studied 61 adopted children at age 4, who had spent the first two years of their lives in institutions, and compared them with 39 children, who had been raised by their birth parents without interruption. This study similarly found that early institutionalization had long lasting effects on important aspects of development including the child’s security of attachment.

More recent studies are adding to our understanding of how attachment patterns may change for children adopted at an older age or children who have experienced more severe instances of trauma or deprivation. Pace, Zavattini and D’Alessio (2012) studied 28 Italian children who were between the ages and 4 and 7 when placed in their adoptive families. Five of these children had been born in Italy, while the remaining 23 were adopted from other countries. All had experienced prolonged periods of institutionalization prior to their adoptive placements. The authors found that the attachment patterns of many of the children had changed from insecure to secure ($p=.002$) 6 to 8 months after placement in their adoptive families, and that the adoptive mothers of the children whose attachment patterns changed had predominantly secure-

attachment ($p=.047$). Of particular note was that for these children, a secure attachment representation did not replace the insecure one; rather, while the adopted children achieved a secure representation with their new parents, this pattern coexisted with older insecure representations. Further, they found that it was the older insecure representation that was triggered at stressful points in the relationship. This is consistent with Groze's (1996) finding that while a child with a prior history of maltreatment may be able to form an attachment with his new adoptive parents, the child's patterns of interpersonal functioning that were based on a prior working model may persist for many years.

Neimann and Weiss (2011) found that a sample of children adopted internationally at a mean age of 13 months were able to form a secure attachment with their adoptive mothers at 6 months post placement. However, the development of a secure relationship was likely to take longer for children who had experienced more severe abuse or neglect. This was a pilot study with a relatively small sample size. Using the Attachment Q-Set (AQS), considered to be one of two "gold standard" methods with infants, to assess attachment between infants and adoptive mothers in a convenience sample of 22 infant-mother dyads, these researchers distinguished between those children who had formed a secure relationship with their adoptive parents and those for whom development of the secure relationship was still in process. They reported that these children were in the process of *becoming* attached. While this study's sample is relatively small, and deals with internationally adopted infants, its findings raise the question of whether a similar process may occur with children adopted from the public child welfare system. Extrapolating these findings to children adopted from the child welfare system at an older age with a more extensive experience of maltreatment, the development of

attachment between child and the new parent may take even longer and look different from other more typical parent-child relationships.

Attachment theory illustrates the importance of developing a positive parent-child relationship. It is within the context of this strong relationship that healing occurs (Cook, 2000). It is within the context of this relationship that children can develop new ways to evaluate relationships. Thus, the development of a strong, positive parent-child relationship will be considered a key indicator of successful outcome. It may be a foundation on which other aspects of child development are based (Boris, Fueyo, & Zeanah, 1997).

While attachment theory provides some explanation of how this relationship is developed, it does not fully explain what factors contribute to its development, nor does it fully explain how those factors relate to one another. For that, we must turn to ecological systems and bioecological theories.

Ecological Systems

The ecological-transactional developmental model (Cicchetti & Lynch 1993) can be used to examine how adoption functions as an intervention for maltreated children; to determine what factors have the greatest effect on improved outcomes for maltreated children who are subsequently adopted; and, to determine *how* the various factors contribute to or inhibit the development of improved outcomes. This is consistent with the most recent focus of adoption research, which moves beyond comparative outcomes for children who have and have not been adopted to a focus on the processes through which recovery from adversity occurs (Palacios & Brodzinsky, 2010). Recent studies have begun to consider how the ecological context of children affects the outcomes

resulting from the experiences of maltreatment (Gephart, 1997; Zielinski & Bradshaw, 2006). While numerous studies (Cicchetti & Lynch, 1995; Cicchetti & Toth, 1995; Finkelhor & Kendall-Tackett, 1997; DeBellis, 2001) have established a link between experiencing maltreatment in childhood with increased risk of impaired developmental outcomes, studies also show that the experience of maltreatment does not automatically lead to impaired development. In fact, there is a wide range of developmental outcomes among maltreated children (Zielinski & Bradshaw, 2006) and the different outcomes are affected by many aspects of the child's ecological environment. This includes the parent/caregivers and the social/community environment (Banyard, 2003; Gabarino, 1985; Korbin, 2003).

According to the ecological-transactional perspective, growth and development of the individual is multiply determined and occurs as a result of the interactions within and between the various levels of the ecological system—the child, the family/caregiver, and the social environment (Cicchetti & Toth, 2000). Drawing on Bronfenbrenner's ecological systems theory (Bronfenbrenner, 1951; 1971; 1992; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 1998) and Belsky's (1980) ecological approach to the etiology of child maltreatment, Cicchetti has studied extensively the range of developmental outcomes for maltreated children and argues that one must understand the processes and mechanisms that contribute to the range of outcomes in order to understand how various outcomes occur. This understanding is also necessary to develop effective interventions that alter or mitigate the effects of these outcomes.

Bronfenbrenner's early works (1951, 1979) gave greater emphasis to the role of the environment in shaping development (1992), but he later acknowledged that this way of

thinking was too limiting. Later in his career, Bronfenbrenner modified his ecological systems paradigm (Bronfenbrenner, 1992; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 1998). He argued that this move was necessary, because it seeks not to answer the question, *how much* of the variance in behavior is attributable to heredity and *how much* to environment but rather, *how?* (Bronfenbrenner & Ceci, 1994). How do characteristics of the individual interact with the environment to produce specific behaviors and behavioral differences among individuals? Bronfenbrenner and Ceci (1994) predict that the context of the environment will moderate the nature of the interactive processes that occur between individuals. Bronfenbrenner asserts that his model is empirically testable and that it extends and redefines several aspects of ecological systems theory as well as key aspects of biogenetics.

One of the key principles of the ecological systems model is bidirectionality. Bronfenbrenner and Ceci (1994) assert that from the beginning, the developing organism interacts with its environment and that both the individual and the environment are changed (transformed) by that interaction. They also assert that human potential is realized through a bidirectional process that occurs over time. Individuals are seen not as merely passive recipients of the actions or inactions of persons and systems in their environment, but also as having the power to affect and change those persons and systems, as well (Bronfenbrenner, 1979). Thus, maltreated children will not experience a singular result as a consequence of having been abused or neglected. The outcome of the maltreatment will be impacted by the way in which the individual also impacts the systems (family) in his or her environment.

Applying this model to adoption as an intervention, the process of building a family that is able to meet the child's needs for optimal growth and development would be seen as series of reciprocal interactions between the child, his/her adoptive family and the individuals within it, as well as multiple interactions at the meso, exo, and macro levels. Therefore, it would not be only the child's characteristics that have to be examined in determining how the child might be healed in his adoptive family, it would include the characteristics of the adoptive parent, e.g., microsystems such as the adoptive family system, mesosystems such as the amount and nature of contact between bio and adoptive families or between the adoptive family and their social network, and exosystems such as the availability of post adoption services for the family (Schweiger & O'Brien, 2005).

According to Bronfenbrenner (1972), families serve as the closest and most direct influences on children's development, followed by peers, their school, and their community, which are increasingly distant and less influential. Families are also significant in that they moderate the influence on the child of the more distal systems. Thus, studying and matching the child with a family that best meets the child's needs would be paramount in assuring optimal developmental outcomes for that child. When placing a maltreated child, especially an older one, for adoption, one would first recognize that by changing families the child is also changing microsystems and through them all of his/her interactions with the rest of the environment. Because the caregiving process in the family is the closest to the child, this would be expected to have a greater impact on the child's development than processes that are located further away such as in other microsystems or the meso or macrosystems. Secondly, one would strive for goodness-of-fit between the needs of the child and the adoptive family to assure that they

ultimately form a family system capable of supporting optimal growth and development for the child *and* for the family. The family must feel that the adoption is meeting its needs as well.

Ecological systems theory has been applied to child welfare adoption (Schweiger & O'Brien, 2005) as a way of understanding the complex relationships and intervention needs of children adopted through the public child welfare system. This lens can be used to understand the multiple levels of influence on the level of functioning and development of the adopted child and the adoptive family. The concept of goodness-of-fit has often been used in matching child welfare children to potential adoptive families (Rycus & Hughes, 1998; Schweiger & O'Brien, 2005). "Simply defined, goodness of fit results when the child's capacities, motivations and temperament are adequate to master the demands, expectations and opportunities of the environment" (Chess & Thomas, 1989, p. 380 as cited in Gallagher, 2002, p. 627). Goodness of fit does not suggest that stress and conflict are absent. Indeed, growth and development can be facilitated by gentle challenges or stresses from the environment when the individual has the capacity to demonstrate mastery and overcome the challenges presented. A good fit would be present when the environmental expectations and demands do not overwhelm the capacities of the individual at a particular stage of development (Chess & Thomas, 1991). This concept can also be applied to the adoptive family. Whereas a particular child may not be a good match for one family, he or she may thrive in another.

A full exploration of Bronfenbrenner's model would involve exploring all levels of the environment from individual through exosystem. Such exploration is beyond the scope of this study. Instead, this study will focus on one piece of the model – the

interaction between the adopted child and the microsystem of his/her adoptive family. In determining how adoption acts as an intervention, it is necessary to examine the way in which successful outcome is defined and from various points of view (the adoptive parent and the adoptee). Once that is done, one would need to examine the characteristics of the child, the processes by which the family operates, structural characteristics of the family, and how these factors impact each other to create an adoption that is successful.

Adoption Outcomes

As articulated in the earlier discussion of attachment, one indicator of adoption success that will be used in this study is the development of a strong positive parent-child relationship. This will be used as a proxy for attachment, and examined from both the adoptive parent and adopted child's points of view. It is especially important to include the child's perception of the quality of the parent-child relationship because attachment is in fact a reciprocal process. Both the parent and the child must feel a connection to each other.

The second indicator of adoption success draws upon the discussion of ecological systems theory and the concept of goodness of fit between the needs of the family and those of the adopted child. Parental satisfaction with adoption is one way of determining the adoptive parents' belief that the adoption is meeting their needs. This construct has been used in numerous studies as an indicator of adoption outcome (Groothues, Beckett, & O'Connor, 2001; Kuhl, 1985; Nalavany, Glidden, & Ryan, 2009; Smith-McKeever, 2006; Rushton, Dance, & Quinton, 2000; Thoburn, 1990).

Child Factors

A number of child related factors have been studied in relation to adoption outcomes. When the child enters the adoptive family, he/she is unbalancing the entire family system, which must reconfigure itself around the child's needs, characteristics, and behaviors. Thus, it is important to consider key child related factors that may impact the family's ability to regain its equilibrium in such a way that it can effectively function as a new family system—the adoptive family.

Placement age.

The child's age at placement has been consistently shown to be an important factor related to outcome. The older the child at placement, the greater the likelihood of poor adoption outcomes (Howe, 1997; 2001; Levy-Shiff, 2001; Dance & Rushton, 2005). Age at placement can be viewed through several different perspectives. One is that when placed at a later age, it may be more difficult for the child to develop a secure attachment relationship with the new adoptive parent(s) because the formation of the new relationship is complicated by earlier relationship experiences. The child brings his or her own internal working model into the relationship that will impact how he or she views relationships in the new adoptive family. In addition, older placed children often have pre-adoption experiences marked by trauma, abuse, neglect, and dependency, and have developed coping strategies as well as survivor behaviors (also known as problem behaviors) that make it more difficult for them to adjust to their new families (Groza, Ryan, & Cash, 2003; Howe, 2001). Also, an older age at placement usually means that it will take a longer time to build the relationship (Ji, Brooks, Barth, & Kim, 2010). Adoptive parents must approach building the relationship in a way that is congruent with

the child's age and level of development. The proximity seeking behaviors exhibited by an infant may look substantially different from those of an 11 year old, and the parent must know what types of relationship building behaviors are appropriate for each of the children. It is posited that an older age at placement will result in less positive adoption outcomes.

Child behavior.

A number of studies (Rosenthal et al, 1998; Partridge, Hornby, & McDonald, 1986; Boneh, 1984; Urban Systems, 1985; Dance & Rushton, 2005; Reid et al., 1987) provide evidence that children with emotional or behavioral problems at the time of placement are less likely to be successful in adoptive families. This is especially true when externalizing behavior problems such as aggression and delinquency are present (Barth & Berry 1991; Urban Systems 1985; Partridge et al., 1986; Smith & Howard 1991; 1994; Howard, Smith, Ryan 2004). Children adopted from the public child welfare system are described as coming from more problematic families and displaying more challenging behaviors (Brodzinsky & Pinderhughes, 2002) than children who were voluntarily relinquished for adoption as infants. They are more likely to be diagnosed with various forms of mental health problems, display higher levels of internalizing and externalizing behaviors, and have greater difficulties with academic and social adjustment (Berry & Barth, 1989; Brand & Brinich, 1999; Erich & Leung, 2002; Ingersoll, 1997; Simmel, Barth, & Brooks, 2007; Taussig, 2002; Wierzbicki, 1993). Those who have experienced multiple placement moves prior to being placed for adoption are also more likely to display higher levels of problem behaviors (Unrau, Seita, & Putney, 2008).

Children may constantly test their parents by acting out in a way that seeks to determine if this set of parents will harm, reject or abandon them like previous parents have done (Brodzinsky & Pinderhughes, 2002). Families report that they often become overwhelmed and exhausted trying to manage these behaviors and seek out multiple forms of post adoption support (Reilly & Platz, 2004; Shapiro & Shapiro, 2006).

While children adopted at an older age are seen as having increased level of problem behaviors, studies of children adopted in infancy indicate adoptees exhibit higher levels of problem behaviors than do children who are not adopted (Ingersoll, 1997; Keys, Sharma, Elkins, Iacono, & McGue, 2008; Nickman et al., 2005). Thus, it is important to determine how the child's level of problem behaviors contributes to a successful adoption outcome, independent of age at placement. Based on the literature, it would be expected that a greater number of child behavior problems will be associated with a less positive parent-child relationship and a lower level of parental satisfaction.

Maltreatment history.

Children adopted from the public child welfare system bring with them a history of maltreatment that can include *in utero* exposure to pathogenic substances, such as alcohol and other drugs, direct experience of abuse or neglect, witnessing domestic or community violence, the experience of multiple moves, and disrupted attachments. Multiple studies document the negative effect of these experiences on adoption outcomes. For example, the child's experience of prior emotional or sexual abuse (Partridge et al, 1986; Smith & Howard, 1991; Dance & Rushton, 2005; Groza & Ryan 2002) is associated with greater risk of negative outcomes as is the child's experience of prior adoption disruption (Barth & Berry, 1988; Barth et al., 1988; Boyne et al., 1984).

Increasingly, however, attention is being paid to the effects of the severity, frequency, nature, pattern of harm experienced, and effect of cumulative exposure to multiple forms of maltreatment (Turner, Finkelhor, & Ormrod, 2006). These experiences are labeled as complex or developmental trauma (Becker-Weidman, 2009), and using this as a lens through which to further understand how the child's earlier experiences impact his/ her ability to enter into a strong parent-child relationship.

Complex trauma is defined as “the dual problem of children's exposure to traumatic events, and the impact of this exposure on immediate and long-term outcomes” (Cook, Blaustein, Spinazzola, & Van der Kolk, 2003, p. 5). The clinical formulation of complex trauma describes seven domains of possible impairment as a result of the trauma exposure, including 1) attachment problems, 2) biological changes, 3) difficulty with affect regulation, 4) dissociation, 5) behavioral control problems, 6) distorted cognitions, and 7) poor self-concept. Perry and colleagues (1995) estimate that at least half of all children exposed to maltreatment may be expected to develop significant trauma symptomatology, including behaviors related to hyper-arousal and dissociative states. The family is seen as playing a crucial role in determining how the child adapts to trauma. For the child for whom the biological family was responsible for the trauma, it may be much harder to view a new family as a source of support and healing. When considering maltreatment history, it is important to assess not only whether a child has experienced a particular type of maltreatment, but whether he/she experienced multiple types of maltreatment, as well as the nature, extent and severity of the maltreatment to determine whether the child is bringing an internal working model of complex trauma

into the parent-child relationship. The literature suggests that a more extensive history of maltreatment will be associated with poorer adoption outcomes.

Child stress.

While parenting stress is often examined in adoption studies (see following section), less attention has been paid to the child's level of stress. As stated in the preceding section, children who have experienced complex trauma may exhibit symptoms of hyperarousal associated with traumatic stress. These include hypervigilance, exaggerated startle response, and restlessness (Van der Kolk & McFarlane, 1996); stress is often manifested biochemically through increased levels of basal cortisol (Perry et al. 1996). Studies of attachment in foster care and adoption are beginning to investigate the relationship between the child's stress level and attachment behavior. The preliminary findings are that children with increased levels of stress are more likely to have difficulty forming a secure parent-child relationship (Dozier et al., 2006; Neimann & Weiss, 2012). They also suggest that children who have experienced early attachment disruption, loss, and trauma, develop distinctive patterns of vulnerability that may reoccur at times of stress and developmental transition (Shapiro & Shapiro, 2006). It is hypothesized that a higher level of the child's stress will negatively impact the achievement of successful adoption outcomes.

Child's current age.

Studies show that regardless of age at placement, adopted adolescents are at the highest risk for negative adoption outcomes. In a review of 12 studies of adoption disruption rates conducted between 1975 and 2005, Coakley and Berrick (2008) found

that the age of the child was a significant predictor of disruption in 8 of the 12. The most difficult period is adolescence.

Developmental theory related to typically developing children articulates the numerous developmental and contextual changes that occur in adolescence, and the concomitant changes in parenting strategies that are required as parents adjust to their child's new status. During adolescence, children mature physically and parents may begin to expect their children's behavior to mature as well. As adolescents mature cognitively, they may increasingly begin to question parental rules and limits, and engage more frequently in debates and confrontive interactions over parental authority and jurisdiction. Adolescents' self-perceptions may change and they may engage in more open expressions of affect. They also experience numerous contextual changes related to peer and school relationships. As these changes progress, parents are called upon to change their expectations and parenting strategies so as to maintain equilibrium in the parent-child relationship. The developmental task associated with this stage of development is separation and identity development. While parent-child conflict may be seen as a typical part of this stage of development, serious relationship breaks are seen in less than 10% of all families (Holmbeck, Paikoff, & Brooks-Gunn, 2002).

There are a number of factors that may make adolescence a more difficult developmental period to negotiate in adoptive families. There may be a substantial difference between the chronological and developmental ages of some adoptees. Becker-Weidman (2009) found a discrepancy of 5.5 years between the chronological and developmental ages of a group of 57 adoptees. While the average chronological age of the children studied was much younger (9.9 years), one might speculate how this

discrepancy might impact the parent-child relationship. The parent may expect the child to “act his/her age” chronologically, when developmentally, he/she is functioning at a much lower level. Coupled with the finding that parents begin to attribute intentionality to their children’s behavior as they mature (Goodnow & Collins, 1990), parents may become increasingly frustrated when their children do not perform according to their age-based expectations. At a time when most adolescents are poised to be separating from their families, adoptees may still be in the process of forming an attachment. The parent-child relationship may not be as strongly formed, so that it cannot contain the increased arguing that may be typical of this stage. Recent studies confirm that the level of parent-child conflict is higher for adopted teens and their parents than for their nonadopted peers (Kreibel & Wentzel, 2011). This study will seek to test the hypothesis that the current age of the child will impact the development of the parent-child relationship, and parental satisfaction with the adoption. The older the age of the child, the less positive will be the adoption outcomes.

Summary of child factors.

Based on a review of the adoption literature, there are a number of child related factors that appear to impact the ability of adoption to serve as an intervention for children adopted from the public child welfare system. These include the child’s current age, the age at placement in the adoptive home, behavior, history of maltreatment, and level of stress. This study will propose to examine the hypotheses that child factors will contribute significantly to adoption outcome and specifically that adoption outcomes will be less positive when the child (a) is older at the time of the study, (b) was placed at an

older age, (c) has more behavior problems, (d) endured a more severe maltreatment history and (e) is currently experiencing a higher level of stress.

Research into adoption outcomes consistently finds that child factors contribute the most significant amount of the variance into indicators of success (Barth et al., 1988; Brodzinsky, 1993; Festinger, 2002; Groze, 1996; Kadushin, 1967; Rosenthal, Schmidt, & Conner, 1988; Rosenthal, 1993; Rushton, Dance, & Quinton, 2000; Dance & Rushton, 2005). However, both attachment and ecological systems theories postulate that family process and structural factors will also have an impact.

Family factors

Two types of family factors have been found to have an important impact on adoption outcome: family process factors and family structural factors. Process factors are dynamic and interactional, activities of the family whereas structural factors are more static trait-based factors. Bronfenbrenner speaks to the importance of determining *how* outcomes occur rather than *what* outcomes occur. Belsky (1984) applied this concept to a model for parenting and identified parenting processes that contributed to child growth and development. Family process variables are consistently more important to the development of strong family relationships and the psychological well-being of family members (Hartman & Laird, 1983; Landsford, Ceballo, Abbey, & Stewart, 2001; Phillips, 2012; Stroh, Becvar & Becvar, 2000). Adoption research is following suit and focusing more frequently on “the underlying processes and factors operating in adopted persons and/or in adoptive families...the primary goal now is to clarify the bases for individual differences in the adjustment of adopted individuals” (Palacios & Brodzinsky, 2010, p. 275).

Despite the importance of process factors, it is also apparent that the practice community still strongly considers structural factors in recruiting and selecting adoptive families and in matching a family with a particular youngster (Barth & Brooks, 1997; Crea, Griffin, & Barth, 2011). While the ecological systems perspective places the greatest emphasis on processes, the reality of finding adoptive families for children in the public child welfare system requires that the families' structural characteristics be studied, as well. Family structure can be conceptualized as an organizational framework that determines who is a member of the family, and the functions and hierarchical positions of the various family members. It can include factors such as total family size, marital status of adults in the household, functions of birth order in a family system, and degree to which extended family members and fictive kin are accorded full family membership status (Burnett & Farkas, 2009; Emisch & Francesconi, 2001; Genetian, 2005; Shaff, Wolfinger, Kowalski-Jones, & Smith, 2008; M. Shriner, Mullis, & B. Shriner, 2010). The research suggests that both family process and family structure make important contributions to adoption outcome. Therefore both key process and structural family factors will be reviewed.

Family process factors.

Adoptive parent stress.

Another key variable that impacts upon the quality of the parent-child relationship is parenting stress (Abidin, 1983). High parental stress has been associated with problematic attachment in adopted children (McKay, Pickens, & Stewart, 1996; Teti, Nakagawa, Das, & Wirth, 1991; Weinfield, Whaley, & Egeland, 2004). Adoptive parents may be expected to experience increased stress in a number of ways. First, there

is the normative stress of becoming a new parent or of adding an additional child or children to the family. There may also be increased stress due to challenging behavior on the part of the child. Stress may occur because the placement may resurrect feelings related to prior losses (e.g., infertility). All of these sources of increased stress may impact upon the parent's ability to perceive and respond to the child's attachment signals.

Studies also show that increased levels of stress can impact the types of parenting strategies used. In a study of foster parents (Lipscombe et al., 2004), the quality of parenting exhibited by these caregivers was influenced by the level of stress they were experiencing, with higher levels of stress leading to poorer parenting strategies used with the children in their care. Finally, increased levels of stress have been associated with lower levels of parental satisfaction with the adoption (Mainemer et al., 1998; Hoksbergen et al., 2004; Rijk et al., 2006).

Family functioning style.

While the factors described to date all present risks to positive adoption outcomes, the remaining two family process factors are considered to be protective factors. That is, they constitute family strengths that are associated with more positive adoption outcomes. The majority of adoptions are, in fact, considered to be successful, so we might ask, *how do families do it?* It leads us to seek to understand how a family can manage the multiple demands or situations that come about as a result of parenting a child adopted from the public child welfare system. Sawin and Harrigan (1994) and Trivette and Dunst (1990) speak of a "family style." A family's style is defined as "the family's strengths, capabilities, or uniqueness in coping with life events and promoting growth" (Sawin & Harrigan, 1994, p. 20). It is not a set of isolated variables but refers instead to the

presence and interrelationship of a number of variables that “form clusters and constellations which are dynamic, fluid, interrelated, and interacting” (Trivette & Dunst, 1990, p. 3). Family functioning style is not static; it develops over a span of time after placement.

Bronfenbrenner (1988) asserts that one of the two conditions essential for a child to develop normally is to have the “enduring, irrational involvement of one or more adults in care of and in joint activity with that child” (p. 262). In short, the child must have a family and that family must be able to function in such a way as to meet the child’s needs. Family functioning style has long been a way of discussing adoptive families, yet the ways in which the family’s functioning was characterized and measured have differed greatly. An early study of adoptive families (Lawder et al., 1969) using a series of follow-up interviews with adoptive families post placement, sought to present information about how family functioning develops over a time span after placement. This is consistent with ecological systems theory that argues that proximal processes must occur over a sufficient period of time to allow for the family system to impact the growth and development of the child. Some of the most notable characteristics included (a) strong bonds of family unity and identity, (b) parents who were very enthusiastic about the adoption and characterized as warm, (c) accepting of their children, and (d) having a strong sense of entitlement. Groze (1996) also identified characteristics of strong families, which included (a) flexibility in expectations, (b) flexibility in family functioning, and (c) positive, consistent support for the adoption. He also found that, over time, families became more flexible and close than would be expected of biological families at the same point in their life cycle. These conclusions have continued to be

supported by current research. McGuinness and Pallansch (2000) found cohesiveness and expressiveness to be associated with better child outcomes. A stronger family functioning style is predicted to be associated with more positive adoption outcomes.

Communicative openness.

Communicative openness is the family's ability to have open and honest conversations about adoption. It provides for the exchange of adoption related information, as well as supports the expression of emotions related to adoption (Brodzinsky, 2006). It is based on the work of Kirk (1964), who spoke of the inherent balancing act that adoptive parents must perform between acknowledging, but not overemphasizing, the impact of adoption on the family system and its members. Kirk wrote of the negative impact of adoptive families who collude in secrecy and denial about adoption being key to their family's formation, on the one hand, and on the other hand, families who insist that the sole lens for viewing the family and its interactions is through adoption – families who “deny the difference” and families who “insist on the difference.” He argued instead for the open and nonjudgmental communication.

Brodzinsky (2005; 2006) has developed this concept further and identifies three levels in which communicative openness takes place: intrapersonal, within the individual to explore his or her feelings about adoption; intrafamilial, among members of the birth family or among members of the adoptive family; and finally, interfamilial, between members of the birth and adoptive families. Brodzinsky separated the concept of communicative openness from that of post-placement contact between birth and adoptive family members (structural openness), and argued that it was communicative openness

that most strongly contributed to successful adoption outcomes. This proposition has been explored by a number of studies with somewhat mixed results.

Brodzinsky's original study (2006) in this regard examined 73 adopted children and their families. These children were placed within the first 18 months of life (mean age 3.8 months). He reports that 25% of the children were adopted from overseas and it appears that the remaining 75% of the children were adopted domestically from private adoption agencies. The researcher developed two scales to measure the key predictor variables: a 20-item true-false parent report of structural openness, and a 14-item child report communication openness scale. Two measures of child adjustment were used as the outcome variables: the child report Self-Perception Profile for Children (Harter, 1985) and the parent report of the Child Behavior Checklist (Achenbach, 1991). Brodzinsky found only a modest association between structural and communication openness but that communication openness was more strongly associated with both measures of child adjustment. He also found that structural openness did not predict the child's adjustment independently of communication openness. He argued that agencies must not encourage solely structural openness but encourage communicative openness as well.

Other studies have examined communicative openness. In a study in the U.K., Hawkins, Beckett, Rutter, et al., (2007) used a sample of 162 adoptees (a significant portion of who were adopted from Romania) and their parents to measure communicative openness and thoughts about contact. Data were collected through parent and child interviews. Interviews were conducted when the children were aged 11 and then again at age 15. The researchers found that at the younger age, more of the children reported being interested in contact with their birth families than they were at age 15. They also

found that at age 15, children were more than twice as likely to report difficulty talking about adoption than their parents realized. In other words, the parents felt that there were higher levels of communication openness in the family than did the children.

Jones and Hackett (2007) used a small sample of ten families for an exploratory qualitative study to gain a greater understanding of communicative openness as part of a larger attempt to understand adoptive family life. Also conducted in the U.K., these families were all private domestic adoptions of infants. In interviews with ten adoptive mothers and ten adoptive fathers, researchers used open ended questions to ask the parents to tell them about adoptive family life. The parents shared their perspectives on the importance of communicative openness but also on its complexity and the sensitivity of the issues involved. Topics such as the adoptive parents' infertility, the child's history of trauma, birth parents' alcohol dependence, and the existence of siblings placed with other families were cited as ones which, while difficult to address, contributed to the building of a shared narrative and shared family values. They concluded that there is no one way to discuss adoption and that the nature and extent of the communication may change as the child matures or the family situation changes. These researchers concluded that the most important factor for these families was not the level of structural openness, per se, but the family's satisfaction with that level and its ability to express and explore feelings in that regard. Unlike previous studies, this study examined communicative openness only from the perspective of the adoptive parents.

A longitudinal study by Von Korff and Grotevant (2011) examined communicative openness, which they termed "family conversation, and its mediating role in adoptive identity formation." Their sample consisted of 184 adoptive families of

children adopted at infancy. Families were studied during the child's adolescence and then again at emerging adulthood (M=15.68 years and 24.95 years). These researchers found a strong association between structural and communicative openness, and that the effects of structural openness were mediated by communicative openness.

Neil (2009) sought to compare the effects of communicative and structural openness in a sample of families of 163 children adopted at age 4 or under (mean placement age- 22 months) from private adoptive agencies in the U.K. The author sought to determine the effects of both types of openness on child behavior as measured by the CBCL (Achenbach, 1991). Data were collected from adoptive parent interviews and ratings of both communicative and structural openness were developed. These researchers found that there was a strong association between structural and communicative openness, but that neither of these were associated with CBCL scores. They concluded that two possible flaws with the study were a reliance on parent report rather than child report on the level of communicative openness, and selection of the CBCL as the outcome variable.

Finally, two studies found that communicative openness was positively associated with adoption identity development (LeMare & Audet, 2011) and adoption information seeking for emerging adult adoptees (Skinner-Drawz, Wrobel, Grotevant, & von Korff, 2011). Although none of these studies examined communication openness in child welfare adoptions, their findings suggest that communicative openness, especially when measured from the child's perspective, will be associated with more positive adoption outcomes.

Family structural factors.

Structural openness. To what extent are members of the birth family considered to be part of the adoptive family? The literature speaks of a continuum of post adoption contact among the adoptee, the adoptive family and birth family members, ranging from the exchange of cards and letters through an intermediary to ongoing face-to-face contact. The practice of structural openness emerged from the practice of private infant adoptions in an attempt to combat the secrecy, shame and denial that were a historical part of adoption. It was also propelled by the insistence of birth parents to have knowledge about the children for whom they had made a voluntary adoption plan. A recent report (Siegel & Smith, 2012) summarizes major research findings related to structural openness. Key among them is that structural openness is the most commonly practiced approach in private infant adoptions in the U.S. While private agencies appear to embrace this practice, it is less often practiced with adoptions from the public child welfare system (Brown, Ryan, & Pushkal, 2007; Crea & Barth, 2009; Ryan, Harris, Brown, Houston, Smith, & Howard, 2011).

Some studies have sought to determine the impact of structural openness on the adoptive parents. These studies (Grotevant, McRoy, Elde, & Fravel, 1994; Grotevant, Wrobel, von Korff, Skinner, Newell, Friese, & McRoy, 2007) found that while openness arrangements change over time, greater contact between the adoptive and birth families resulted in higher levels of empathy and affect toward the birth family, and a stronger sense of permanence with their children among adoptive parents. Ge, Natsuaki, Martin, et al., (2008) and Hollenstein, Leve, Scaramella, Milfort, and Neiderhiser (2003) found

that greater levels of structural openness resulted in increased levels of parental satisfaction with the adoption.

Other studies examined child outcomes. Sullivan and Lathrop (2004) found that adoptees who were already doing well found structural openness to be helpful, whereas it could interfere with placement stability with those who were already struggling in their adoptive families. These authors argued for flexibility in determining when and how structural openness would (or would not) be in the child's best interest. Haugaard, West, and Moed (2000) also found mixed results. For some adoptees, increased contact resulted in increased curiosity and positive feelings toward the birth family, whereas for others increased contact yielded more negative attitudes toward birth parents. These same authors (Haugaard, Moed, & West, 2001) found no significant differences between levels of structural openness and child outcomes. Von Korff, Grotevant, and McRoy (2006) reported that adoptive parents saw no associations between structural openness and adolescent adjustment, while adoptees in more open arrangements reported lower levels of externalizing behaviors. Finally, Curtis and Pearson (2010) reported that for a group of 130 adults adopted as infants, those with greater structural openness had more psychological issues than those who were not in contact with members of their birth families.

Despite the fact that proponents of structural openness have been touting the benefits for children adopted through the public child welfare system since the late 1990s (Silverstein & Roszia, 1999), only one study examined the impact of structural openness with this group of adoptees. Frasch, Brooks, and Barth (2000) studied 231 children adopted from California's foster care system. They found that structural openness was

not associated with parental satisfaction with the adoptions. They found that adoptive parents were more likely to have contact with the birth parents than were their children. Adoptees were more likely to have contact with other birth family members such as grandparents, siblings, and other extended family members.

Clearly, while structural openness may appear to be a good idea, there is no consistent body of research that establishes the benefits for adoptees and their adoptive families. This is especially the case with public child welfare adoptions. In the present study, it is hypothesized that structural openness will not be associated with more positive adoption outcomes.

Child care burden.

The construct of child care burden was developed by Coulton, Korbin, and Su (1999) as a neighborhood based measure that sought to determine the increased risk of child maltreatment in various communities. Comprised of three variables – the child/adult ratio, male/female ratio, and the percent of the population that was over 65 – they found that child care burden significantly affected the potential for child maltreatment in a community after controlling for individual factors. This study is unable to examine factors at the community level; however, the concept of a modified child care burden has bearing. Adoptive family assessments continue to place an emphasis on two structural family factors – the single vs. two-parent family and the number of children placed in the family. These two factors are being aggregated to form a modified view of child care burden.

On the one hand, public children's services agencies struggle to find placements for large sibling groups. Families who are willing to take in multiple children are lauded

as extraordinary individuals who make a strong contribution to the children they adopt and to their communities. A recent article in an online family magazine (*Exceptional Parent Magazine*, 2004) provided effusive praise for a couple, who, over the course of six years of marriage, had adopted 30 children, all of whom had physical, emotional or cognitive disabilities. The family had 21 of the children currently living with them and three international adoptions pending. While an extreme example, the child welfare practice community is split on whether large families are a risk or protective factor for positive adoption outcomes. Ward (1978; 1987) states that large families contribute to positive adoption outcomes. In addition to allowing for large sibling groups to remain together, large families are seen as having strong parenting skills and resources, including administrative skills, community knowledge, the presence of adequate support, and the ability to adapt. A study of different sized adoptive families of children with developmental disabilities found that large families were functioning as well or better than more conventional sized families (Glidden, Glaherty, & McGlone, 2000).

On the other hand, some states require that more stringent assessments be completed for large families (typically described as families that will have five or more children post placement), because of the perceived increased likelihood of child maltreatment that can occur when there are not enough adults to provide care and develop a positive attachment relationship for each of the children in the family. Two studies (Erich, & Leung, 1998; McDonald, Propp, & Murphy, 2001) found that a greater number of children in the family was associated with less positive adoption outcomes. Yet, other studies (Lansford et al., 2001) found that the ratio of children to adults in a family did not have a bearing on adoption outcomes. For purposes of this study, child care burden,

operationalized as the ratio of children to adults in the household, is not hypothesized to impact adoption outcomes.

Summary of family factors.

Based on this review of the literature, it is hypothesized that family process factors will have an association with adoption outcomes, but family structural factors will not be associated with adoption outcomes. The family process factors related to adoption outcome include adoptive parent perceived stress, as well as family adaptive functioning style and communicative openness. Family structural factors that will not have an impact on overall adoption outcomes are structural openness and child care burden.

Gaps in the literature.

While a number of studies can be found that address some portion of these variables, none have studied them in this unique combination. For example, disruption/dissolution rates for children adopted from the public child welfare system have been reported. There are no studies that compare and contrast a sample of both parents and children involved in public agency adoptions on three different adoption outcomes. In addition, the perspective of the adopted child while still a minor living in the family is less frequently examined. This also applies to the child's perspective related to level of stress and perception of their own behavior problems. Studies that have extensively examined issues related to structural and communicative openness for children adopted in infancy or through private agencies have not been replicated for public agency adoptions. As child welfare system adoptions now comprise nearly 40% of all adoptions in the U.S., we must ask, What outcomes are we seeking from those

adoptions and how can those outcomes best be achieved? This study proposes to add to that discussion.

Research questions and hypotheses

Research Question 1 What child factors, family process factors, and family structural factors are associated with parental satisfaction with the adoption?

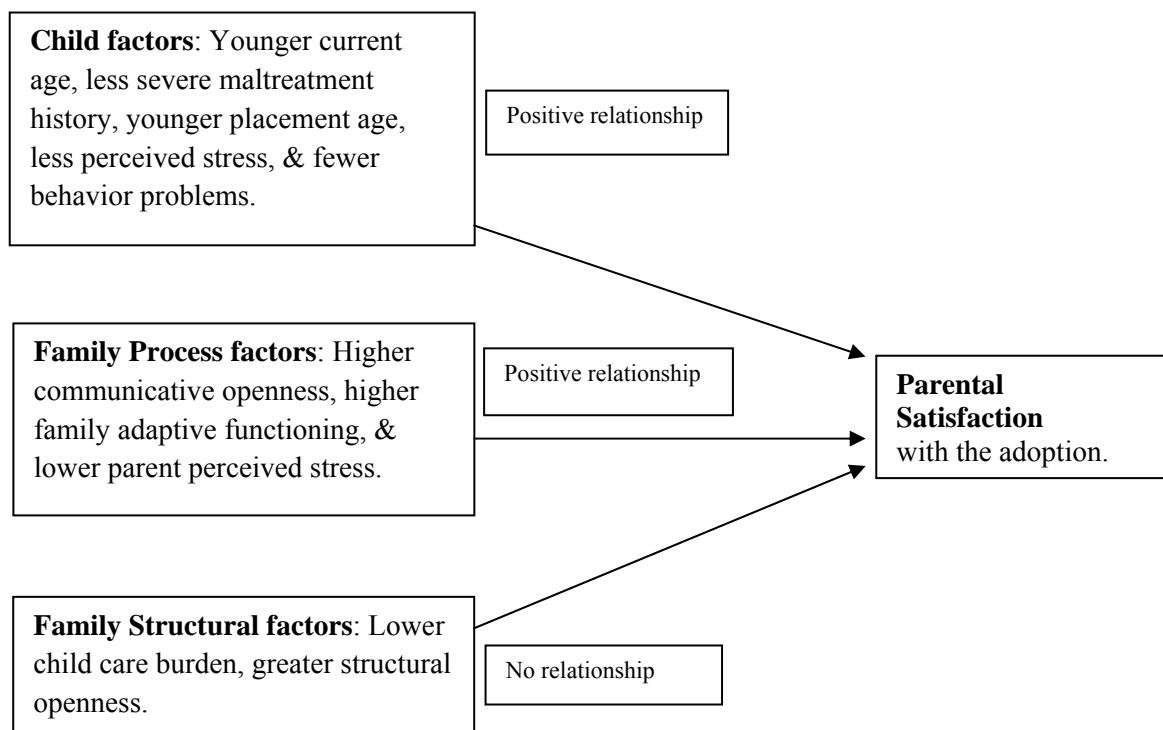
Hypothesis 1.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with greater parental satisfaction with the adoption.

Hypothesis 1.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a higher level of parental satisfaction with the adoption.

Hypothesis 1.3 Family structural characteristics (structural openness and child care burden) will not be associated with parental satisfaction with the adoption.

These are depicted in Figure 1.

Figure 1: Impact of Key Factors on Parental Satisfaction with the adoption.



Research Question 2 What child factors, family process factors, and family structural factors are associated with parental perception of the quality of the parent–child relationship?

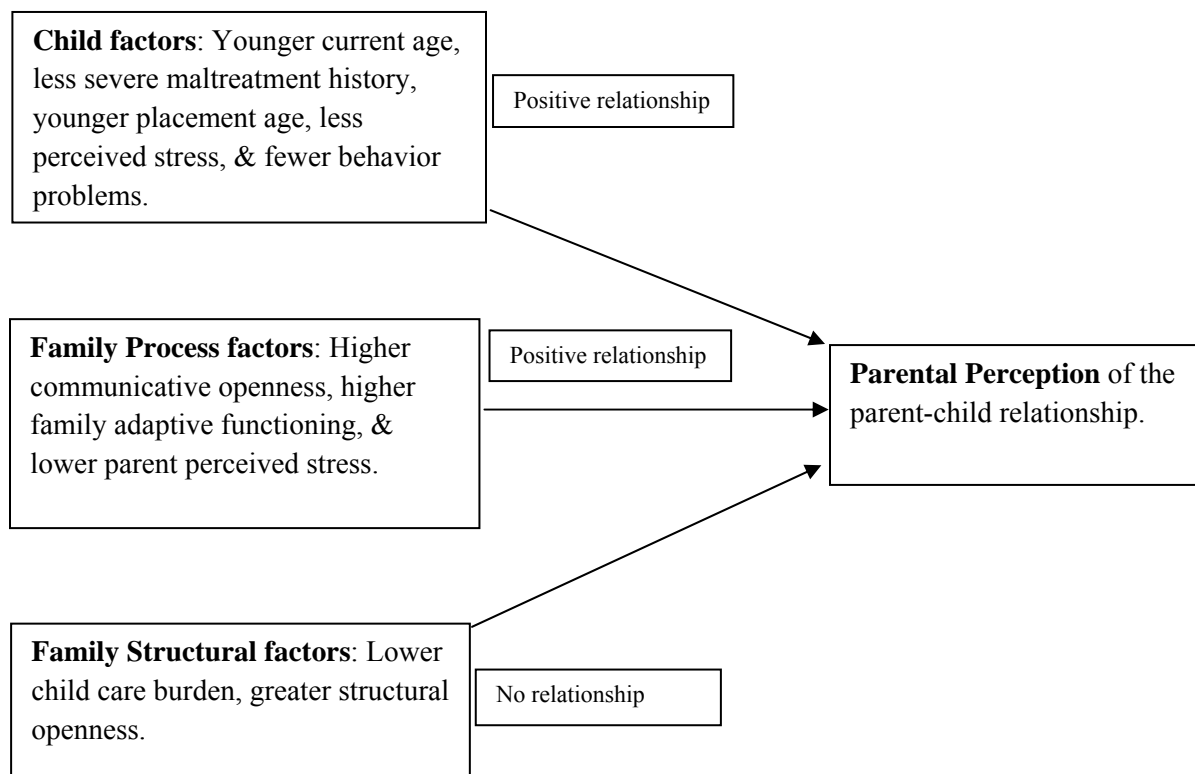
Hypothesis 2.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive parental perception of the quality of the parent-child relationship.

Hypothesis 2.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a more positive parental perception of the quality of the parent-child relationship.

Hypothesis 2.3 Family structural characteristics (structural openness and child care burden) will not be associated with the parent’s perception of the quality of the parent-child relationship.

These are depicted in Figure 2.

Figure 2: Impact of Key Factors on Parental Perception of the parent-child relationship.



Research Question 3 What child factors, family process factors, and family structural factors are associated with the child's perception of the quality of the parent – child relationship?

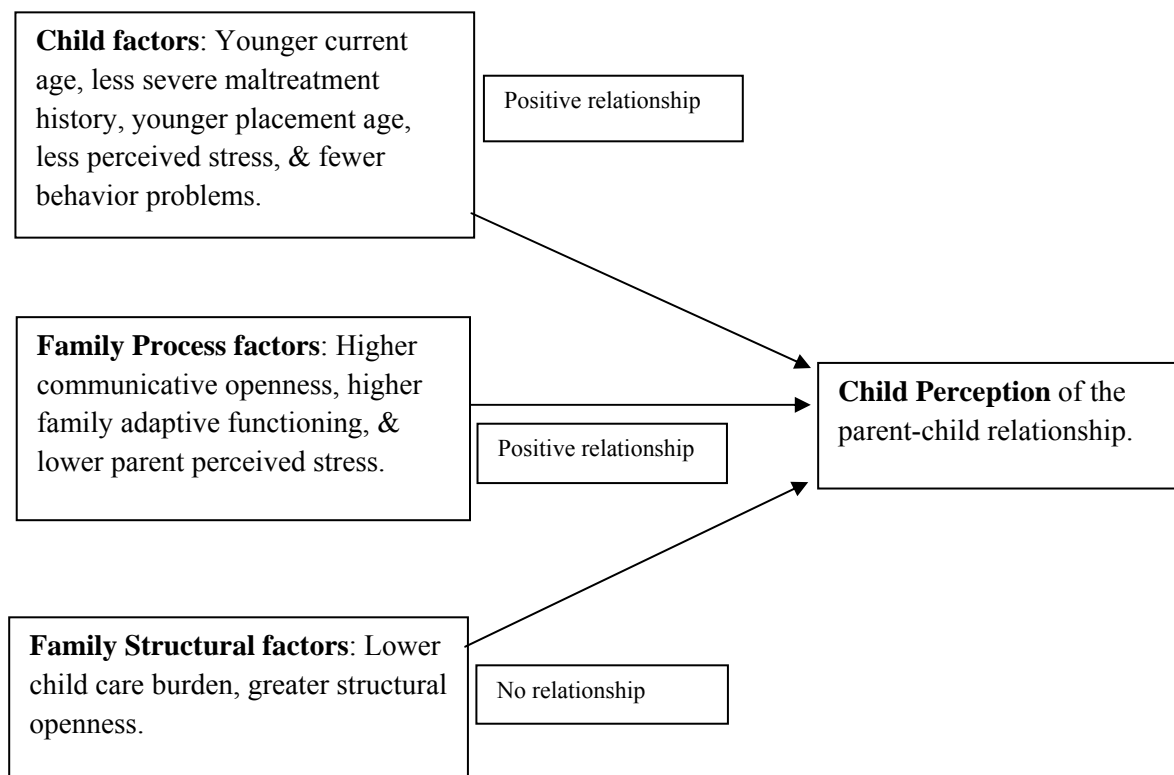
Hypothesis 3.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive child perception of the quality of the parent-child relationship.

Hypothesis 3.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a more positive child perception of the quality of the parent-child relationship.

Hypothesis 3.3 Family structural characteristics (structural openness and child care burden) will not be associated with the child's perception of the quality of the parent-child relationship.

These are depicted in Figure 3.

Figure 3: Impact of Key Factors on Child Perception of the parent-child relationship.



Research Question 4. What differences exist among the factors that are associated with parental satisfaction with the adoption, parental perception of the quality of the parent-child relationship, and the child's perception of the quality of the parent-child relationship?

Hypothesis 4.1 Adoptive parents' satisfaction with the adoption will be positively associated with fewer child behavior problems and with more communicative openness.

Hypothesis 4.2 Adoptive parents' perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, fewer child behavior problems, more communicative openness, and higher family adaptive functioning style.

Hypothesis 4.3 The adopted child's perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, lower child's perceived stress, lower adoptive parent's perceived stress, and greater communicative openness.

Hypothesis 4.4 Child factors will explain the most significant portion of the variance in parental satisfaction with the adoption, parental perception of the parent-child relationship, and child perception of the parent-child relationship.

Chapter 3

Methodology

This study is a cross sectional, quantitative, secondary data analysis of data collected from adoptive parents and adoptees who participated in the longitudinal Florida Adoption Project focusing on one of the three years of data collection. This chapter describes the research design, characteristics of the sample, and operationalization of the variables used in the study, including information about the validity and reliability of each of the measures. The chapter also discusses the plan for data analysis, including tests that will be used to guarantee the integrity of the data and to account for missing values.

Research Design

In order to evaluate the characteristics that contribute to parental satisfaction with the adoption and with the parent's and child's perceptions of the parent-child relationship, a secondary analysis was conducted. The data were obtained from the longitudinal Florida Adoption Project (FAP), *Florida's Adoptive Families: A Longitudinal Look at Family Development – Identifying Key Indicators of Successful and Unsuccessful Adoptive Placements*. The study was conducted by Dr. Scott Ryan, while at the School of Social Work at Florida State University in collaboration with the State of Florida's Department of Children and Family Services in 2002-2004. The first wave of data was collected between October 2002 and December 2002; the second wave collected between October 2003 and December 2003; and, the third wave collected between October 2004 and December 2004. Partial funding for the data collection was obtained from a grant from the Dave Thomas Foundation for Adoption. The purpose of the study

was to examine the various factors that contribute to successful and unsuccessful outcomes for children adopted through the Florida public child welfare system.

Data Collection

The researchers at the Florida Adoption Project initially sent out packets to each of the families determined eligible to participate in the study. The packets contained a cover letter explaining the purpose of the study and requesting participation. The letter also explained that (a) participation was voluntary, (b) there were no known risks for participating, (c) the information provided would be kept confidential (to the extent allowable by law), and (d) the family could choose not to participate without losing benefits. Consent forms were not required to be returned with the surveys. Instead, the return of the completed survey was determined to imply the participant's consent.

Also included in the packet were surveys coded for each eligible adopted child in the family, asking questions of the adoptive parents about the child, family, and the parents themselves. If the adoptee was aged 13 or older, a separate survey for adolescents, along with an assent form and a separate self-addressed stamped envelope, was included, as well. The parent was asked to examine the survey and if he/she consented to having the adoptee complete the survey, to pass it on to the child.

As incentives to participate, families were provided certificates for a Wendy's Single Combo Meal; participating families were entered into a drawing for one of ten gift certificates of approximately \$100 each at a local grocery store. There was no follow up with potential respondents who did not return the survey.

Sample Criteria

The original sample was drawn by the Florida Department of Children and Families from a list of all adoptive parents receiving an adoption subsidy for at least one child as of March 2002, and included 9,170 adoptive families and 14,746 adoptees. The sample was reduced by (a) parents who did not want to participate in the survey, (b) families for whom there was an incorrect address or for whom the letter was returned, and (c) those whose adopted child was over the age of 18 at the time of the study. These reductions yielded a total of 6,782 families and 10,923 children whose identifying information was sent by the Florida Department of Children and Families to the researcher as both eligible and willing to participate.

Wave 1 responses were received from 1,694 families (25% response rate) for 2,382 (21.8% response rate) children. In Wave 1, adoptive parents were asked to complete a survey for each adopted child in their home who was under the age of 18. Thus, in some cases, the same parent and family information will apply to more than one child. This will be addressed later in this chapter.

Wave 2 questionnaires were sent out to all of the families that responded to the Wave 1 mailing; 737 families representing 1038 children responded to Wave 2, yielding a response rate of 43.5% of families and 43.6% of children between Waves 1 and 2. Table 1 summarizes the response rates from the first two waves of data collected for this study.

Table 1. Total eligible to participate and responses by Wave

	Families		Children	
	N	%	N	%
Eligible to participate	6,782	100.0	10,923	100.0
Wave 1 Responses	1,694	25.0	2,382	21.8
Wave 2 Responses (as percent of Wave 1)	737	43.5	1,038	43.6
Wave 2 Responses (as percent of Eligible)	737	10.9	1,038	9.50

Although the original study was longitudinal, this study was cross sectional in design. It uses data collected primarily in Wave 2, because only this wave included the primary variables of interest. Some data were collected in Wave 1 that were not available in Wave 2, so some of Wave 1 data were also used; the specific data included the gender of the adoptee, race/ethnicity of the adoptee, adoptee age at placement in the adoptive family, and number of previous placements before adoption. The original Wave 2 study collected data from adoptive parents and their adopted children who were aged 13 and over at the time of the survey. This study examined a subsample of cases where both parents and children completed the survey at Wave 2. The final sample included 146 adoptive parents and children. The manner in which these participants were selected is described below.

Participants

This study focused on comparing the perceptions of both adoptees and their adoptive parents on the quality of the parent-child relationship. Therefore, the sample was

limited only to those families in which both parent(s) and child completed surveys (n=258). In approximately one quarter (25.5%) of the families, parents completed the survey for more than one adopted child in the home. This also meant that more than one child of the same parents might have also completed a survey. Including all children in the analysis would have resulted in information about a family being included multiple times. This clustering violates the assumption of independence of observations that is required for multiple regression analysis (Cohen, Cohen, West, & Aiken, 2003) because data from the same family tends to be more alike than data from other families. In order to correct for this clustering effect and remove autocorrelated data, the sample was further reduced by selecting only one child in each family, the eldest adopted child.

The decision to select the eldest adopted child in each family was made based on both theoretical and empirical considerations. The literature suggests that adolescence is a particularly vulnerable period for adoptees and their families, when positive adoption outcomes were more likely to be at risk (Keyes et al., 2008; Nickman et al., 2005; Reuter, Keyes, Iacono, & McGue, 2009). It is a time of increased parent-child conflict and a time when adopted adolescents scored significantly higher for behavioral and emotional problems. Smith, Howard, and Monroe (1998) analyzed 401 families whose public child welfare adoptions were considered to be in difficulty and found that the age of the child contributed significantly to the child's level of behavior problems. In a recent review of adoption disruption research (Coakley & Berrick, 2007), the authors noted that the age of the child was significantly associated with increased likelihood of disruption in 6 out of 12 studies reviewed, with the older the child the greater the likelihood of disruption.

In the current sample, the CBCL scores for 258 children, who, along with their parents had completed the questionnaire, were examined to determine whether means for the eldest adopted child in the family differed from the score for younger adopted children in the family. The mean CBCL score for the eldest child was 32.88 and for younger adopted children in the home, it was 27.65. This difference was significant at $p < .000$. A similar comparison using placement age was also significant at $p < .000$. The mean placement age for the eldest adopted child was 4.96 years while the mean placement age for younger adopted children in the family was 4.54 years. Thus, both past research as well as indicators in the current sample suggested that the eldest child in the family was most likely to be at risk for negative adoption outcomes, so this was the child selected to include in the analysis.

A comparison of the demographics of the respondents between the two waves indicates that respondents for each wave differed significantly. The adoptive parents in Wave 2 were more likely to be Caucasian and less likely to be African American. They were also more likely to be older, with higher levels of education. Fewer of the adoptive mothers were stay-at-home mothers in Wave 2 than in Wave 1. The adopted children in Wave 2 were also more likely to be Caucasian, first placed away from their birth mothers at an older age, and had a greater number of total placements. No significant differences between the waves of data were found for marital status, annual household income, or current employment status of the adoptive father. Child related demographic information for which there was no significant difference between Wave 1 & Wave 2 was gender, age of the child at the time of the survey, age of first foster care entry, age of first placement with the adoptive family, and age at the time of the adoption was finalized. Tables 2 and

3 illustrate the differences between respondents in Wave 1 and Wave 2, and then further demonstrate the difference between all respondents in Wave 2 and those who were included in the final sample for this study.

Study Measures

The following measures from the *Florida's Adoptive Families: A Longitudinal Look at Family Development – Identifying Key Indicators of Successful and Unsuccessful Adoptive Placement* were utilized in this study.

Dependent variables.

Parent and Child Perceptions of the parent-child relationship. Both the adoptive parent and the adoptee were asked to provide their perspectives on the quality of the parent-child relationship at Wave 2. Seven questions assessing factors — such as the amount of time spent together, level of trust, respect, and closeness felt by the adoptee and the adoptive parent, and each party's perception of the overall impact of the adoption— have been formed into a scale (with total scores ranging from 7 to 28). Each item was measured on a four-point Likert scale with response options ranging from positive statements, “Yes, very much so” or “Excellent” scored as 1, to negative statements, “No” or “Poor” scored as 4. For this study to aid in interpretation, scores were reversed coded so that higher scores indicated a more positive perception of the relationship. In this sample, the parental perception scale yielded a Chronbach's alpha of $(\alpha) = 0.897$ and the child perception scale yielded a Chronbach's alpha of $(\alpha) = 0.886$. These alphas suggest that the scales are reliable (DeVellis, 2003).

Related scales using some or all of the same questions have been used in several other studies of adoptive families as a measure of the strength of the parent-child

relationship (Groza & Ryan, 2002; Groza, et al., 2003; Groze & Rosenthal, 1993; Reilly & Platz, 2004) In the Groza, Ryan and Cash (2003) study, the scores on the seven questions were summed and divided by the number of questions to yield an average score. This scale was subjected to an exploratory factor analysis using a principal component factor extraction with varimax rotation to test its factor structure (Groza, et al., 2003). The analysis showed that 70% of the variance was explained in one factor. The authors reported that “all of the questions loaded with a minimum factor load of 0.7 (range = 0.77-0.87)” (p 10). They reported the scale’s reliability yielded a Chronbach’s alpha (α) = 0.93.

Parental Satisfaction with the adoption. At each wave, adoptive parents were asked “At this time, how satisfied are you with your overall adoption experience concerning this adopted child?” Responses were recorded on a five-point Likert scale: 1.= Very dissatisfied; 2.= Somewhat dissatisfied; 3. = Mixed or neutral; 4. = Somewhat satisfied; 5. = Very satisfied. This study used the answer to this question collected at Wave 2, and the score from this one item response was treated as a continuous variable. Other adoption studies have also used this question alone or as part of a scale to indicate a primary adoption outcome (Molina, Fuentes, & Berrocal, 2012; Nalavany et al., 2009).

Child factors.

Child’s current age. The child’s current age was computed based on the child’s date of birth and the date of the survey at Wave 2.

Maltreatment history. Information related to this construct was collected in Wave 2. Parents were asked to report whether the child had ever experienced either suspected or confirmed physical abuse, sexual abuse, neglect, or abandonment. Suspected or

confirmed were both counted as 1. The number of the four types reported was then added together to form a continuous variable ranging from 0 to 4. The more types of maltreatment experienced by the child, the worse the child's maltreatment history was posited to be. Although the literature discusses differential outcomes for children based on the type of abuse or neglect experienced (Erich & Leung, 2002; Nalavany, 2006), it is not within the purview of this study to distinguish among the impact of the various types of abuse or neglect, but rather to determine whether an aggregate of the child's prior abuse or neglect experiences has an impact on adoption outcome.

Age of child when first placed in the adoptive home. This was reported by the adoptive parent at Wave 1. Parents were asked, "When (what date) was this child placed in your care?" Placement age was calculated in the original data set by subtracting the date of placement from the child's date of birth.

Child's perceived stress. – This was taken from the child's report at Wave 2. The *Perceived Stress Scale (PSS)* (Cohen, Caremark, & Mermelstein, 1983) is used to operationalize the perceived stress of the adopted adolescent. The scale was originally developed as a 14-item instrument designed to measure the degree to which situations in one's life are considered to be stressful. The authors argued that perceived stress is more important to assess than objective stressors, because it is the cognitive appraisal by the individual that a situation is stressful that matters most. The scale was developed based on work with three samples of individuals – two samples of college students and one sample of individuals involved in a smoking cessation program. The instrument was found to demonstrate sufficient validity and reliability (Chronbach's alpha (α) = .84, .85, & .85 in three samples). The original scale was reduced to a 10-item scale (Chronbach's

alpha (α) = .85) to improve its structure (Cohen & Williamson, 1988). The ten items are scored on a five-point Likert scale ranging from 1 (never) to 5 (very often). Half of the items were reverse scored, and then the total score (range of 1-47) was used in this analysis to measure the total amount of the adopted adolescent's perceived stress. The scale has not been previously used to measure the perceived stress of adoptive adolescents; however, it should be noted that at least two of the samples with which it was originally developed were of a somewhat similar age (college students). A reliability analysis conducted with the current sample yielded a Chronbach's alpha (α) = 0.607. This suggests a moderately reliable scale (DeVellis, 2003).

Child Behavior Checklist (CBCL). – The Child Behavior Checklist (CBCL) (Achenbach 1991; Achenbach & Rescorla, 2001) was used to operationalize the parents' perception of the child's behavior. This instrument has been used countless times in practice (Early, Gregoire, & McDonald 2001; Hudziak, Copeland, Stanger, & Wadsworth 2004; Rishel, Green, Marcus, Shear, & Anderson, 2005) and in adoption research as both a predictor (Leung, et al., 2005; Smith, Howard & Monroe, 1998) and an outcome variable (Goldman, 2007; Neil, 2009; Tan, 2006; Tan, Dedrick, & Marfo, 2007). Designed to provide a standardized format for caregivers' reports of children's competencies and behaviors problems (Achenbach, 1991), it has had its psychometrics well documented for both clinical and nonclinical populations. The parent report, which was used in this study when examining its impact on the adoptive parent's perception of relationship and satisfaction with the adoption, is composed of 118 items. The parent or caregiver rates each item on a 3-step scale: (0) – not true, (1) – somewhat true and (2) -

very true or often true for this child. Item responses are scored and can be reported either as raw total scores or as t-scores

In studying behavior problems among adoptees, some adoption studies have examined only certain subscale scores on the CBCL, most notably the subscales for internalizing and externalizing behaviors. Many studies have found an association between increased levels of externalizing behaviors and adoption outcome. For example, Berry and Barth (1989) found a greater risk of placement instability was associated with higher levels of externalizing behaviors in a study of 85 children adopted from the public child welfare system. This study also found greater placement instability to be associated with school related problems. Hinterlong and Ryan's (2008) study of kinship and nonkinship adoption in adoptive families headed by adults over aged 60, found that externalizing behaviors were the strongest predictors of negative outcomes. Higher levels of externalizing behaviors were also found to have a negative effect on foster parents' likelihood of adopting a child already placed in their home, although these findings were reported in a pilot study of only 31 foster children (Leathers, Spielfogel, Gleeson, & Rolock, 2012). A plethora of studies show that both domestic and inter country adoptees exhibit more externalizing behaviors than nonadoptees (Keyes, Sharma, Elkins, Iacono, & McGue, 2008; Miller, Chan, Tirella, & Perrin, 2009; Miller, Fan, Christensen, Grotevant, & van Dulmen, 2000; Peters, Atkins, & McKay, 1999; Wierzbicki, 1993; Zill, 1994).

Other adoption studies have used the total behavior problem score on the CBCL to indicate behavior problems. In a meta-analysis examining behavior problems and mental health referrals of international adoptees, (Juffer & van IJzendoorn, 2005), the

authors reviewed 64 articles on behavior problems in adoption, including 25 that used the CBCL to diagnose problem behaviors. They found that 19 of the studies used externalizing and internalizing behaviors as the primary indicator of the problems, while 17 used the total problem score. In reviewing all the studies, the authors reported that 101 subsamples in the studies examined used total problems, while 64 used externalizing problems and 64 used internalizing problems. In addition to internalizing and externalizing behaviors, other behavior problems reported in adoption studies include psychiatric disorders (Zill, 1994), depression (Brodzinsky, Radice, Huffman, & Merkler, 1987), violation of family norms, running away, lying /manipulation (Smith, Howard, & Monroe, 1998), anxiety disorders (Keyes et al. 2008), and school issues (Barth, Gibbs, & Siebenaler, 2001; Juffer, Stams, Geert-Jan, & VanIJzendoorn, 2004).

This study used the total problems score for the CBCL as the measure of child behavior rather than selecting specific subscales. Although some families may have more difficulty dealing with externalizing behaviors, this is not the case with all adoptive families. For example, the Barth and colleagues (2001) study reported that the area of difficulty for which adoptive parents most frequently sought assistance was school problems. The Smith and colleagues (1998) study of adoptions in difficulty (defined as at risk of dissolution or displacement) found that the most commonly cited behavior problem among these families was “violation of family norms.” Since each family has its own norms about what types of behavior are acceptable or able to be tolerated, this would indicate that in any one family different types of behavior problems may be more or less stressful for the parent. In addition, the use of post adoption services increases over time (Wind, Brooks, & Barth, 2007), indicating that what families may have been able to

handle at one point may be less easily dealt with at a later date. Alternatively, families report that it is the accumulation of multiple issues that spurs the use of increased post adoption services (Smith, 2010). Thus, using the total behavior problems score allows for a wider range of adoptive family perceptions of behavior problems to be reflected.

Family process factors

Communicative Openness – Communicative openness has been defined by Brodzinsky (2005) as the attitude and behavior of adoptive parents with regards to talking and thinking about adoption. He states that communicative openness “reflects the general attitudes, beliefs, expectations, emotions, and behavioral inclinations that people have in relation to adoption” and “includes, among other things, a willingness of individuals to consider the meaning of adoption in their lives, to share that meaning with others, to explore adoption related issues in the context of family life, to acknowledge and support the child’s dual connection to two families, and perhaps to facilitate contact between these two family systems in one form or another” (p. 149.) Communicative openness has been studied both from the child’s perspective and from the parent’s report. Brodzinsky (2006) constructed an “Adoption Communication Openness Scale, consisting of 14 items that were based on the child’s report. Sample items from that scale include, “My parents are good listeners when it comes to my thoughts and feelings about being adopted; My parents have difficulty understanding adoption from my point of view; If there is something I need to know about my adoption, my parents are always there for me....”. His sample consisted of 73 adopted children placed within 18 months of birth and the assessment was done during a face-to-face interview. A later study by Neil (2007), examined communicative openness from the adoptive parents’ perspective for a group of

children who had been placed for adoption under the age of 4 and who were followed up at approximately 6 years post placement. In that study, Neil developed a rating scale broken down into five dimensions – 1) communication with the adopted child about adoption, 2) comfort with and promotion of dual connection, 3) empathy for the adopted child, 4) communication with the birth family, and 5) empathy for the birth family. In the Neil study, information about communicative openness was gathered by interviewing adoptive parents only.

Both the Brodzinsky and Neil studies suggested that it was the child's perception of the communicative openness that was most important. As neither the Brodzinsky nor the Neil scales were available for use in this data set, Communicative Openness was operationalized for this study as the answers to six questions reported by the adopted adolescent at Wave 2. Using a five-point Likert scale ranging from 1-never to 5-very often, adolescents responded to the following items from the Teen Survey.

12. "My parent(s) feel comfortable talking about adoption with me."
13. "My parent(s) would understand if I told them I wanted to contact my birth mother."
14. "When I do something wrong or bad, my parent(s) say my behavior comes from my birth mother or father."
16. "My parent(s) listen to my feelings about adoption."
18. "My parents(s) tell me they can give me back if they want to."
19. "My parent(s) say they are thankful they adopted me."

Items 14, 18 and 19 were reverse scored, and then the total score was used as a proxy for communicative openness with a higher score representing more communicative openness in the adoptive family. A reliability analysis conducted for the scale used in this study yielded a Chronbach's alpha (α) = 0.779. This suggests a reliable scale (DeVellis, 2003).

Family Functioning. Family functioning was operationalized using the total score of the parent's report on the Family Functioning Style Scale (Deal et al., 1988). This scale was developed to assess qualities of strong families. The scale assesses the extent to which an individual believes his or her family is characterized by different strengths and capabilities. Each of the 26 items is rated on a five-point Likert scale ranging from 1="Not at all like my family" to 5= "Almost always like my family". Construct validity was established using principle components factor analysis with oblique rotation to identify five factors which accounted for 60% of the variance (Trivette & Dunst, 1990). The percentage of variance accounted for by each of the five factors was found to be relatively equal. Internal consistency was established by split-half reliability coefficients of .92 and a Chronbach's alpha of .92 using the total number of items of the scale (Trivette & Dunst, 1990). Rather than use the individual subscales, this study will use the total score on the Family Functioning Style Scale as an indicator of overall family functioning. The analysis for the current sample yielded a Chronbach's alpha (α) = .949. This suggests a reliable scale (DeVellis, 2012).

Parents' Perceived Stress. Information about the adoptive parent's perceived stress was collected in Wave 2. As previously noted, the ten items are scored on a five-point Likert scale ranging from 1 (never) to 5 (very often). Half of the items are reverse scored and then the total score (range of 1-47) is used in the analysis to measure the total amount of the adoptive parent's perceived stress. In this sample, when one parent's score was reported, that parent's score was used. When two parents' scores were reported, an average of the two parents' scores was used. While the scale was originally developed with groups of persons who may be less likely to be parents (at least the two college

student samples), it has been used in another study of adoptive parents of older children adopted from the child welfare system (Goldman, 2007). In that study, the scale was found to have a reliability rating of Chronbach's alpha (α)=0.811. A reliability analysis conducted with the current sample yielded a Chronbach's alpha (α)=0.867, which suggests a reliable scale (DeVellis, 2003).

Family Structural Factors.

Structural Openness. – This dichotomous variable was developed from the answers to two questions reported by the adopted child at Wave 2. Children were asked if they or their adoptive parents had any contact with any members of the child's birth family in the last year (birth mother, birth father, or other family members). An answer of "yes" to any one of these questions, was coded as 1= yes. The two questions were examined together and answer of yes to any one item was coded as 1= structural openness. Answers of "no" on all the items was coded as 0= no structural openness. Structural openness can be operationalized in a number of ways which consider both the type and frequency of contact (Brodzinsky, 2005). However, the limitations of the data set did not allow for exploration of contact frequency.

Child Care Burden. While studies determining the impact of family size on adoption outcome have yielded mixed results (Barth & Brooks, 1997; Glidden, et al., 2000), there is some indication that the number of children in a family and/or the ratio of adults to children in the family has been found to be an indicator of increased risk of child maltreatment (Bae, Soloman, & Gelles, 2009; Coulton, Korbin, Su, 1999). This study operationalized child care burden as the ratio of total number of children to the total number of adults in the household at the time of the Wave 2 survey.

Demographic Variables.

Child related. - Information about the child's race, age at which the child first entered foster care, and gender were taken from Wave 1. All of these variables are by parent report.

Child's length of placement with the adoptive family. – This variable was computed in Wave 1 by subtracting the date the survey was completed from the date the child was first placed in the adoptive home. The data in Wave 1 were collected between October and December 2002. The final variable for length of placement at Wave 2 was computed by adding one year to the Wave 1 item.

Number of placements. Adoptive parents were asked at Wave 1 to report how many total placements, if known, including the current placement, the child has been in since being placed away from his or her birth mother. This could include foster homes, placement with relatives or placement in other settings. The number of placements was totaled.

Parent/family related. Information about the parental age, marital status, level of education, race/ethnicity, and employment status of the adoptive parent was collected from the parent's report at Wave 2. The adoptive parent also reported the family's level of household income without including the amount of any subsidy at Wave 2.

Data Analysis Plan.

The statistical program used to analyze the quantitative data was SPSS statistical software version 19. To begin, a number of procedures to prepare the data for analysis were necessary so that answering the research questions and testing the hypotheses could be accomplished with confidence. This included examining descriptive statistics for each

of the variables to determine that they met assumptions required for analysis and making decisions about missing data.

Missing Data.

A review of the 192 pairs of parents and children who met the criteria for inclusion in the final sample revealed that data was missing on key variables in 46 (24%) of the cases. The variable most frequently missing was Child Perceived Stress, which was missing for 19 (10%) of the cases, followed by Communicative Openness, missing from 16 (8%) of the cases. Other variables with missing values were Placement Age (10 missing, 5%), Adoptive Parent Perceived Stress (8 missing, 4%), Child Care Burden (6 missing, 3%), Length of Placement (2 missing, 1%) and one case with missing values for each of Maltreatment History, CBCL, YSR, and Structural Openness.

Consultation with committee members and an independent statistical expert resulted in a decision to use *Listwise* Deletion to handle all instances in which data were missing. This resulted in a further reduction of the final sample for analysis from 192 pairs of parents and children to 145 pairs for the dependent variable of Parental Satisfaction with the Adoption, 146 pairs for the dependent variable of Parent's Perception of the Quality of the Relationship, and 146 pairs for the dependent variable of the Child's Perception of the Quality of the Relationship. Although *Listwise* deletion results in a substantial reduction in the number of cases used in the analysis and introduces possible bias (Schafer & Graham, 2002), it does assure that there can be no concerns raised that the imputation method resulted in construction of values that were not true representations of the data.

To determine what type of bias was introduced into the sample by the use of *Listwise* deletion to handle the missing data, the 192 cases were broken into two groups for comparison. One group consisted of 146 cases that remained after Listwise deletion and the other group consisted of 46 cases that were removed from the final sample because of missing data. Independent t-tests were performed to compare the means of the two groups on each of the predictor and dependent variables in the study (Enders, 2010). Maltreatment history was the only variable for which there was a significant difference in the mean scores between the two groups. The cases removed from the sample had a lower mean level of past maltreatment ($M=1.51$) compared to the cases that remained in the sample ($M=2.12$), $t=-2.913$, $p=.005$. This means that the final sample was biased in favor of children with more severe maltreatment history. This difference will be addressed in the final chapter. There were no other significant differences between the two groups with regard to the mean scores for any of the other variables used in the model.

Data Screening.

Each of the variables was examined to determine the existence of any outliers and to determine mean, median, mode, range, and standard deviation. To determine whether the data were considered to be normally distributed, skewness and kurtosis were examined both visually, using a histogram with normal curve, and by examining values reported. Skewness values below 2 and kurtosis values below 7 were determined to meet the criteria for normality of distribution.

Skewness and kurtosis were within the acceptable range on all continuous variables, with two exceptions. Because the predictor variable Child Care Burden had a

small number of cases that skewed the distribution and substantially increased the range, it was top coded (reducing the range from .5 to 7.5 to .5 to 5.0)

A visual examination of the distribution of the dependent variable Parental Satisfaction with the adoption revealed that this variable was substantially negatively skewed. Slightly over three quarters (75.2%) of the adoptive parents in the sample were either satisfied or highly satisfied with the adoption, while only 13% were either dissatisfied or highly dissatisfied. Tabachnick and Fidell (2001) state that transformation of variables that are non-normally distributed can produce substantially more accurate analytic results. In order to correct for substantial negative skewness, the literature (Mertler & Vannatta, 2002; Tabachnick & Fidell, 2001) recommends that the variable be transformed using a combination of reflect and logarithm. Reflection requires that a constant number be subtracted from each score so that the smallest score equals one, and then that the applicable transformation be applied. The reflection procedure however changes the direction of the variable so that interpretation must be reversed. In this sample, Parental Satisfaction with the adoption was transformed using the command “reflect and logarithm.” As a result of this transformation, the new dependent variable Parental Satisfaction with Adoption Transformed (PSAT) is scored in the opposite direction of the Parental Satisfaction with the adoption. A higher score on PSAT means that the parent is more *dissatisfied* with the adoption. After these adjustments were completed, all of the variables met the criteria for inclusion in the study.

Bivariate correlations were examined among all predictor, control, and dependent variables to test for multicollinearity. A cutoff value of .7 was used to identify multicollinearity. None of the correlations reached that threshold.

Analysis Strategy

All of the research questions were tested using ordinary least squares regression. Separate regression models were run for each of the dependent variables to determine the differences in predictors for each. Bivariate correlations between the predictor, control, and dependent variables were examined as one way to determine which of the predictor variables to include in each model. In this study, covariates whose relationship with the dependent variables had a significance level of at least .25 were included in the analysis. In addition, other covariates included were ones where theory and previous research had shown that a strong relationship existed between the covariate and adoption outcome. Each research question and hypothesis was examined using the following analysis strategy.

Research Question 1 What child factors, family process factors, and family structural factors are associated with parental satisfaction with the adoption?

Hypothesis 1.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with greater parental satisfaction with the adoption.

Hypothesis 1.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a higher level of parental satisfaction with the adoption.

Hypothesis 1.3 Family structural characteristics (structural openness and child care burden) will not be associated with parental satisfaction with the adoption.

Ordinary Least Squares hierarchical regression with three entry blocks was used to test these hypotheses. Use of the hierarchical as opposed to single entry method

allowed for the examination of specific variance accounted for by each block of independent variables, child characteristics, family process factors, environmental support, and family structural factors. Identification of significant F value changes after each entry block allowed for assessment of the goodness of fit of the model by determining whether each block's addition produced a significant change in the amount of variance explained. The Beta coefficients and significance levels for each variable in the final model allowed for identification of the specific variables that accounted for the variance. This allows for comparison to determine whether each of the outcome variables is best explained by the same covariates.

Research Question 2 What child factors, family process factors, and family structural factors are associated with parental perception of the quality of the parent-child relationship?

Hypothesis 2.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive parental perception of the quality of the parent-child relationship.

Hypothesis 2.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a more positive parental perception of the quality of the parent-child relationship.

Hypothesis 2.3 Family structural characteristics (structural openness and child care burden) will not be associated with the parent's perception of the quality of the parent-child relationship.

Ordinary Least Squares hierarchical regression with three entry blocks was used to test these hypotheses. Use of the hierarchical as opposed to single entry method allowed for the examination of specific variance accounted for by each block of independent variables, child characteristics, family process factors, environmental support, and family structural factors. Identification of significant F value changes after each entry block allowed for assessment of the goodness of fit of the model by determining whether each block's addition produced a significant change in the amount of variance explained. The Beta coefficients and significance levels for each variable in the final model allowed for identification of the specific variables that accounted for the variance. This allows for comparison to determine whether each of the outcome variables is best explained by the same covariates.

Research Question 3 What child factors, family process factors, and family structural factors are associated with the child's perception of the quality of the parent-child relationship?

Hypothesis 3.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive child perception of the quality of the parent-child relationship.

Hypothesis 3.2 More positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a more positive child perception of the quality of the parent-child relationship.

Hypothesis 3.3 Family structural characteristics (structural openness and child care burden) will not be associated with the child's perception of the quality of the parent-child relationship.

Two ordinary Least Squares hierarchical regressions with three entry blocks were used to test these hypotheses. One used the parent report score on the CBCL and the other the youth self report. Use of the hierarchical as opposed to single entry method allowed for the examination of specific variance accounted for by each block of independent variables, child characteristics, family process factors, and family structural factors. Identification of significant F value changes after each entry block allowed for assessment of the goodness of fit of the model by determining whether each block's addition produced a significant change in the amount of variance explained. The Beta coefficients and significance levels for each variable in the final model allowed for identification of the specific variables that accounted for the variance. This allows for comparison to determine whether each of the outcome variables is best explained by the same covariates.

Research Question 4. What differences exist among the factors that are associated with parental satisfaction with the adoption, parental perception of the quality of the parent-child relationship, and the child's perception of the quality of the parent-child relationship?

Hypothesis 4.1 Adoptive parents' satisfaction with the adoption will be positively associated with fewer child behavior problems and with more communicative openness.

Hypothesis 4.2 Adoptive parents' perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, fewer

child behavior problems, more communicative openness, and higher family adaptive functioning style.

Hypothesis 4.3 The adopted child's perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, lower child's perceived stress, lower adoptive parent's perceived stress, and greater communicative openness.

Hypothesis 4.4 Child factors will explain the most significant portion of the variance in parental satisfaction with the adoption, parental perception of the parent-child relationship, and child perception of the parent-child relationship.

The sign, direction, and strength of the Beta weights and significance levels of each of the variables found to predict a significant level of the variance in each of the preceding regression models will be examined to determine whether there are differences in which variables predict which outcomes. A comparison of the various predictors for each outcome will be presented.

Institutional Review Board (IRB)

The original study from which the data for this study was gathered was approved by the Institutional Review Board of Florida State University. Although consents and assents were obtained from all participants, in the original study identifying information was stored separately, only de-identified data were used for analysis and results were reported in aggregate form. This researcher received a data set from Dr. Ryan, the investigator of the original study, that contained de-identified data tracking participants only by ID numbers. This protocol for the current study (IRB-2012-117) received

expedited review and was classified as Exempt by the Institutional Review Board of Case Western Reserve University.

Chapter 4

Findings

This chapter begins by describing the characteristics of families and children included in the study, as well as sample statistics on all independent and dependent variables. It then provides the results of all multivariate data analyses and reports the results of all hypotheses testing. The chapter concludes with a summary of all significant findings from the study.

Comparison of study participants with original sample

When analyzing data that are a subsample of a larger data set, especially one that has had data collected over multiple waves, it is important to determine how the families in the study might differ from the larger group of families from whom the sample was drawn. In order to accomplish this, an initial analysis compared characteristics of the families who only completed Wave 1 questionnaires versus those who completed questionnaires at both Waves 1 and 2. In addition, the families included in the final sample were compared with all families in the Wave 2 sample. Any differences in child or parent characteristics will have implications for the generalizability of the findings and will be discussed in the next chapter.

Child characteristics. The children in this study differed significantly from other children whose families completed only the Wave 1 survey as well as from other children whose parents completed both the Wave 1 and Wave 2 surveys on nearly all of the demographic characteristics. Table 2 compares child characteristics for children only included in Wave 1 with children included in both Waves 1 and 2. It also shows the difference between children included in the study and all children included in Wave 2. Because a basic inclusion criterion for this study was that the child had to have completed

the teen survey, the children in this sample's average age was nearly 4-1/2 years older than other children in Wave 2 (M=14.96 yrs v M=10.23 yrs). The children in the study were also more likely to be Caucasian (58.2% v 50.9%) and first placed into foster care at an older age (M=2.53 yrs v 1.56 yrs) than were other children whose parents completed the Wave 2 surveys. In addition, the children included in this study were first placed with their adoptive families at an older age (M=5.00 yrs v M=3.27 yrs), and had experienced significantly higher rates of all four types of maltreatment (36.3% v 27.6% physical abuse; 71.2% v 59.8% neglect; 16.4% v 13.1% sexual abuse; and 40.4% v 34.2% abandonment).

Table 2. Comparison of Child Demographic Characteristics Between Waves For Data Reported at Wave 1

Variable	Wave 1 Total Children n=2382	Wave 1 & 2 Total Children n= 1038	Subsample of children included in study n=146
		Significant difference between W1 & W2. P<.05*; p<.01**; p<.001***	Significant difference between W2 total & W2 in study P<.05*; p<.01**; p<.001***
Age	M=10.34 (SD=4.26)	M=10.23 (SD=4.16)	M=14.96 (SD=1.58)***
Gender			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Male	652 (50.7)	542 (53.0)	85 (58.2)
-Female	633 (49.3)	481 (47.0)	59 (40.4)
			$\chi_2=2.214(1)$, p=.137
Race / Ethnicity			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Caucasian	578 (45.7)	520 (50.9)	85 (58.2)
-Hispanic/Latino	91 (7.2)	78 (7.6)	8 (5.5)
-African American	425 (33.6)	280 (27.4)	42 (28.8)
-Other/Multicultural	170 (13.4)	143 (14.0)	10 (6.8)
		$\chi_2=10.49(3)^*$	$\chi_2=8.24(3)^*$
Age first placed in foster care	M=1.49 (SD=2.33)	M=1.56 (SD=2.44)	M=2.53(SD=3.06)***
Total Number of Placements	M=2.73 (SD=2.8)	M= 2.67 (SD=2.54)	M=3.17 (SD=3.01*)
Age first placed in adoptive home	M=3.15 (SD=3.37)	M=3.27 (SD=3.5)	M=5.00 (SD=4.32)***
Maltreatment History			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Physical abuse	340 (27.4)	273 (27.6)	53 (36.3) $\chi_2=10.72(1)^{**}$
-Neglect	685 (54.3)	603 (59.8)	104 (71.2) $\chi_2=9.09(1)^{**}$
-Sexual abuse	152 (12.3)	129 (13.1)	24 (16.4) $\chi_2=2.60(1)p=.107$
-Abandonment	396 (31.9)	332 (34.2)	59 (40.4) $\chi_2=5.07(1)^*$

Parental characteristics. Table 3 provides a comparison of the adoptive parents in the sample compared to other adoptive parents who completed the survey at Wave 1 only, and at Waves 1 and 2. Adoptive parents in this sample were significantly older than the other adoptive parents who completed the survey at Wave 2 (mean age for adoptive mother = 51.33 years v 48.51 and mean age for adoptive father =51.82 yrs v 49.60 years). The adoptive parents included in the sample did not differ substantially from other adoptive parents who completed the survey at Wave 2 in any other demographic characteristics but did differ substantially from adoptive parents who completed the surveys only at Wave 1 by age, race, level of education, and employment status of the adoptive mother.

Table 3. Comparison of Parental Demographic Characteristics Across Waves

For Data Reported At Wave_1

Variable	Wave 1 Total Respondents N=1694	Wave 1 & 2 Total Respondents N=1038 Difference between Wave 1 & Wave 2	Cases Included in Study N=146 Difference between Wave 2 total and Study
Married	938	732	101
Adoptive Mother Age	M=47.39 (SD=9.98)	M=48.51 (SD=9.17)***	M=51.33 (SD=8.36)***
Adoptive Father Age	M=48.75 (SD=10.75)	M=49.60 (SD=9.61)***	M=51.82 (SD=9.97)***
Annual Income	M=\$51,009	M=\$52,615	M=\$51,068
Adoptive Mother Race/Ethnicity			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Caucasian	793 (63.5)	756 (75.1)	101 (73.7)
-Hispanic /Latina	55 (4.4)	28 (2.8)	3 (2.2)
-African American	384 (30.8)	204 (20.3)	31 (22.6)
-Other/Multiracial	16 (1.3)	19 (1.9)	3 (1.5)
		$\chi_2= 39.72(13)***$	$\chi_2=1.604, p=.658$
Adoptive Father Race/Ethnicity			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Caucasian	586 (71.4)	625 (80.6)	86 (79.6)
-Hispanic /Latino	57 (6.8)	46 (5.9)	7 (6.5)
-African American	166 (20.2)	89 (11.5)	13 (12.0)
-Other/Multiracial	12 (1.5)	15 (1.9)	2 (1.9)
		$\chi_2=24.59(3)***$	$\chi_2=.043, p=.998$
Highest Level of Education AdopMother			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-<High school	89 (7.1)	57 (5.8)	6 (4.5)
-High school/GED	314 (25.2)	214 (21.7)	35 (26.1)
-Technical Trng	130 (10.4)	65 (6.6)	6 (4.5)
-Some College	420 (33.7)	332 (33.7)	51 (38.1)
-Bachelor's degree	187 (15.0)	183 (18.6)	24 (17.9)
-Master's / PhD	105 (8.4)	133 (13.5)	12 (9.0)
		$\chi_2= 31.12(5)***$	$\chi_2=4.171, p=.525$

P<.05*; p<.01**; p<.001***

<i>Variable</i>	<i>Wave 1 Total Respondents</i> N=1694	<i>Wave 1 & 2 Total Respondents</i> N=1038 <i>Difference between Wave 1 & Wave 2</i>	<i>Cases Included in Study</i> N=146 <i>Difference between Wave 2 total and Study</i>
<i>Highest Level of Education AdopFather</i>			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-<High school	72 (8.8)	43 (6.2)	8 (9.0)
-High school/GED	218 (26.7)	138 (19.9)	17 (19.1)
-Technical Trng	100 (12.2)	77 (11.1)	7 (7.9)
-Some College	219 (26.8)	207 (29.9)	25 (28.1)
-Bachelor's degree	129 (15.8)	126 (18.2)	19 (21.3)
-Master's / PhD	79 (9.7)	101 (14.6)	13 (14.6)
		$\chi_2=21.13(5)**$	$\chi_2=3.190, p=.671$
<i>Current Employment Status Adop Mother</i>			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Stay at home parent	421 (33.9)	283 (28.8)	33 (24.6)
-Unemployed but looking	28 (2.3)	14 (1.4)	2 (1.5)
-Employed, part time	143 (11.5)	138 (14.1)	19 (14.2)
-Employed, full time	558 (44.9)	465 (47.4)	67 (50.0)
-Retired	92 (7.4)	81 (8.3)	13 (9.7)
		$\chi_2=10.46^*$	$\chi_2=1.160, p=.885$
<i>Current Employment Status Adop Father</i>			
	<u>Freq. (%)</u>	<u>Freq. (%)</u>	<u>Freq. (%)</u>
-Stay at home parent	28 (3.4)	19 (2.7)	2 (2.2)
-Unemployed but looking	4 (0.5)	5 (0.7)	1 (1.1)
-Employed, part time	17 (2.1)	22 (3.2)	2 (2.2)
-Employed, full time	665 (81.8)	554 (79.8)	72 (80.0)
-Retired	99 (12.2)	94 (13.5)	13 (14.4)
			$\chi_2=.575, p=.966$

P<.05*; p<.01**; p<.001***

Sample Characteristics

The sample consisted of 146 adoptive parents and their oldest adopted child, where both parent and child had completed the Wave 2 survey. Table 4 displays child data. The children in the sample ranged in age from 12 to 19, with an average age of 15.95 years (SD=1.57). Nearly three fifths (59.3%) were male. More than half of the adopted children (58.6%) were Caucasian, over a quarter (29.0%) were African American, while 5.5% identified as Hispanic/Latino, and another 6.9% identified as Other/Multiracial. While the average age at which these children had been placed in their adoptive homes was 5.00 years old, over 43% (43.2%), were placed in their adoptive homes at age 2 or under. Age of placement in the adoptive home ranged from infancy (26.7%) to 14 (2.0%) and the length of the adoptive placement ranged from 1 year (0.7%) to 18 years (3.4%), with an average length of placement of nearly 11 years (M=10.95). Over 30% (31.7%) of the adopted children had not had any prior placements other than the adoptive home, and a total of nearly three quarters (74%) had been in three placements or less including the current adoptive placement. The form of maltreatment most commonly experienced by the children in the sample was neglect (78.8%) followed by abandonment (58.9%). Physical abuse was experienced by 50.0% of the children in the sample, and sexual abuse by 24.7%. Nearly 14% of the children in the sample (13.7%) had not experienced any maltreatment prior to placement; 12.3% had experienced one type of maltreatment; 37% had experienced two types of maltreatment; 21.9% had experienced three types; and 15.1% had experienced all four types of maltreatment prior to placement.

Table 4. Child Characteristics - Children Included in Study
For Data Reported at Wave 2 n=146

Current Age (Yrs.)	Freq (%)	Plcmnt Age (Yrs.)		Length of Plcmnt (Yrs)	Freq (%)	Total Plcmnts (Incl current)	N=123 Freq (%)
			Freq. (%)				
12	2 (1.4)	<1	39 (26.7)	1	1 (0.7)	1	39 (31.7)
13	15 (10.3)	1	15 (10.3)	2	4 (2.8)	2	29 (23.6)
14	24 (16.5)	2	9 (6.2)	3	5 (3.4)	3	23 (18.7)
15	31 (21.2)	3	4 (2.7)	4	4 (2.8)	4	9 (7.3)
16	35 (24.0)	4	12 (8.2)	5	10 (6.9)	5	6 (4.9)
17	25 (17.1)	5	8 (5.5)	6	7 (4.8)	6	5 (4.1)
18	12 (8.2)	6	12 (8.2)	7	15 (10.3)	7	3(2.4)
19	2 (1.4)	7	8 (5.5)	8	8 (5.5)	8	2 (1.6)
		8	8 (5.5)	9	9 (6.2)	9	1 (0.9)
		9	7 (4.8)	10	8 (5.5)	10	0
		10	2 (2.0)	11	7 (4.8)	11	2 (1.6)
		11	7 (4.8)	12	6 (4.1)	12	0
		12	6 (4.1)	13	11 (7.6)	13	1 (0.9)
		13	3 (2.0)	14	20 (13.8)	14	1 (0.9)
		14	3 (2.0)	15	15 (10.3)	15	0
				16	5 (3.4)	16	1 (0.9)
				17	5 (3.4)	17	1 (0.9)
				18	5 (3.4)		
Mean	15.95	Mean	5.00	Mean	10.95	Mean	3.19
Median	16.05	Median	4.65	Median	11.33	Median	2.0
Mode	15.09	Mode	<1	Mode	13.76	Mode	1.0
SD	1.57	SD	4.31	SD	4.39	SD	3.01

Table 4. Child Characteristics - Children Included in Study
For Data Reported at Wave 2 n=146

Race	Freq (%)	Maltreatment History	Freq (%)
Caucasian	85 (58.6)	Physical Abuse	
Hispanic/Latino	8 (5.5)	Yes	73 (50.0)
African American	42 (29.0)	No	73 (50.0)
Other/Multiracial	10 (6.9)	Sexual Abuse	
		Yes	36 (24.7)
		No	110 (75.3)
Gender	Freq (%)	Neglect	
Male	87 (59.6)	Yes	115 (78.8)
Female	59 (40.4)	No	31 (21.2)
No Types Maltx	Freq (%)	Abandonment	
0	20 (13.7)	Yes	86 (58.9)
1	18 (12.3)	No	60 (41.1)
2	54 (37.0)		
3	32 (21.9)		
4	22 (15.1)		

Demographic information about the adoptive parents in the study reported is displayed in Table 5. Over two-thirds (69.7%) of the adoptive parents were married. Families' annual household income averaged \$53,509 per year before any adoption subsidy, with nearly one quarter (23.2%) earning less than \$25,000 per year, and slightly over 7% earning over \$100,000 per year. At the time of the study, the average age of adoptive mothers in this sample was 52.32 years and the average age of adoptive fathers was 53.5 years. Nearly three fourths (73.7%) of the adoptive mothers in the survey were Caucasian with another quarter (22.6%) being African American. Hispanic/Latino and other multiracial adoptive mothers made up less than 4% of the sample. Nearly 8 in 10 adoptive fathers were Caucasian (79.6%) with approximately 1 in 8 being African American (12.0%).

While approximately 3 in 10 (30.6%) adoptive mothers had a high school diploma or less, over 4 in 10 (42.5%) had some college or technical training, and another quarter (26.7%) had a bachelor's degree or advanced degree. Education levels of the adoptive fathers followed a similar pattern. Over a quarter (28.0%) of adoptive fathers in the sample had a high school diploma or less, over one third (36.0%) had some college or technical training, and over one third (36.0%) had a bachelor's or advanced degree. The majority (61.2%) of the adoptive mothers in the sample were employed either full or part time. Nearly all (82.2%) of the adoptive fathers were employed full or part time, as well. As a result of this analysis, it should be noted that this sample is biased in favor of older Caucasian adoptive parents with higher levels of education, whose adolescent Caucasian adopted children were first placed in their adoptive homes at an older age, who were in more placements, and who had experienced more types of maltreatment.

Table 5. Parental Characteristics Families Included in Study for Data Reported at Wave 2

<u>Married?</u>		<u>Annual Household Income</u>		<u>Race/Ethnicity</u>		
Yes	101 (69.7)	N=125				
No	44 (30.3)	<\$25,000	29 (23.2)			
		\$25,000-\$50,000	47 (37.6)		<u>Adoptive Mother</u>	<u>Adoptive Father</u>
		\$50,001-\$100,000	40 (32.0)	Caucasian	101 (73.7)	86 (79.6)
		>\$100,000	9 (7.3)	Hispanic/Latino	3 (2.2)	7 (6.5)
		M=\$53,509		African American	31 (22.6)	13 (12.0)
		SD=\$35,913		Other/Multiracial	2 (1.5)	2 (1.9)
					n=136	n=108
<u>Age at Time of Survey</u>						
<u>Adoptive Mother</u>		<u>Adoptive Father</u>		<u>Highest Level of Education</u>		
					<u>Adoptive Mother</u>	<u>Adoptive Father</u>
<40	6 (4.3)	9 (8.7)		<High School	6 (4.5)	8 (9.0)
40's	51 (36.9)	31 (30.1)		High School/GED	35 (26.1)	17 (19.1)
50's	56 (40.6)	42 (40.8)		Technical Training	6 (4.5)	7 (7.9)
60's	20 (14.5)	14 (13.6)		Some College/AA	51 (38.1)	25 (28.1)
70's	4 (2.6)	5 (4.8)		Degree		
>80	0	2 (1.9)		Bachelor's Degree	24 (17.9)	19 (21.3)
N=138		n=103		Master's/PhD	12 (9.0)	13 (14.6)
M=52.32 yrs		M=53.29 yrs.			n=134	n=89
SD=8.35		SD=10.27				
<i>Parental Demographic Characteristics (Wave 2 Both Parents and Eldest Child completed survey)</i>						
<u>Current Employment Status</u>						
		<u>Adoptive Mother</u>		<u>Adoptive Father</u>		
Stay at home parent		33 (24.6)		2 (2.7)		
Unemployed, but looking		2 (1.5)		1 (1.1)		
Employed part-time		15 (14.2)		2 (2.7)		
Employed full-time		67 (50.0)		72 (80.0)		
Retired		13 (9.7)		13 (13.4)		
		n=134		n=89		

Data Analysis

Descriptive statistics.

Table 6 presents the descriptive data for the child factor predictor variables used in the study. The children who had completed the survey averaged 15.96 years of age at the time of the study (SD=1.58) and were placed in their adoptive homes at a mean age of 5.0 years (SD=4.31). Children in the study had experienced an average of 2.12 (SD=1.22) types of maltreatment. Children in this sample had a mean perceived stress score of 26.80 (SD=7.52). Child Perceived Stress will be discussed further in the discussion of family predictor variables.

Table 6: Descriptive Data for Child Predictor Variables Used in the Study
N=146

	Mean	Standard Deviation	Range
Child Factors			
Child Age	15.96	1.58	11.68-19.55
Number of Maltreatment Types	2.12	1.22	0-4
Placement Age	5.00	4.31	0-14.92
CBCL for Children 6-18 Parent Report	33.51	31.60	0-137
Teen CBCL Youth Self Report	65.22	28.35	7-180
Child Perceived Stress	26.80	7.52	10-44

Table 7 reports the results of adoptee's scores on the CBCL for children aged 6 to 18. These instruments have been normed on a national sample that provides scores both for youngsters who have not been referred for treatment and for those who have been receiving mental health treatment. Normed mean scores on total problems for nonreferred populations were 22.8 for females and 35.2 for males, and for referred populations, 63.4

for females and 63.5 for males. Also, in the national sample, males scored higher than females in externalizing behaviors for both clinical and nonclinical samples, whereas females scored higher than males for internalizing behaviors (Achenbach & Rescorla, 2001).

The mean total problems scores in the current study were found to be 35.27 for females and 32.27 for males, with 33.51 as the overall average score. As in the national sample, the females in the study sample had a higher score on the internalizing subscale; however, in this study, females also scored slightly higher than males on externalizing behaviors and scored higher on the total problems score. For all scores, with the exception of the males total problem scores, the adoptees in this study had scores that fell between the clinical and nonclinical norms in the population at large. These findings are consistent with other adoption studies (Brodzinsky, 1993; Rosenthal & Groze, 1991; Rosenthal & Groze, 1994) that showed many adoptees had mean scores on the CBCL between the means for referred and non-referred populations. The total problem scores for males were lower than the normed score for the general population.

Table 7. Comparison of CBCL Scores Parent Report (children aged 6 to18) n=146

	<i>Normed Clinical Score</i>	<i>Normed Clinical Score</i>	<i>Normed NonClinical Score</i>	<i>Normed NonClinical Score</i>	<i>Adoptees in Study</i>	<i>Adoptees in Study</i>
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Internalizing Behaviors</i>	14.5	18.3	6.1	6.8	5.4	8.0
<i>Externalizing Behaviors</i>	22.9	20.8	7.8	7.0	10.3	11.7
<i>Total Problems Scores</i>	63.5	63.4	35.2	22.8	32.27	35.27

Table 8 reports the results of the scores on the Youth Self Report (YSR) for children aged 6 to 18. Scores from the YSR were used in an additional regression model when examining the dependent variable, Child's Perception of the parent-child relationship. This was done so that the adoptee's perspective on his /her level of behavior problems could be compared directly with his or her perception of the parent-child relationship. In the national sample, mean scores for non-referred populations were 37.8 for females and 33.4 for males, and for referred populations, mean scores were 59.4 for females and 54.0 for males (Achenbach & Rescorla, 2001). In the national sample, as with the CBCL, females scored higher than males on internalizing behaviors for both clinical and nonclinical populations. However, although males scored higher than females on externalizing behaviors in the clinical sample, females scored slightly higher than males on externalizing behaviors in the nonclinical sample. Mean scores on the YSR in this sample were 68.0 for females and 62.7 for males, with an overall mean score of 64.14. This score is higher than for both the referred and non-referred populations in the national sample. This indicates that adoptees in this sample saw themselves as having more total problems than the larger group of youngsters who had not been adopted, regardless of whether they were receiving mental health treatment. The expected pattern of females scoring higher on internalizing behaviors was seen in this adoption sample; however the males and females had equal mean scores on externalizing behavior.

Table 8. Comparison of YSR Scores (children aged 6 to18) n=146

	<i>Normed Clinical Score</i>	<i>Normed Clinical Score</i>	<i>Normed NonClinical Score</i>	<i>Normed NonClinical Score</i>	<i>Adoptees in Study</i>	<i>Adoptees in Study</i>
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Internalizing Behaviors</i>	14.2	18.7	8.4	11.6	10.9	15.1
<i>Externalizing Behaviors</i>	17.7	16.5	9.7	9.9	17.8	17.8
<i>Total Problems Score</i>	54.0	59.4	33.4	37.8	62.7	68.0

Table 9 reports descriptive information for family process and family structural factors used in this study. Scores in this sample on the Family Functioning Style scale ranged from 47 to 129 with higher scores indicating a greater number of family strengths as reported by the adoptive parents. Only one family rated in the lower 50th percentile, 34 (23.2%) families rated themselves between the 50th and 75th percentiles and the remaining 111 (76.0%) reported their families scoring between the 75th and 100th percentiles. The Family Functioning Style scale (Dunst, Trivette, & Deal 1988) has been used in previous research (Nelson, 2003; Pirila, Van der Meere, Seppaen, et al., 2005); Sexton, Snyder, Reheams, Barron-Sharp, & Perez, 1991), and data has been published concerning the reliability and validity of the scale (Trivette & Dunst, 1990). However, none of the published studies reported Family Functioning Style scale total or mean scores, and this author was unable to locate any published norms or reports of such scores. Therefore, it is not possible to compare scores from this sample with any other groups.

Scores in this sample on the Communicative Openness measure ranged from 11 to 30 with a higher score indicating more Communicative Openness as reported by the

adoptive. None of the children scored their families in the lowest quartile; nine (6.2%) reported that their families fell between the first and second quartiles; 25 (17.8%) reported that their families fell between the second and third quartiles, and the remaining 109 (76.0%) reported their families in the top quartile on their level of communication openness. There are no national norms for comparison for Communicative Openness since this scale was created specifically for use in this study. Families in this study reported a relatively low child care burden ($M=1.50$), indicating that the adoptees had ample access to adults to parent them. Over one third (36.3%) of the families in this sample had only one child in the household and nearly two thirds (64.4%) had two or less children. Families also reported relatively low levels of Structural Openness; nearly two thirds (63%) of the adoptees reported that there was no contact of any sort between members of the adoptive family and members of the child's birth family.

Table 9: Descriptive Data for Family Predictor Variables Used in the Study n=146

	Mean (SD)	Median	Mode	Range
Family Process Factors				
Parent Perceived Stress	21.50 (5.82)	21.00	16.00	10-41
Communicative Openness	25.35 (4.41)	26.00	30.00	11-30
Family Style Functioning Scale	106.85 (14.44)	108.00	118	47-129
Family Structural Factors				
Structural Openness	No= 92 (63%) Yes = 54(37%)			
Child Care Burden (TopCoded)	1.50 (1.05)			.5-5.0

Table 10 reports Perceived Stress scores for both adoptees and adoptive parents in the sample and compares these scores with findings from other studies (Andreeou, Alexopoulos, Lionis, Varogli, Gnardellis, Chrousos, & Darviri, 2011; Cohen et al., 1983; Cohen, 1994; Orucu & Demir, 2008; Roberti, Harrington & Storch, 2006; Yu & Ho, 2010) both in the U.S. and overseas. In all groups, females reported higher levels of perceived stress than did males. This finding was the same in the current sample of adoptees and adoptive parents. It also appears that both adoptees and their adoptive parents reported substantially higher levels of perceived stress than was found in any of the other studies.

Table 10. Comparison of Perceived Stress Scores for study participants with findings for other groups. N=146

	Males M (SD)	Females M(SD)	Total M(SD)
Adoptive Mothers in study		21.9(5.8)	
Adoptive Fathers in study	20.4 (6.1)		
Adoptive Parent composite			21.5 (5.8)
Adoptees in study	25.4 (7.3)	28.66(7.4)	26.8 (7.5)
National Norm-Adults	12.1 (5.9)	13.7 (6.6)	
Greek adults	16.6 (6.36)	18.4 (6.4)	
US group of Undergrads	17.4 (6.1)	18.4 (6.5)	
Turkish group of Undergrads	18.12 (6.5)	20.1 (7.0)	18.9 (6.8)

Table 11 displays the descriptive data for the dependent variables used in the study. PSAT had a mean score of .426 (SD=.574). As noted previously, because of the transformation used, a lower score means greater satisfaction with the adoption. Parent's Perception of the parent-child relationship had a mean score of 23.05 (SD=4.91) while the Child's Perception of the parent-child relationship had a mean score of 24.76 (SD=3.62).

Table 11: Descriptive Data for Dependent Variables Used in the Study

	Mean	Standard Deviation	Range
Parental Satisfaction with the Adoption Transformed (PSAT)	.426	.574	0-1.61
Parental Perception of the Quality of the Parent-Child Relationship	23.05	4.91	9-28
Child Perception of the Quality of the Parent-Child Relationship	24.76	3.62	13-28

Bivariate analysis. Table 12 presents the bivariate correlations between the independent and dependent variables used in the study. The three dependent variables were moderately correlated with each other at a significance level of $p < .01$. PSAT was negatively correlated with both the Parent's Perception of the parent-child relationship ($r = -.573$) and the Child's Perception of the parent-child relationship ($r = -.306$), with a lower level of PSAT representing a higher level of parental satisfaction. The Parent's Perception of the parent-child relationship was significantly ($p < .01$) and moderately correlated with the Child's Perception of the parent-child Relationship ($r = .546$). A paired samples t-test revealed that the adopted child had a significantly more positive perception of the parent-child relationship than did the adoptive parent ($t = -4.643, 143, p < .000$).

Each of the three dependent variables had a different relationship with the independent variables. The bivariate relationships between each of the dependent variables with the independent variables are described in the following sections.

Table 12. Correlation Matrix: Variables Used In Models

	Parental Satis_T	Adop Par Perc Rel	Ch Percep Relationship	Child Age	MalTx Hx	Plcmt Age	CBCL	YSR	Ch Perc Stress	AP Perc Stress	Commun Openness	Family func Style	Structural Openness	Ch Care Burden
ParentalSatis Tranformed	1	-.576**	-.317**	-.008	.167*	-.040	.515**	.300**	.269*	.048	-.348**	-.147	.030	-.062
AP Percep Relationship		1	.552*	-.171*	-.169*	-.096	-.692**	-.308**	-.382**	-.186*	.357**	.356**	-.011	.064
Ch Percep Relationship			1	-.203*	-.160*	-.182*	-.342**	-.400**	-.509**	-.249**	.386**	.248**	.035	.049
Child Age				1	.057	.137	-.080	-.033	-.022	.048	-.031	-.221**	-.005	-.002
MalTx Hx					1	.389**	.146	.035	.109	-.138	-.081	-.067	.074	-.019
Plcmt Age						1	-.032	-.032	.111	-.148	.038	-.084	.142	-.001
CBCL							1	.395**	.406**	.237**	.253**	-.126	-.028	-.078
YSR								1	.602**	.224*	-.206*	-.086	-.123	-.022
Ch Perc Stress									1	.148	-.227**	-.163	-.079	-.054
AP Perc Stress										1	-.140	-.235**	-.154	-.025
Commun Openness											1	.033	.057	-.004
Family func Style												1	-.110	.022
Structural Openness													1	.020
Ch Care Burden														1

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

Parental Satisfaction with the Adoption Transformed (PSAT).

Child Factors. PSAT moderately and significantly ($p < .01$) correlated ($r = .515$) with the CBCL as well as with the Youth Self Report (YSR) ($r = .300$) indicating that the higher the child's score on either the CBCL or the YSR, the more dissatisfied (less satisfied) the adoptive parent was with the adoption. PSAT is also moderately correlated with the Child's Perceived Stress ($r = .269$, $p < .01$), indicating that the higher the perceived stress of the adopted child, the more dissatisfied (less satisfied) the adoptive parent is with the adoption. PSAT is slightly correlated with the Child's Maltreatment History ($r = .167$, $p < .05$), indicating that the more severe the child's history of maltreatment, the more dissatisfied (less satisfied) the adoptive parent is with the adoption. No significant correlations were found between PSAT and the child factors of Child's Age at the time of survey ($r = .008$, $p = .919$) or the child's Placement Age when first placed with the adoptive family ($r = -.040$, $p = .631$).

Family Process Factors. One family process factor, Communicative Openness was moderately negatively correlated ($r = -.348$, $p < .01$) with PSAT, indicating that parents are more satisfied (less dissatisfied) with the adoption when there is greater Communicative Openness. No significant correlations were found between PSAT and the family process factors of the Adoptive Parent Perceived Stress ($r = .048$, $p = .569$) or Family Functioning Style ($r = -.147$, $p = .080$).

Family Structural Factors. Finally, no significant correlations were found between PSAT and the family structural factors of Structural Openness ($r = .030$, $p = .716$) or Child Care Burden ($r = -.062$, $p = .456$).

Parent's Perception of the parent-child relationship.

Child Factors. The CBCL score was strongly negatively correlated with the Parent's Perception of the parent-child relationship ($r = -.692, p < .01$). The child's score on the YSR ($r = -.308, p < .01$) and the Child's Perceived Stress ($r = -.382, p < .01$) were moderately negatively correlated with the Parent's Perception of the parent-child relationship. The child's maltreatment history ($r = -.169, p < .05$) and age at the time of the survey ($r = -.171, p < .05$) were weakly negatively correlated with the Parent's Perception of the parent-child relationship. These indicate that the parent has a more positive perception of the parent-child relationship when the child (a) is younger, (b) has a less severe maltreatment history, (c) has fewer behavior problems, and (d) has lower levels of stress. No significant correlations were found between the Parent's Perception of the parent-child relationship and the child's Placement Age ($r = -.096, p = .249$).

Family Process Factors. The Parent's Perception of the parent-child relationship was moderately positively correlated with Communicative Openness ($r = .357, p < .01$) and with Family Functioning Style ($r = .356, p < .01$), indicating that more communicative openness and a higher level of family functioning were positively associated with the adoptive parent feeling more positive about the parent-child relationship. Parents who have more communication openness have a more positive parent-child relationship; likewise, parents with higher family functioning style also perceive their parent-child relationship to be more positive. Adoptive Parent's Perceived Stress ($r = -.186, p < .05$) was weakly negatively correlated with the Parent's Perception of the parent-child relationship. Lower levels of parental stress are associated with a more positive perception of the parent-child relationship by the adoptive parent.

Family Structural Factors. No significant correlations were found between the Parent's Perception of the parent-child relationship and Structural Openness ($r = -.011$, $p = .891$) or Child Care Burden ($r = .064$, $p = .439$).

Adoptive parents' have a more positive perception of the parent-child relationship when the child is younger at the time of the survey, has experienced less maltreatment prior to placement, and when the child has a lower score on either the CBCL and/or the YSR. Higher levels of communication openness and family functioning are associated with a more positive perception of the parent-child relationship. On the other hand, higher levels of parent and child perceived stress are associated with less positive parental perceptions of the parent-child relationship.

Child's Perception of the parent-child relationship.

Child Factors. All but one of the child related factors proved to be significantly associated with the child's perception of the parent-child relationship. Three child factors were found to be moderately negatively correlated with the Child's Perception of the parent-child relationship – the child's scores on the CBCL ($r = -.342$, $p < .01$) and the YSR ($r = -.400$, $p < .01$), as well as the child's perceived stress ($r = -.509$, $p < .01$). Higher scores on either the CBCL or YSR and higher levels of child stress are associated with less positive perceptions of the parent-child relationship on the part of the adoptee. Adoptees who are more highly stressed and who have more behavioral problems have a less positive perception of the parent-child relationship. The child's Age at the time of the survey ($r = -.203$, $p < .05$), and the child's Placement Age ($r = -.182$, $p < .05$) were weakly negatively correlated with the child's perception of the parent-child relationship. The correlation between the child's Maltreatment History and his or her perception of the parent-child

relationship approached significance ($r=-.160$, $p=.054$). Adoptees who were older at the time of the study, or were placed at an older age had a less positive perception of the parent-child relationship.

Family Process Factors. Moderately positive correlations were found between the Child's Perception of the parent-child relationship and the family process factors of Communicative Openness ($r=.386$, $p<.01$) and Family Functioning Style ($r=.248$, $p<.01$). Adoptee's have a more positive perception of the parent-child relationship in families with more communication openness and with more positive family functioning styles. The family process factor of the adoptive parent's perceived stress is moderately negatively correlated with the adoptee's perception of the parent-child relationship ($r=-.249$, $p<.01$). Adoptees have a less positive perception of the parent-child relationship when the parents are more highly stressed.

Family Structural Factors. No significant correlations were found between the Child's Perception of the parent-child relationship and Structural Openness ($r=.035$, $p=.674$) or Child Care Burden ($r=.049$, $p=.560$).

Multivariate analysis.

Multiple regression was selected as the appropriate statistical test to use, because it provides for the ability to estimate the effect of each independent variable on a dependent variable when the dependent variable is continuous (Cohen, Cohen, West, & Aiken, 2003). All of the assumptions upon which the use of multiple regression was based were evaluated and none were found to be violated. Multicollinearity was well within the recommended range of $r=.9$, as none of the variables were correlated at or above $r=.7$. Outliers were assessed using the Mahalanobis distance and Cook's D

statistics, and none of the cases were found to exceed the recommended critical values (Stevens, 1984).

Multiple regression Ordinary Least Squares (OLS), hierarchical regression with three entry blocks, was used to test each of the hypotheses. Use of the hierarchical as opposed to single entry method allowed for the examination of specific variance accounted for by each block of independent variables, child characteristics, family process factors, and family structural factors (Cohen, et al., 2003). Identification of significant F value changes after each entry block allowed for assessment of the goodness of fit of the model by determining whether each block's addition produced a significant change in the amount of variance explained. The Beta coefficients and significance levels for each variable in each of the final models allowed for identification of the specific variables that accounted for the variance. This allows for comparison to determine whether each of the outcome variables is significantly associated with the same covariates. The results of each of the multivariate analyses are discussed below for each of the hypotheses.

Parental Satisfaction with the adoption transformed (PSAT).

The first research question is, "What child factors, family process factors, and family structural factors are associated with parental satisfaction with the adoption?"

An Ordinary Least Squares hierarchical regression analysis was used to examine the relationship between the independent variables and the dependent variable Parental Satisfaction with the adoption transformed (PSAT). Following are the hypotheses. Results of this analysis are reported in Table 13.

Hypothesis 1.1 states that more positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with greater parental satisfaction with the adoption.

As can be seen in Table 13, the final regression model was significant for PSAT at $R^2=.348$ $F(10,134)=7.167$, $p<.000$. Child factors explained 28.7% of the variance in PSAT $R^2=.287$ $F(5, 139)=11.1173$, $p<.000$, and family process factors explained an additional 6.1% of the variance $R^2 \Delta= .061^*$ at $F(8,136)= 9.055$, $p<.000$.

A single child factor of the CBCL score ($B=.008$, $p<.000$) accounted for the majority of the variance explained in this model. The child's Age at survey ($B=.003$), Maltreatment History ($B=.045$), the child's Age at Placement ($B=-.013$), and the Child's Perceived Stress ($B=.004$) did not add significantly to an explanation of the variance.

Hypothesis 2.1 states that more positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent perceived stress) will be associated with a higher level of parental satisfaction with the adoption.

One family process factor was significantly associated with PSAT in the final model; that is Communicative Openness ($B=-.028$, $p<.01$). The family process factors that did not significantly add to an explanation of the variance in PSAT in the final model were the Parent Perceived Stress ($B=-.012$) and the Family Functioning Style score ($B=-.004$).

Hypothesis 1.3 states that family structural characteristics (structural openness and child care burden) will not be associated with parental satisfaction with the adoption.

Adding family structural factors did not result in any additional significant explanation of the variance in the dependent variable ($R^2 \Delta = .001$ ns). Neither the family structural factor of Structural Openness ($B = -.037$) nor Child Care Burden ($B = -.004$) were significant predictors of parental satisfaction with the adoption. Results of this analysis are displayed in Table 13.

Thus, in the final model, the parent report of the CBCL score had a positive effect on Parental Satisfaction with the Adoption Transformed (PSAT) and Communicative Openness had a negative effect on PSAT. Adoptive parents are more satisfied with the adoption when the child has fewer behavioral problems and the family has greater communication openness.

Table 13. Results of OLS regression with Parental Satisfaction with the Adoption Transformed (PSAT) as the Dependent Variable and Child Factors, Family Process Factors and Family Structural Factors Included, n=145

Predictor Variables	Model 1			Model 2			Model 3		
	B	SE(B)	β	B	SE(B)	β	B	SE(B)	β
Child Factors									
Constant	-.269	.448		1.405*	.712		1.359	.730	
Child age	.012	.026	.032	.003	.026	.008	.003	.026	.009
CBCL	.009***	.001	.461	.008***	.001	.445	.008***	.001	.443
Maltx history	.061	.037	.131	.045	.036	.095	.045	.037	.095
Placement age	-.013	.011	-.098	-.013	.010	-.096	-.013	.010	-.099
Child perceived stress	.006	.006	.080	.003	.006	.043	.004	.006	.046
Family Process Factors									
APar perceived stress				-.013	.007	-.131	-.012	.008	-.126
Communicative Openness				-.028***	.009	-.225	-.028**	.009	-.226
Family Functioning Style				-.004	.003	-.103	-.004	.003	-.098
Family Structural Factors									
Structural Openness							-.037	.086	.031
Child Care Burden							-.004	.038	-.008
R ² Δ=					.061**			.001	
	R ² = .287; F(5, 139)=11.173***			R ² = .348; F(8, 136)=9.055***			R ² = .348; F(10, 134)=7.167***		

P<.05*; p<.01**; p<.001***

Parent Perception of the parent-child relationship.

The second research question was, “What child factors, family process factors, and family structural factors are associated with parental perception of the quality of the parent –child relationship?”

As was discussed earlier, an Ordinary Least Squares hierarchical regression analysis was used to examine the relationship between the independent variables and the dependent variable Parental Perception of the parent-child relationship. Following are the hypotheses. Results of this regression are reported in Table 14.

Hypothesis 2.1 More positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive parental perception of the quality of the parent-child relationship.

As reported in Table 14, the final regression model was significant for Parent Perception of the parent-child relationship at $R^2=.633$ $F(10,135)=22.347$, $p<.000$. Child factors explained 54.8% of the variance in Parent Perception, the family process factors explained an additional 7.5% of the variance at $R^2 \Delta= .075$, $p<.000$ at $F(8,137)=28.341$.

Two child factors contributed to the variance explained in this model – Child Age at survey ($B=-.487$, $p<.000$) and the child’s score on the CBCL ($B=-.096$, $p<.000$). The child’s Maltreatment History ($B=.000$), Placement Age ($B=-.078$), and Perceived Stress ($B=-.035$) did not significantly add to an explanation of the variance.

Hypothesis 2.2 states that more positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent

perceived stress) will be associated with a more positive parental perception of the quality of the parent-child relationship.

A significant relationship was found between family process factors and Parent Perception of the parent-child relationship. Two family process factors significantly contributed to the explanation of the variance – Communicative Openness ($B=.195$, $p<.000$) and Family Functioning Style ($B=.079$). The family process factor that did not contribute to an explanation of the variance in the Parent's Perception of the parent-child relationship was Parent's Perceived Stress ($B=.039$).

Hypothesis 2.3 stated that family structural characteristics (structural openness and child care burden) will not be associated with the parent's perception of the quality of the parent-child relationship.

Adding family structural factors did not result in any additional significant explanation of the variance in the dependent variable ($R^2 \Delta=.000$ n.s.). Neither the family structural factor of Structural Openness ($B=-.003$) nor the Child Care Burden ($B=.034$) added to the explanation of the variance in the Parent's Perception of the parent-child relationship. Results of this analysis are reported in Table 14.

Thus, in the final model, the child's current age and score on the CBCL had a negative effect on the Parent's Perception of the parent-child relationship, and Communicative Openness and Family Functioning Style had a positive effect on the Parent's Perception of the parent-child relationship. Adoptive parents rated the parent-child relationship more positively when the child was younger and had fewer behavior problems. They also rated the relationship more positively when there was more communication openness and a higher level of family functioning.

Table 14. Results of OLS regression with Parental Perception of the Quality of the Parent-Child Relationship as the Dependent Variable and Child Factors, Family Process Factors, and Family Structural Factors Included, n=146

Predictor Variables	Model 1			Model 2			Model 3		
	B	SE(B)	β	B	SE(B)	β	B	SE(B)	β
Child Factors									
Constant	39.677***	3.047		21.177***	4.624		21.126***	4.745	
Child age	-.671***	.179	-.216	-.490**	.170	-.157	-.489**	.171	-.157
CBCL	-.103***	.010	-.665	-.096***	.009	-.621	-.096***	.010	-.620
Maltx Hx	-.089	.252	-.022	.000	.236	.000	.000	.237	.000
Placement age	-.076	.071	-.067	-.078	.067	-.069	-.078	.068	-.069
Child perceived stress	-.070	.041	-.107	-.035	.039	-.053	-.035	.039	-.053
Family Process Factors									
APar perceived stress				.039	.048	.047	.039	.049	.046
Communicative Openness				.195**	.058	.185	.195**	.059	.185
Family Functioning Style				.079***	.019	.233	.079***	.019	.233
Family Structural Factors									
Structural Openness							-.003	.554	.000
Child Care Burden							.034	.247	.007
R ² Δ=					.075***			.000	
				R ² = .548; F(5, 140)=33.973***		R ² = .623; F(8, 137)=28.431 ***			
						R ² =.623; F(10, 135)=22.347***			

P<.05*; p<.01**; p<.001***

Child Perception of the parent-child relationship.

The third research question was, “What child factors, family process factors, and family structural factors are associated with the child’s perception of the quality of the parent-child relationship?” To answer this question, two OLS hierarchical regression analyses were used to examine the relationship between the independent variables and the dependent variable Child’s Perception of the parent-child relationship. Following are the hypotheses. Results are also displayed in Table 15 when the YSR score was used and Table 16 when the CBCL score was used.

Hypothesis 3.1 states that more positive child factors (younger current age, less severe maltreatment history, younger age at placement, lower child perceived stress, and fewer behavior problems) will be associated with a more positive child perception of the quality of the parent-child relationship.

As reported in Table 15, the final regression model, including YSR as a child factor, was significant in predicting the Child’s Perception of the parent-child relationship at $R^2=.440$ $F(10,134)=10.531$, $p<.000$. The family process factors explained an additional 9.4% of the variance $R^2 \Delta= .094$, $p<.000$ at $F(8,136)=13.316$, $p<.000$.

While child factors constituted the majority of the variance explained in this model $R^2=.345$ $F(5,149)=14.665$, $p<.000$, only two were significant - Child’s current Age ($B=-.370$, $p<.05$) and the Child’s Perceived Stress ($B=-.158$, $p<.000$). The YSR ($B=-.015$), Maltreatment History ($B=-.178$), and the child’s Age at Placement ($-.112$) did not significantly add to the explanation of the variance.

Hypothesis 3.2 states that more positive family process factors (higher communicative openness, higher family adaptive functioning style, and lower parent

perceived stress) will be associated with a more positive child perception of the quality of the parent-child relationship.

Two family process factors significantly added to the explanation of variance in the Child's Perception of the parent-child relationship when the YSR was used as a child characteristic – Parent's Perceived Stress ($B=-.086$, $p<.05$) and Communicative Openness ($B=.196$, $p<.000$). The remaining family process factor of Family Functioning Style ($B=.021$) did not make a significant contribution to the explanation of the variance in the Child's Perception of the parent-child relationship.

Hypothesis 3.3 states that family structural characteristics (structural openness and child care burden) will not be associated with the child's perception of the quality of the parent-child relationship.

Adding family structural factors did not result in any additional significant explanation of the variance in the dependent variable ($R^2 \Delta=.001$ n.s.) when YSR was used. Neither the family structural factor of Structural Openness ($B=-.109$) with YSR nor Child Care Burden ($B=.083$) added to the explanation of the variance in the Child's Perception of the parent-child relationship. Results of this analysis are displayed in Table 15.

Thus, in the final model when CBCL YSR was used to characterize the child's level of behavior problems, adoptees who were younger and had lower levels of perceived stress had a more positive perception of the parent-child relationship. Adoptees also rated the parent-child relationship more positively when the family had lower levels of parental stress and higher levels of communication openness.

Table 15. Results of OLS regression with Child Perception of the Parent-Child Relationship as the Dependent Variable and Child Factors (with YSR), Family Process Factors, and Family Structural Factors Included, n=145

Predictor Variables	Model 1			Model 2			Model 3		
	B	SE(B)	β	B	SE(B)	β	B	SE(B)	β
Child Factors									
Constant	39.575***	2.697		31.351***	4.152		31.383***	4.623	
Child age	-.464**	.158	-.204	-.369*	.152	-.162	-.370*	.153	-.162
YSR	-.021	.011	-.168	-.015	.010	-.118	-.015	.011	-.119
Maltx Hx	-.217	.220	-.073	-.180	.209	-.061	-.178	.210	-.060
Placement age	-.083	.063	-.099	-.113	.060	-.136	-.112	.060	-.135
Child perceived stress	-.190***	.042	-.397	-.159**	.040	-.332	-.158***	.040	-.331
Family Process Factors									
APar perceived stress				-.084*	.043	-.137	-.086*	.044	-.140
Communicative Openness				.196***	.052	.253	.196***	.052	.253
Family Functioning Style				.022	.017	.088	.021	.017	.086
Family Structural Factors									
Structural Openness							-.109	.498	-.015
Child Care Burden							.083	.221	.024
R ² Δ=					.094***			.001	
	R ² = .345; F (5, 149)=14.665***			R ² = .439; F(8, 136)=13.316***			R ² = .440; F(10, 134)=10.531***		

P<.05*; p<.01**; p<.001***

Table 16 shows the association with the Child's Perception of the parent-child relationship when all factors are the same, except that the CBCL score has been substituted for the YSR score in the model. The final regression model including CBCL score as a child factor was significant in predicting the Child's Perception of the parent-child relationship at $R^2=.435$ $F(10,135)=10.392$, $p<.000$. Child factors explained 34.5% of the variance R^2 at $F(R^2 = .345$ $F(5, 140) =14.469$, $p<.000$, while family process factors explained an additional 8.9% of the variance at $R^2=.434$ $F(8, 137)= 13.155$, $p<.000$.

While child factors constituted the majority of the variance explained in this model, only two of those factors were significant - Child's current Age ($B=-.380$, $p<.05$) and the Child's Perceived Stress ($B=-.174$, $p<.000$). The CBC score ($B=-.011$) Maltreatment History ($B=-.115$), and the child's Age at Placement ($-.118$) did not significantly add to the explanation of the variance. Only one family process factor significantly added to the explanation of variance in the Child's Perception of the parent-child relationship when the CBCL was used as a child characteristic – Communicative Openness ($B=.198$, $p<.000$). The remaining two family process factors Family Functioning Style ($B=.024$) and Parent's Perceived stress ($B=-.083$) did not make a significant contribution to the explanation of the variance in the Child's Perception of the parent-child relationship.

Thus in the final model when CBCL Parent Report was used to characterize the child's level of behavior problems, adoptees who were younger and had lower levels of perceived stress had a more positive perception of the parent-child relationship. Adoptees also rated the parent-child relationship more positively when the family had higher levels of communication openness.

Table 16. Results of OLS regression with Child Perception of the Parent-Child Relationship as the Dependent Variable and Child Factors (with CBCL), Family Process Factors and Family Structural Factors Included, n=146

Predictor Variables	Model 1			Model 2			Model 3		
	B	SE(B)	β	B	SE(B)	β	B	SE(B)	β
Child Factors									
Constant	39.363***	2.709		31.000***	4.186		30.966***	4.293	
Child age	-.487*	.159	-.212	-.381*	.154	-.166	-.380*	.155	-.165
CBCL	-.021	.009	-.184	-.012	.009	-.100	-.011	.009	-.098
Maltx Hx	-.111	.224	-.037	-.115	.213	-.039	-.115	.215	-.039
Placement age	-.081	.064	-.097	-.108	.060	-.129	-.108	.061	-.129
Child perceived stress	-.204***	.036	-.424	-.174***	.035	-.362	-.174***	.035	-.361
Family Process Factors									
APar perceived stress				-.083	.043	-.133	-.083	.044	-.134
Communicative Openness				.197***	.053	.254	.198***	.053	.254
Family Functioning Style				.022	.017	.088	.022	.018	.087
Family Structural Factors									
Structural Openness							-.006	.502	.001
Child Care Burden							.078	.223	.023
R ² Δ=					.089***			.001	
	R ² = .345; F(5, 140)=14.769***			R ² = .434; F(8, 137)=13.155***			R ² = .435; F(10, 135)=10.392***		

P<.05*; p<.01**; p<.001***

Comparison of contributors to the variance in the three dependent variables.

The final research question was, “What differences exist among the factors that are associated with parental satisfaction with the adoption, parental perception of the quality of the parent-child relationship, and the child’s perception of the quality of the parent-child relationship?”

The sign, direction, significance levels, and strength of the standardized Beta weights for each of the independent variables found to contribute a significant level of the variance in each of the preceding regression models was examined to determine whether there were differences in the child and family process factors that contribute to the variance in each of the outcomes. Standardized Betas were used in this analysis so that the contribution of each of the independent variables could be compared across dependent variables. Following are the hypotheses. Results are reported in Table 17.

Table 17. Comparison of standardized Beta's of significant predictors for each of the dependent variables studied.

Variable	Parental Satisfaction with the Adoption Transformed (PSAT)	Parental Perception of the Quality of the Parent-Child Relationship	Child Perception of the Quality of the Parent-Child Relationship (with YSR)	Child Perception of the Quality of the Parent-Child Relationship (with CBCL)
Child Age at study		-.157**	-.162*	-.380*
CBCL	.443***	-.620***		
Child Perceived Stress			-.331***	-.361***
Adoptive Parent Perceived Stress			-.140*	.
Communicative Openness	-.226**	.185**	.253***	.254***
Family Functioning Style		.233***		

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

Hypothesis 4.1 was that adoptive parents' satisfaction with the adoption will be positively associated with fewer child behavior problems and more communicative openness.

Because this model used a transformation for parental satisfaction with the adoption (PSAT) that resulted in it being reversed, interpretations of the dependent variable are in the opposite direction. Thus PSAT was positively associated with the child's CBCL score ($\beta = .443$, $p < .000$) and negatively associated with Communicative Openness ($\beta = -.226$, $p < .000$), which means that there is greater parental satisfaction with

the adoption when the child has fewer behavior problems (lower CBCL scores) and when there were higher levels of communicative openness in the family. A decrease of one standard deviation in the score on the Child Behavior Checklist (31.60) will result in an increase of .443 standard deviations (.574) in parental satisfaction with the adoption. Also, an increase of one standard deviation (4.41) in Communicative Openness will result in an increase of .226 standard deviations in parental satisfaction (.574). Parental satisfaction is higher when the child is younger and when there is greater communication openness. This is displayed in Table 17.

Hypothesis 4.2 was that adoptive parents' perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, fewer child behavior problems, more communicative openness, and higher family adaptive functioning style.

Adoptive Parents' Perception of the parent-child relationship was significantly associated with the child's Age at the time of the survey ($\beta = -.158$, $p < .01$), CBCL score ($\beta = -.620$, $p < .001$), Communicative Openness ($\beta = .185$, $p < .01$), and Family Functioning Style ($\beta = .233$, $p < .001$). In this model, an increase of one standard deviation in the child's Age at the time of the study (1.58 years), will result in a decrease of .157 standard deviation (4.91) in the Parent's Perception of the parent-child relationship. Similarly, an increase of one standard deviation in the CBCL score (31.60) will result in a decrease of .620 standard deviation (4.91) in the Parent's Perception of the parent-child relationship. When examining the role of family process factors, this model found that an increase of one standard deviation (4.41) in Communicative Openness resulted in an increase of .185 standard deviation (.491) in Parent Perception of the parent-child relationship; an increase

of one standard deviation (14.44) in Family Functioning Style resulted in an increase of .256 standard deviation (.491) in Parent Perception of the parent-child relationship. The adoptive Parent's Perception of the parent-child relationship is higher when the child is younger and has fewer behavior problems, and the family exhibits greater communication openness and a more positive family functioning style. This is displayed in Table 17.

Hypothesis 4.3 was that the adopted child's perception of the quality of the parent-child relationship will be positively associated with the child's younger current age, lower child's perceived stress, lower adoptive parent's perceived stress, and greater communicative openness.

When the YSR was used, the adopted Child's Perception of the parent-child relationship was significantly associated with the child's current Age ($\beta = -.162$, $p < .05$), the Child's Perceived Stress ($\beta = -.331$, $p < .001$), the adoptive Parent's Perceived Stress ($\beta = -.140$, $p < .05$), and Communicative Openness ($\beta = .253$, $p < .001$). In this model, an increase of one standard deviation (1.58 yrs.) in the child's current Age results in a decrease of .162 standard deviation (3.62) in the Child's Perception of the parent-child relationship; an increase of one standard deviation in the Child's Perceived stress (7.52) results in a decrease of .331 standard deviation (3.62) in the Child's Perception of the parent-child relationship; an increase of one standard deviation in the adoptive Parent's Perceived Stress (5.82) results in a decrease of .140 standard deviation (3.62) in the Child's Perception of the parent-child relationship. Also, an increase of one standard deviation (4.41) in Communicative Openness results in an increase of .253 standard deviation (3.62) in the Child's Perception of the parent-child relationship.

When the CBCL score was used to depict the child's level of behavior problems, the adopted Child's Perception of the parent-child relationship was significantly associated with the child's current Age ($\beta = -.380$, $p < .05$), the Child's Perceived Stress ($\beta = -.361$, $p < .001$), and Communicative Openness ($\beta = .254$, $p < .001$). Adoptive Parent's Perceived Stress was not associated with the Child's Perception of the parent-child relationship. In this model, an increase of one standard deviation (1.58 yrs.) in the child's current Age results in a decrease of .380 standard deviation (3.62) in the Child's Perception of the parent-child relationship; an increase of one standard deviation in the Child's Perceived stress (7.52) results in a decrease of .361 standard deviation (3.62) in the Child's Perception of the parent-child relationship; an increase of one standard deviation (4.41) in Communicative Openness results in an increase of .254 standard deviation (3.62) in the Child's Perception of the parent-child relationship.

When YSR is used to depict the child's level of behavior problems, the adoptee's perception of the parent-child relationship is more positive when the child is younger, has fewer behavior problems, and is less stressed. The adoptee also feels more positive about the parent-child relationship when the parent is less stressed and there is greater communication openness in the family. When the CBCL is used to depict the child's level of behavior problems, the adoptee's perception of the parent-child relationship is more positive when the child is younger, has fewer behavior problems, and is less stressed. The adoptee also feels more positively about the parent-child relationship when there is greater communication openness in the family.

Hypothesis 4.4 states that child factors will explain the most significant portion of the variance in parental satisfaction with the adoption, parental perception of the parent-child relationship, and child perception of the parent-child relationship.

Child factors accounted for the greatest extent of the variance explained in all four of the models – 28.7% in Parental Satisfaction with the adoption, 54.8% in Parental Perception of the parent-child relationship, and 34.5% each in Child Perception of the parent-child relationship with both YSR and CBCL. It should be noted however, that no one child factor made significant contributions to the variance in all four outcomes. The child's CBCL score was significant in Parental Satisfaction and Parental Perception of the parent-child relationship but not in the Child Perception of the parent-child relationship. The Child's current age was significant in Parent and Child Perceptions of the parent-child relationship but not in Parental Satisfaction. The child's level of Perceived Stress was significant in the Child's Perception of the parent-child relationship but not in Parental Satisfaction or in the Parent's Perception of the parent-child relationship. These findings are displayed in Table 18.

Table 18. Child and Family Process Factors Contribution to The Variance In Parental Satisfaction With The Adoption, Parent Perception of The Parent-Child Relationship, and Child Perception of The Parent-Child Relationship.

Dependent variable	Percent of variance explained by Child factors	Percent of variance explained by Family process factors	Child factors that made a significant contribution to an explanation of the variance.	Child factors that made a significant contribution to an explanation of the variance.	Child factors that made a significant contribution to an explanation of the variance.
			<i>CBCL</i>	<i>Current Age</i>	<i>Perceived Stress</i>
Parental Satisfaction with the Adoption	28.7	6.1	✓		
Parental Perception of the parent-child relationship	54.8	7.5	✓	✓	
Child Perception of the parent-child relationship YSR	34.5	9.4		✓	✓
Child Perception of the parent-child relationship CBCL	34.5	8.9		✓	✓

Power Analysis

A *post hoc* power analysis was conducted using the G*3.0.10 software program to determine whether there was sufficient statistical power in the study design to yield significant results. The analysis determined that for an OLS regression with an anticipated large effect size of 0.35, an alpha level of .01, and 11 predictor variables, a sample size of 146 (Parent's Perception of the parent-child relationship and the Child's

Perception of the parent-child relationship) yielded a statistical power level of 0.99. For a sample size of 145 (PSAT), the analysis also yielded a statistical power level of 0.99.

This meant that all variables in the models could be entered and there is enough power to identify significant results without committing a Type II error.

Summary of Findings

This study used a subsample of 146 parents and their eldest adopted child from a secondary data set of families who had adopted from a public child welfare system.

These families differed from other families in the larger data set in that the adoptive parents were (a) older, (b) more likely to be Caucasian, and (c) more highly educated. In addition, the adopted children (a) were older, (b) had been in more placements, (c) were placed in their adoptive families at an older age, and (d) had experienced a greater range of maltreatment prior to their adoptive placement.

Three dependent variables, each representing a different conceptualization of adoption outcome, were examined. Two of these outcomes characterized adoption success from the adoptive parent's point of view, while the third characterized adoption success from the point of view of the adoptee. For each of the three dependent variables, an OLS regression model was used to test the relationship between that outcome and child, family process, and family structural factors. Child factors included the child's age at the time of the study, history of maltreatment, age of placement in the adoptive home, CBCL or YSR score, and the child's perceived level of stress. The family process factors examined were the adoptive parent's perceived stress, the family functioning style, and the family's level of communication openness. Family structural factors were structural openness and child care burden.

For each outcome, it was found that the overall model was significant, and that child factors and family process factors contributed significantly to the explanation of variance in the outcome, whereas family structural factors did not. The three outcomes were also consistent, in that the child factors of maltreatment history and age at placement in the adoptive home did not significantly contribute to the amount of variance explained.

Although the three outcomes were consistent in some respect, they were not consistent in terms of which child and family process factors explained a significant portion of variance. Significant variance in parental satisfaction with the adoption was explained by the extent of behavioral problems (as measured on the CBCL) and the family's level of communicative openness. Parents whose children had fewer behavior problems and who were in families with greater communicative openness tended to be more satisfied with their adoptions.

Significant variance in the parent's perception of the quality of the parent-child relationship was explained by the child's age at the time of the survey, the extent of the child's behavioral problems (CBCL score), the level of family communicative openness, and the family functioning style. Parents with younger children with fewer behavior problems, who were in families with greater communicative openness and a higher level of family functioning tended to perceive the parent-child relationship to be more positive.

Also, significant variance in the child's perception of the parent-child relationship when the YSR was used to depict child behavior problems was explained by the child's current age, the level of perceived stress of both the child and the adoptive parent, and the family's level of communicative openness. Younger adoptees who were less stressed,

whose parents were also less stressed, and whose families had higher levels of communicative openness tended to perceive the parent-child relationship more positively.

Significant variance in the child's perception of the parent-child relationship when the CBCL was used to depict child behavior problems was explained by the child's current age, the child's level of perceived stress (but not the adoptive parent's), and the family's level of communicative openness. Younger adoptees who were less stressed and whose families had higher levels of communicative openness tended to perceive the parent-child relationship more positively.

The only independent variable that significantly contributed to an explanation of the variance in all three of the dependent variables was the family process factor of family's communicative openness. None of the child factors contributed significantly to an explanation of variance for all three outcomes. The child's age at the time of the survey contributed to both the parent and child's perception of the parent-child relationship but not to the parent's level of satisfaction with the adoption. The extent of the child's behavior problems contributed to both of the parent centered outcomes (satisfaction and perception of the relationship) but not to the child centered outcome.

Finally, a paired samples t-test was used to compare the mean scores between the child's perception of the parent-child relationship and the parent's perception of the parent-child relationship. This comparison revealed that the children in this sample scored significantly higher than did their parents on their assessment of the parent-child relationship. Adoptees perceive the parent-child relationship to be more positive than do their parents.

Chapter 5

Discussion and Implications

The purpose of this study was to explore adoption outcomes for children adopted from the public child welfare system and to determine the impact of key factors on varying definitions of success in adoption from both parent and child perspectives. This chapter discusses the major findings of the study and how the findings improve on an understanding of child welfare adoptions. Strengths and limitations of the study are delineated. Finally, implications of this study for practice, policy and future research are addressed.

Adoption Outcomes

This study sought to explore factors that contribute to varying definitions of success in adoptions of children from the public child welfare system. As adoption is increasingly viewed as an intervention, it is important to be clear about the outcomes being sought and the factors that contribute to their successful accomplishment. Adoption literature speaks of the adoption triad or more recently the adoption constellation (Grand, 2010), which includes the birth family, the adopted person and the adoptive family as well as the social workers and agencies that work with them. When considering outcomes, it is important to identify from whose perspective those outcomes are defined. A birth parent might define success as being able to have ongoing contact with a birth child who is legally a part of another family; an adoptive parent might define success as having a well-behaved child; an adoptee might define success as being able to have consistent food; and a social worker might define success as the placement remaining

stable. Each party's perspective must be valued and understood, so that all parties can be helped to find ways to experience the adoption as successful.

This study selected two different perspectives on adoption outcomes—the adoptive parent's perspective and the adoptee's perspective—and sought to examine their similarities and differences. The outcomes focused on (a) the adoptive parent's satisfaction with the adoption, (b) the adoptive parent's perception of the quality of the parent-child relationship, and (c) the adoptee's perception of the quality of the parent-child relationship.

Factors Contributing to Adoption Outcomes

Child factors. Consistent with the findings of other studies of adoption from the public child welfare system, child related factors of child behavior problems, the child's current age, age at placement, maltreatment history, and current level of stress explained the greatest amount of the variance in each of the three outcomes (Berry & Barth, 1989; Festinger, 2002; Groothues, Becket, & O'Connor, 2001; Nalavny, Glidden, & Ryan, 2009; Rosenthal & Groze, 1992). Child factors explained 28.7% of the variance in parental satisfaction, 54.8% in the adoptive parent's perception of the relationship, and 34.5% in the child's perception of the relationship. After discussing significant findings, this section attempts to explain nonsignificant findings.

Child Behavior. The parent's report of the total behavior problems was significant in predicting the greatest amount of the variance in both indicators of the parental perceptions of success. Consistent with much of the previous research, more behavior problems were associated with less positive perceptions of adoption success by the adoptive parents (see Groza & Ryan, 2002; Livingston & Smith, 2010).

The current study also examined the youth perception of their behavior. There was a moderately positive correlation between the parent report and the youth report, meaning they shared a perception of behavior functioning, a finding consistent with other studies (Ferdinand, van der Ende, & Vernhulst, 2004; Lambert, Samms-Vaughan, Fairclough, Schmitt, Jeong, & Nutter, 2003; Sternberg, Lam, Gutterman, Abbot, & Craig, 2006). However, unlike with the parent report, where adoptees scored between the norms for typical behavior and behavior in the clinical range, adoptees in this study scored themselves above the clinical range. In other words, it appears the adoptees in this sample saw themselves as having more behavior problems than youngsters in the general population, who had been referred for mental health treatment saw themselves as having.

While other studies show that adolescent adoptees experience greater behavior problems and more mental health referrals than other nonadopted adolescents (Juffer & vanIJzendoorn, 2005, Keyes et al., 2008), this finding suggests that the adoptees' perceptions of their level of behavior difficulties is highly skewed. Given the limited number of studies conducted from the adoptee's perspective, it is not possible to determine whether this finding is an anomaly or an indication of some other phenomenon, such as adopted adolescents being told more frequently by their adoptive parents or professionals that they are behaving poorly. Coupled with another finding in this study, which suggests that adoptive parents focus much more on behavior problems than do their children, it may be that the adoptee begins to believe that he/she has significant behavior problems and internalizes a negative self-image, lower self-esteem, or an increased sense of stigma about being adopted. While the term "adopted child

syndrome” (Weger, 2000) is no longer used in the literature, adoptees may have internalized having problematic behavior as part of their identity.

On the other hand, neither parent nor youth perception of behavior problems predicted the child’s perception of the parent-child relationship. This group of adopted adolescents, it seems, was able to feel positively about the parent-child relationship regardless of their level of problematic behaviors. This could be confusing to adoptive parents, who tend to view the problem behaviors as a sign that the child is not attached but children who experience trauma tend to have an attachment as well as problematic behaviors; the two are not mutually exclusive (Groze & Rosenthal, 1993; Hodges et al., 2005).

Child’s current age. The age of the child at the time of the study was found to significantly contribute to the variance in both parent and child perceptions of the relationship but not to the adoptive parent’s level of satisfaction with the adoption. The finding that the current age of the child has a negative impact on both parties’ perceptions of the parent-child relationship is again consistent with the literature (Coakley & Berrick, 2006; Erich, Hall, Kanenberg, & Case, 2009), as well as with developmental/life cycle theory. According to developmental theory, the parent-child conflicts often associated with adolescence are a typical part of the separation–individuation process for identity development (Rice, 2001). Studies show that there is more parent-child conflict for adolescent adoptees (Reuter, Keyes, Iacono, & McGue, 2009), whose behavior during adolescence is often more exaggerated as they also deal with issues of loss and divided loyalty, as well as with identity development (Hajal & Rosenberg, 1991).

The child's current age did not contribute to parental satisfaction with the adoption. Adoptive parents must be able to separate their feelings about the adolescent's behavior from their feelings of love for the child. While the adoptee may feel he/she has to reject the adoptive family in order to find him/herself, adoptive parents' role is to take the long view and support their child during this difficult time. Ultimately, as Hajal and Rosenberg (1991) suggest, the adoptee may emerge from this process feeling more fully in control of his/her own destiny and "adopt" the adoptive family by his/her own choice. In other words, the separation and conflict that occurs during adolescence will eventually result in the child reconnecting with the adoptive family when he/she is older (Rosenberg, 1992). This is a process similar to what happens in all families but may be exaggerated for adoptees and takes longer to accomplish.

Child's perceived stress. Child stress was found only to be significantly associated with the child's perception of the parent-child relationship. The higher the child's perceived stress, the less positive the child's perception of the parent-child relationship. This could suggest that the adoptee may not see the parent-child relationship as a source of comfort or support during adolescence, or that the experience of stress impairs the parent-child relationship. In a parent-child relationship characterized by a secure bond, the child looks to the parent for protection, help with emotional regulation, and to get his/her needs met. In the relationship between the child and an adoptive parent, although the adoptee is attached, an adolescent who has experienced complex trauma may be unable to use the parent-child relationship as a source of emotional regulation and may instead re-experience traumatic stress during this time of developmental transition. Parent-child conflict typical of adolescence and more prevalent in adoptive families

(Rueter et al, (2009) may lead to hyperarousal. The former internal working model of the parent-child relationship as a source of danger resurfaces and former survival behaviors are triggered (Pace, Zavattini, & D'Alessio, 2012; Palacios, Roman, Moreno, & Leon, 2009). There is related research from international adoptees that suggests the mechanism of cortisol regulation, an indicator of stress, may not work as well with children who have early trauma, even years after living with an adoptive family (Gunnar, 2010; Loman, Gunnar, & the Early Experience, Stress and Neurodevelopment Center Team, 2010).

Maltreatment history.

The child's history of maltreatment was not found to contribute significantly to any of the adoption outcomes. While the long-term negative effects of maltreatment are well documented (Browne & Finkelhor, 1986; Cicchetti, Toth, & Maughan, 2000; Egeland, Sroufe, & Erickson, 1983), adoption studies are finding that aspects of the parent-child relationship partially moderate or mediate the effect of prior maltreatment on long term outcomes for adoptees (Gleitman & Savayak 2011; Groza & Ryan, 2002; Ji, Brooks, Barth, & Kim, 2010; Simmel, 2007; Whitten & Weaver, 2010). This is, in essence, what is meant when adoption is characterized as an intervention – adoption promotes healing from maltreatment. This finding suggests that the presence of the maltreatment history may be less important than the family's ability to mitigate the maltreatment's effects by providing the child with a corrective emotional experience. The nature of maltreatment impacts the way the child is affected by it. The effects also depend on (a) the child's relationship with the perpetrator, (b) the presence of other protective factors in the environment, and (c) the child's own resilience (Crosson-Tower, 1999;

Winton & Mara, 2001). This finding is also consistent with clinical writings that talk about adoption as healing (see Groza & Rosenberg, 2001).

Placement age. Based on a plethora of studies since the 1970s (Berry & Barth, 1990; Festinger, 1986; Howe, 2001; Kadushin & Seidl, 1971), the older the age at placement, the less successful the adoption outcomes. More recent studies suggest that it is not the placement age, per se, but that placement age is an indicator of the child having had more opportunity to experience maltreatment, multiple moves, and other adverse childhood experiences. In addition, Decker and Omori (2009) indicate that most of the impact of age at placement seen in childhood is gone by the time the adoptee reaches later adolescence or early adulthood. In this study, placement age did not contribute significantly to an explanation of the variance in any of the three outcomes. If placement age is a proxy for other variables, the nonsignificant findings in this study may have been due to the fact that despite being placed by the public child welfare system, 26.7% of the children had not had any prior placements, and 43.2% were placed at age 2 or younger. In addition, the average length of placement for this group was nearly 11 years. In essence, with so many of the children in this sample placed quite young and /or for a considerable length of time, it may be difficult to see the effect of age at placement.

Family process factors.

All of the family process factors studied significantly contributed to the variance explained in at least one of the adoption outcomes. Family process factors explained an additional 6.1% of the variance in parental satisfaction, 7.5% in the adoptive parent's perception of the relationship, 8.9 percent in the child's perception of the parent-child relationship using CBCL score for child behavior and 9.4% using the YSR. All of the

family process factors contributed significantly to an explanation of at least one outcome; however, communicative openness significantly contributed to all three of the outcomes.

Adoptive Parent Perceived Stress. Parenting stress has long been associated with negative family outcomes (McGlone, Santos, Kazama, Fong, & Mueller, 2002; Palacios & Sanchez-Sandoval, 2006; Respler-Herman, Mowder, Yasik, & Shamah, 2012). Many adoptive parents report that the strain of raising a child with special needs¹, coupled with the lack of post adoption services, often results in increased stress. In this study, adoptive parents' perceived stress did not predict either of the parent based outcomes (satisfaction with or perception of the parent-child relationship). It only explained a significant portion of the variance in the child's perception of the parent-child relationship when the YSR was used to depict child behavior problems but not when the CBCL was used. For these adoptees whose parents are more highly stressed, there was a tendency to feel less positive about the parent-child relationship. In other words, the parent's stress level does not play a role in the parent's view of success in adoption but it does impact how the adoptee interprets the outcome. It appears that these adoptees are more directly impacted by parental stress levels than are the parents. This may be related to the hypervigilance that many trauma survivors develop, in that they feel they need to be on guard against future threats of harm (van der Kolk, 1996). Everyday stressors that may have elicited minimal response may now elicit an exaggerated reactivity (Perry et al., 2006). An adoptee whose internal working model of the parent-child relationship has been one of potential danger may have found that in order to survive, he/she needs to monitor the emotions of the parent and be prepared to quickly get out of harm's way or stand up and

¹ A child is classified as having a special need if the child comes from a problematic birth family background, such as being drug exposed, older when placed, history of maltreatment, part of a sibling group, or other characteristics that would make him/her more difficult to place for adoption.

fight, if necessary. Once again, survival behavior would dictate that the adoptee watch for any signs of stress in the adoptive parent. But, because trauma survivors often misinterpret innocuous stimuli as potential threats (van der Kolk, 1996), the adoptee may not be able to accurately read normal parenting stress and instead interpret it as imminent threats. So, a level of stress that the adoptive parent may view as manageable and not interfering with the parent-child relationship, may be interpreted by the adoptee as a sign of trouble.

Communication Openness. This is the one factor that was significant for all of the outcomes. Greater communication openness is associated with (a) higher levels of parental satisfaction with the adoption, (b) more positive parental perceptions of the parent-child relationship, and (c) more positive child perceptions of the parent-child relationship. This finding is consistent with findings from other studies (Brodzinsky, 2006; LeMare & Audet, 2011; Skinner-Drawz, Wrobel, Grotevant, & Von Korff, 2011) suggesting that higher levels of communicative openness are associated with improved adoption outcomes across the lifespan. In this study, communication openness was measured by a six-item scale constructed from questions answered by the adoptee, such as, “My parent(s) feel comfortable talking about adoption with me”; “My parent(s) would understand if I told them I wanted to contact my birth mother”; and (reverse scored) “My parent(s) tell me they can give me back if they want to”. This scale appears to identify a style of communication that goes beyond discussion of adoption. It suggests a style of parenting wherein the adoptee is accepted for who he or she is and feels safe enough to express his/her feelings about adoption or any other matter without concern for hurting the parent. This finding has implications for both practice and future research, especially

when combined with the findings from the family structural factors, which are discussed in the next section.

Family functioning style. Consistent with other research (Gibbs, Barth, & Houts, 2005; McGuinness, Ryan, & Robinson, 2005), family functioning style was found to significantly explain a portion of the variance in the parental perception of the parent-child relationship. Family functioning style (Deal, Trivette, & Dunst 1988) measures strengths in families. The adoptive parents feel more positive about the parent-child relationship if they view their family as functioning more positively and having more strengths. However, family functioning style was not a significant factor in parental satisfaction with the adoption or in the child's perception of the parent-child relationship.

Family structural factors.

As hypothesized, family structural factors did not contribute significantly to any explanation of the variance in any of the three outcomes examined in this study. While each of the models remained significant overall, the addition of family structural factors did not result in any significant change in the amount of variance explained in any of the adoption outcomes.

Structural Openness. The current study found that more structural openness did not predict improved adoption outcomes in any of the three models. Furthermore, this study did not find a significant relationship between structural openness and communicative openness, indicating that for this group there is no connection between whether or not there is birth family contact and how open the adoptive family is to talking about adoption issues. It should be noted that the practice of structural openness in adoption began with infant placements. Just as openness practice has been driven by

infant adoption, so, too, has openness research. Very little structural openness research relates to openness for children adopted through the public child welfare system. What has been published speaks less to child outcomes than to adoptive parents' satisfaction with the openness, or to the lack of training that public agency caseworkers and foster and adoptive parents have on this topic (Neil, 2007; Ryan, Harris, Brown, Houston, Livingston, Smith, & Howard, 2011). Indeed, policy and practice in public agencies have often expressly forbidden birth family contact after the adoption was finalized. In this sample, nearly two-thirds (63%) of the children reported that there was no contact of any kind between members of the adoptive family and the birth family. The factors involved in post adoption contact in child welfare adoptions are more complex. In most instances, the birth parents did not voluntarily relinquish their child for adoption, so it may be more difficult for the birth parent to accept the adoptive parent in the role of parent. There may also be issues related to safety for the adoptee or inappropriate behavior by the birth parent. Members of the adoption constellation have very few role models to follow to help negotiate the complexity of these relationships.

This study suggests that communicative openness may have greater potential to lead to positive adoption outcomes than does structural openness. In other words, it was not whether post adoption contact occurred (structural openness), but how open the family was to discussing the contact and other issues related to adoption that contributed most to positive adoption outcomes. Other studies of private adoptions (Brodzinsky, 2006; Jones & Hackett, 2007) have reported similar results.

Child care burden. Child care burden did not contribute significantly to an explanation of the variance in any of the three outcomes. This is consistent with findings

in Glidden, Flaherty, and McGlone (2000) who reported that, for adopted children with developmental disabilities, the presence of multiple children in the family did not predict differential outcomes. Other adoption studies that have examined family structure and size have focused more on the presence of birth and adopted children in the same family (Barth & Brooks, 1997). The child care burden measure used in this study did not distinguish between the number of children who were born into the family and those who entered the family through adoption, and, so, no comparison with these types of studies can be made. This sample had limited variability of child care burden, with the vast majority of families having two children or less, so the lack of a significant finding may be related to sampling issues. It also may be that this factor only matters in families with a child care burden over a certain threshold. This study is not able to contribute to the discussions of these conclusions.

Family process factors vs. family structural factors.

In this study, family process factors contributed significantly to the amount of variance explained in each of the outcomes, whereas family structural factors did not. This is consistent with Bronfenbrenner's theory that highlights the importance of proximal processes as well as with findings from research that focus on the importance of understanding the processes by which change and healing occur (Sutherland, Mustillo, Farmer, Stambaugh, & Murray, 2009). This suggests that factors such as (a) the way family members communicate, (b) their levels of perceived stress, (c) parenting styles and (d) the strengths found in the family influence the family's ability to cope with the challenges of adoption, much more than family composition or post adoption contact.

Outcomes Compared

The results of this study show that although related, each of these outcomes is defined differently and comprised of different factors. The amount of variance explained in each of the outcomes ranges from 62.3% for the parent's perception of the parent-child relationship, to 44% for the child's perception of the parent-child relationship, to 34.8% for the parent's satisfaction with the adoption. The child's level of behavioral problems did not factor into the child's definition of success. On the other hand, when adoption outcome was defined from the parent's perspective, both satisfaction and perception of the parent-child relationship relied most heavily on the parent's report of the child's behavior. This may be a concern if the adoptive parents misinterpret the child's acting out behavior as an indication that the child is not attached. They may surmise that the child does not feel connected to the family and wouldn't care if the adoption dissolved, when they don't understand that the child defines success differently.

Lower levels of perceived stress (both parent and child) factored into the child's definition of success but not at all into either parental outcome. Finally, age of the child at the time of the survey factored into both parent and child perceptions of the parent-child relationship but not into the parent's satisfaction with the adoption.

These various definitions of success are not surprising, reflecting what is seen in practice among members of the adoption constellation. When asked to define successful outcome in adoption, a series of guest speakers in a 2012 adoption practice and policy class (B. Norris, B. Brindo, K. Whiteside, K. Thompson, L. Schellentrager, personal communications, January 28, 2012; V. Groza, S. Minnes, R. Bernstein, E. Turner, J. Soucie, A. Leonard, personal communications, February 26, 2012) provided varying

perspectives. Adoption professionals focused on the adoption not disrupting or dissolving (“It sticks.”) whereas both birth and adoptive parents focused on the child growing up to be healthy and loved (“The child turns out OK”; “Child feels fully a part of the family”). Adult adoptees echoed the theme of being loved and added a need for belonging and for connection to both birth and adoptive families. Clearly, it is important to keep in mind that success is in the eye of the beholder.

Study Strengths

This study has several strengths. It builds on theoretical perspectives frequently used to understand adoption, focusing on the importance of building attachment between the child and the adoptive parent, and on the way in which parent and child impact each other over the course of time. An ecological systems framework is also apparent in the way in which the research has been conceptualized. The research is positioned among other current research in adoption, examining the processes contributing to various adoption outcomes.

The study examined a population of adoptees who have been found to be at higher risk of negative outcomes in other studies; children who were older at the time of the study, with a greater history of maltreatment, and placed in their adoptive families at an older age. Focusing on the eldest child in each adoptive family allowed for study of the child with whom a family is likely to have the greatest challenge. Understanding what contributes to positive adoption outcomes for this group of youngsters may be helpful in minimizing risks for other groups, as well.

This study seeks to understand and compare perceptions of positive outcome from both the adoptive parent and minor child’s perspectives. As such, it helps to fill a gap in

the research and adds to the conversation concerning how youngsters adopted from the child welfare system and their adoptive parents view their experiences.

It also addresses another area where there has been limited study in adoptions from the public child welfare system: openness – both structural and communicative. Because the practice of structural openness began with infant adoptions, much of the research regarding openness is related to this form of adoption. It would be improper to assume that the findings regarding openness that arise from one form of adoption can automatically apply to other forms. Discussions about openness in public child welfare adoptions should be informed by research that has examined openness in that population specifically.

This study also adds to the discussion of the relationship between structural and communicative openness. While past studies have found that greater structural openness can lead to greater communicative openness, the findings from this study suggest a different interpretation. Whether structural openness exists may not be as important as the way in which the family communicates about that openness.

Methodologically, the sample size of 146 families had enough power to address the questions under study, and the focus on only one child in each family eliminated the possible violation of the assumption of independence of observations required for the use of multiple regression analysis (Galbraith, Daniel, & Vissel, 2010).

Limitations

There are numerous limitations of this study that may bias the results. One concern is the survey response rate. Only 10.9% of the families initially eligible to participate in the survey returned questionnaires at Wave 2. Mangione (1995) and Salant

and Dilman (1994) raise concern about the quality of data when response rates are 60% or lower. On the other hand, Visser and colleagues (2000) indicate that the response rate for mailed surveys is often less than 50%, and techniques to increase response rates are complex and costly, seeming to indicate that response rates of less than 50% may not be problematic. Miller, Fan, and Grotevant (2005) identify a number of special challenges in adoption survey research; however, they do not address survey response rates. Compared to other adoption studies using mailed surveys, the 10.9% response rate appears to be low. For example a cross sectional study by Tessler, Adams, Houlihan, and Groza (2004) reported a 90% response rate at Wave 2 for one sample of adoptive families and a 63% response rate for another; however, the samples were drawn from a convenience sample. A longitudinal study by Groze (1996) yielded an overall response rate of 25% over 4 years. Cross sectional studies of large groups of adoptive families also yielded higher response rates. Hellerstedt, Madsen, Gunnar, Grotevant, Lee, and Johnson (2008) reported a response rate of 62%, Rosenthal and Groze (1992) a response rate of 60%, and McDonald, Propp, and Murphy (2001) 52%. However, it should be noted that in some of these studies, a series of follow-up measures including letters and telephone calls were used. This was not done in the data collection process for the sample used for the current study. Also, these studies occurred at a time when families may have been more open to participating in research as there was little research being conducted or available through the media and the internet. These factors may have changed the response rates in adoption research.

Perhaps it would be more appropriate to compare this study to a study by Timm, Mooradian, and Hock (2011) that yielded a response rate of 13% from a single mailing.

These authors also reported that attempts to increase the response rate through follow-up letters did not yield significantly improved results. Thus, attempts to evaluate the response rate from this study must be approached with caution.

However, it should be noted that due to a number of factors, including a 10.9% survey response rate, limitations imposed by the study design and decisions made about handling missing data, only 146 of the 737 families who responded to Wave 2 surveys were included in this study. The sample was, therefore, biased, in favor of older Caucasian adoptive parents with higher levels of education, whose Caucasian adopted children were first placed in their adoptive families at an older age, who had experienced more types of maltreatment, and were in more placements prior to the adoptive placement. This substantial attrition poses a threat to internal validity and limits the generalizability of the findings (Shadish, Cook, & Campbell, 2002). However, it should also be noted that the families in this study are the type of families that report one of the highest rates of disruption/dissolution and are ones about which the practice community is most concerned (see Rosenthal & Groze, 1992).

Another limitation is that the data relied on self report, both by the adoptive parent and their adopted child. This mono-method bias raises the possibility that the method itself (in this case self report) is part of the construct actually studied (Shadish et al., 2002). These results report only the adoptive parents' or the adoptee's perceptions. They do not reflect any objective measure of outcome. One mitigating factor is that the perceptions of both the adoptive parent and the adoptee can be compared on some items.

Another issue is that of social desirability in the responses. Respondents may have provided the answers to questions on the survey that they believed the researchers would

find to be socially acceptable (Royse, 1995). Adoptive parents who are currently receiving an adoption subsidy from the state may feel that it is incumbent upon them to rate the adoption as successful. In addition to general issues of social desirability, other studies (Gillum & O'Brien, 2002; Kufeldt, Armstrong, & Dorosh, 1995) have found that children are more affected by social desirability and, furthermore, that children adopted from the public child welfare system may not be honest about their feelings, because they do not want to be critical of their adoptive families. So, for example, the finding that children feel more positive about the parent-child relationship may be biased by social desirability.

The cross sectional nature of the study poses additional limitations. As noted by Yegidis, Weinbach, and Morrison-Rodriguez (1999), cross sectional studies provide information only about a given point in time. They provide a static description of the nature and relationship of the variables under study at the specific time at which the data are collected. This study was only to report perceptions of the subjects at the time of completing the survey at Wave 2. The design does not allow for any determination of how those perceptions may change over time. Thus, although one can determine association among the independent and dependent variables, no inference of causation can be made.

Further limitations involve several threats to construct validity (Shadish et al., 2002). Each of the major constructs in this study was only assessed using a single measure. This mono-operation bias can both under represent the construct of interest and measure irrelevant constructs as well, thereby complicating efforts at inference. This is especially problematic for one of the scales, Communicative Openness, which was

explicitly developed for this study so the findings from this sample cannot be compared to other populations.

The Communication Openness scale also is at risk of inadequate explication of constructs, another threat to construct validity. Forming the scale from existing items that were not initially developed to measure this construct poses the risk that not all factors related to communicative openness reported in the literature were represented in this measure. In addition, some of the other scales used, child and adoptive parent perceived stress, have not been used with other samples of adoptive parents and adoptees. This means that there is no way to determine the meaning of the significant departure from the published norms for subjects in this study.

Finally, there were significant limitations posed by this being a secondary data analysis. While secondary data analysis presents several advantages, especially to the beginning researcher, it also poses many challenges. Advantages include low or no cost and easy accessibility. Secondary data sets also tend to have larger sample sizes so that research questions can be answered with greater precision, and they can address topics of current interest (Hofferth, 2005). On the other hand, because someone writing from the data is not directly involved in data collection, the researcher has no ability to influence item development, scale selection, response rate, or data base structure and coding, (McCall & Appelbaum, 1999).

Among the greatest challenges is the need to assure that the data base selected is a good fit with the study's theoretical base and research questions. In addition, there are potential issues with the measurement of key concepts, identification of appropriate respondents, and the cost of learning the new data set (Hofferth, 2005).

Because this study was specifically interested in children adopted from the public child welfare system, a sample drawn from families receiving post adoption subsidies in the state of Florida was well suited. It contains scales that have been used for some of the key variables and concepts in other adoption studies, and has multiple measures of successful outcomes. A portion of the sample also has the advantage of having responses from both the adoptive parent and the adoptee, thereby providing multiple perspectives on success, which is a core aspect of this study.

However, because the data set was not constructed with this study's specific research questions in mind, it was necessary to construct some scales to measure some of the key concepts, such as communicative openness. Finally, there was no opportunity to follow up with respondents, which led to large amounts of missing data.

Even with these limitations, the results from the data confirmed several hypotheses. The implications for policy and practice from the findings are discussed.

Implications for Practice and Policy

Regardless of outcome, regardless of perspective, regardless of the child's history or behavior problems, being raised in a family makes a difference. No child is "unadoptable" but not just any adoptive family will be successful with any child. A hopeful finding is that the majority of adoptees and their adoptive parents view their adoption relationship very positively. Despite the fact that many of these youngsters have experienced significant risk factors, practitioners and prospective adoptive families can take a great deal of reassurance from the fact that the parties involved value their relationship so highly. This is an important perspective for practitioners to keep in mind

when the majority of their work with families post adoption focuses on the families in difficulty.

Practice Implications.

It is also quite encouraging to have confirmed that family process factors indeed have an impact on these three adoption outcomes. This means that practitioners must continue to invest a great deal of time and effort in recruitment, selection, and support of adoptive families who are open in their communication, possess numerous strengths, and have effective ways of managing stress. It is especially crucial that adoptive families be helped to manage their expectations of adoption outcomes. If families and practitioners focus too heavily on problem behaviors, they may become unduly disappointed and begin to question whether the adoption is successful. This may, in turn, become a self-fulfilling prophesy whereby both professionals and adoptive families take greater note of the failures than of the successes. As Keck and & Kupecky (1995) state so eloquently, “Parents of hurt children need to focus on being happy with what they have been given, rather than sad about imperfect results” (p. 186). It becomes incumbent on professionals involved with the family to help families see and celebrate the many small successes that occur over time. Having a child who reports he trusts his adoptive family and feels close to them is no small accomplishment when the child comes from a family where getting too close could mean you would get hurt, trust was repeatedly broken, and relationships with an adult may be nonexistent or abusive. The process of helping families reshape their expectations should not wait until after the adoption has finalized. Agencies must take advantage of the adoptive family recruitment and assessment processes as opportunities to educate and support families in becoming more realistic, and if

necessary, rule out or flag for extra support those who do not appear to be able to be flexible in their expectations.

Communicative openness must also be explored. The findings from this study suggest that for public child welfare adoptions, it may not be the level of structural openness that determines successful outcome, but the adoptive family's openness to communicating about adoption related issues and its support for the adoptee in exploring these areas. The importance of communicative openness and strategies for it should be included in adoptive parent training curricula (e.g. "It is never OK, to tell the child you can give him back if you want to"). Post adoption counseling should also focus on helping the family talk about adoption in ways that allow the child to feel more supported and accepted. Therapists should help families create a safe space where discussions about a child's adoption story or desires to search for birth family are seen as normative, and families can learn to handle them successfully.

It is important to recognize, however, that adoptive parents may feel discouraged, overwhelmed and frustrated at times, and also need a safe and private place to be able to express their fears and doubts. One of the unintended consequences of the rigorous scrutiny to which adoptive parents are subjected as part of the home study process (Crea, Griffin, & Barth, 2011), is that it becomes more difficult for adoptive parents to share any negative feelings about the adoption for fear of being judged as a bad parent. One mother who had recently adopted a sibling group of three as a single parent (anonymous, private communication February 22, 2011) recently stated, "Every morning I wake up and say to myself '*what have I done?!?*'" Post adoption support groups and individual counseling

should be available to help parents express their feelings without fear of judgment or condemnation.

At the same time, adoptive families must be carefully assessed to determine whether their expectations of adoption are reasonable or can be adjusted with education and support. This requires an increased focus on family process factors. Doing this level of complex work requires that the public agency staff involved in child welfare adoptions be well educated and highly trained in adoptive family systems practice (Groza & Rosenberg, 2001). Public child welfare agency staff needs to be trained more thoroughly in family assessment, the dynamics of adoptive families, and the realities of adoptive family life. They need to be prepared to mentor adoptive parents as they begin their adoption journey and to teach specific communication skills and strategies. Just as it is important for parents not to have unrealistic expectations about their adopted child, so, too, is it important that practitioners have realistic expectations of adoptive parents. Adoptive families will feel more or less successful at different times. Just as with all families, adoptive families will have times of greater challenge. Practitioners should receive training to help them understand that their role is not to judge parents who express doubts or children who act out.

Policy implications

Agencies would do well to increase their focus on family strengths and family processes as part of the adoptive family recruitment and assessment process. While structural factors may be easier to identify and assess, this study and others suggest that the adoptive parent's ability to communicate openly and to feel empathy for the child and

birth parent (Neil, 2003), or what Brodzinsky (2005) calls an “open, empathic and secure personality style” (p. 153) are important contributors to adoption success.

Policies that require adoption competent certification of clinicians working with adoptive families, and that provide funds to pay for those services, are essential in supporting these efforts. This also requires that those involved in providing counseling to adoptive families post finalization be knowledgeable about adoption issues and competent to work with constellation members on their specific concerns. Case Western Reserve University, the University of Denver, Portland State University, Rutgers University and Hunter College all provide master’s level clinicians with specific expertise in assessment and intervention with all members of the adoption triad (Child Welfare Information Gateway <http://www.childwelfare.gov/adoption/postplacement/training/examples.cfm>). The lack of adoption competent clinicians is often cited by adoptive parents as one of the greatest barriers to receiving the help and support they need (Smith, 2010). More clinical training on adoption issues both in graduate programs and in post graduate certificate programs is needed to meet the increasing demand for these services.

Policies that provide support and mediation to birth and adoptive families long after the adoption is finalized are also needed. Such a system is currently in place in England and Wales where the 2002 Adoption and Children Act requires agencies to make post-adoption support plans for every child (Neil, 2009). In this system, the placing agency is responsible for providing post-adoption support for 3 years after the child is legally adopted and the locality in which the child and family reside becomes responsible for providing post adoption services. The legislation has also established Adoption

support agencies (ASA's) (Neil, 2007) throughout the country with specialized staff who can provide these services. U.S. policy leaders could do well to investigate and learn from this model.

Structural and communicative openness.

Another implication of this study relates to the need of the child welfare system to think carefully about the concepts of structural and communicative openness. Recent studies (Logan, 2010; Ryan, et al., 2011) report that child welfare staff and adoptive parents receive limited training on structural openness, and that it is the attitude of the child welfare staff that most directly influences the adoptive parent's perspective on the issue. Child welfare staff view structural openness differently than do many foster and adoptive parents; foster and adoptive parents view the practice much less favorably. If the child welfare system is to support adoptive families in exploring how and whether contact with birth family members can be beneficial, then it must assure that all parties involved are educated about the process and their role in making it a success. Prospective adoptive parents should be required to participate in training that discusses the benefits as well as the drawbacks to post adoption contact with birth family members. Birth family members should also be offered support as they engage in this emotionally charged process. Highly trained child welfare staff should work with birth and adoptive families to develop a roadmap for how and when post adoption contact may be most beneficial. This is not to suggest that direct, unsupervised contact with an abusive parent would be mandated but that all constellation members should, to the extent possible, be involved in making decisions about post adoption contact at various stages of the child and family's development. In addition, over time, the issues that made a child vulnerable change.

Having a life cycle perspective may mean that at certain ages at least a discussion should occur about the adoptee's desire as well as the feasibility of having birth family/extended family contact.

The meaning of adoption is socially constructed by the individual, the family, and the community. Defining success in adoption is complex. It depends on a number of factors, including the perspectives of the parties involved, and the way in which the question is asked. Asking adoptive parents if they are “satisfied” with the adoption is a far different question than asking them to articulate their perception of the “quality of the parent-child relationship, or whether the child “is attached”. Asking the adoptee to share his or her perspective on the quality of that same parent-child relationship requires examination of a different set of factors from a different perspective. This becomes even more complicated when we include the perspectives of the agency and other professionals working with the family in determining adoption success (Neil, 2003). Agencies may define successful outcome solely as legal permanency or that the adoption does not “disrupt or dissolve”. Therapists working with adoptive families may be focusing on helping the family manage problem behaviors. When an agency recruits families to provide legal permanency, but the family is looking for a strong parent-child relationship, and the therapist measures success by a decrease of total problem behaviors, it can be quite problematic. If we add the perspective of the child who fears that any of these three outcomes will require that he/she give up survival strategies that have protected him in the past, we increase the likelihood of disappointment. Further yet, add the perspective of the birth family who may or may not have had a say in the adoption but who now requests openness, and we set up the highly charged environment that is poised

for failure. It becomes imperative, therefore, that the desires and expectations of all parties involved in child welfare adoptions be thoroughly explored and acknowledged. Agencies and clinicians must be prepared to listen to family members' expectations and not assume that what the agency thinks is important is what the family wants. On the other hand, no one party to the adoption should be allowed to define success for all members. This has implications for how families are recruited, assessed, matched and supported. It also has implications for how adoptees and birth family members are prepared.

Future research

Further research should focus on developing multiple definitions of adoption success and on studying factors that contribute to successful outcomes over time. Longitudinal studies would add yet another dimension to how we understand success and help to develop policies and programs to support it. For example, do adoptive parents or adoptees change their views on the success of the adoption over time? Do some families have a relatively static view of the success of their adoption? What factors contribute to whether the perception changes or remains the same? Are there particular times or particular transitions in adoptive family life when either the parent or the child is likely to view the success of the adoption more or less positively? It would be helpful to gain a greater understanding over the course of time so that a practitioner intervening at any one point can view the family from a life course perspective.

Understanding the different ways in which adoptees and adoptive parents may define success is also important. Studies that can track members of the adoption constellation, including adoption agencies and practitioners, over a period of time to

understand each party's assessment of the state of the adoption will strengthen understanding of adoption dynamics. It will encourage research to move beyond identifying one specific definition of success and to not rely on only one party's perspective when determining factors that contribute to successful adoptions.

In addition, further research should also be conducted specifically focusing on the relationship between communicative and structural openness in child welfare adoptions. For example, this study found that the level of communicative openness when measured from the perspective of the adopted child had a greater impact on adoption outcome than did structural openness. It would be important to determine whether this finding holds for other samples of adoptions from the public child welfare system. If so, it could have implications for how resources are allocated (to support structural or communicative openness). It is also imperative that we understand which of the lessons learned from openness in infant adoption apply to adoptions of youngsters from the public child welfare system.

There are a number of other findings from this study that could provide fertile ground for future research. The high level of total problem scores found for this group of adoptees should also be explored. If adoptees are consistently rating themselves above the clinical range on problems, we must seek to understand why. Are adoptees being referred to treatment at a disproportionate rate? Are adoptive parents and other professionals placing an inordinate emphasis on problem behaviors? Does this self perception reflect internalized stigma or contribute to lower self-esteem? How is the community and larger environment contributing to the development of these negative perceptions? These are all questions that require further exploration. In addition, despite

the high total problem scores on both the parent report and the youth report, behavior problems did not contribute to the child's perception of the quality of the parent-child relationship. What does this mean for how all member of the adoption constellation define success?

Similarly, the higher than normed levels of perceived stress reported by both the adoptive parents and their adopted children raise questions, as well. While many studies of stress in adoptive parents have been reported in the literature, perceived stress of the adoptee remains relatively unexplored. This becomes increasingly important as we seek to understand the role that the intersection of trauma and attachment play in our defining and achieving adoption success. The perceived stress scales used in this study might be used with other samples of adoptees and adoptive parents to determine whether the finding of higher levels of stress is a consistent one.

Finally, although this study makes a small contribution to understanding some of the processes that contribute to successful outcomes in child welfare adoptions, further exploration of how family process factors actually contribute to positive adoption outcomes is needed. What types of interactions between the adoptive parent and child must be repeated over a period of time in order to strengthen the parent-child relationship? Are there some types of interactions that have a greater impact than others? If so, can adoptive parents be trained and supported in undertaking them?

In addition, the impact of the wider social environment on the child and family must not be ignored. This study looked only at the interactions between the adoptee and the adoptive parent. It would be important to determine how the birth family, extended

family members, social service systems, social policies, and communities also contribute to increased perceptions of success.

Conclusion

Adoption is an intervention. There is no doubt that the lives of thousands of children and families are made better through adoption. When a child cannot reside with his/her birth family, adoption offers the best opportunity for a healthy, productive life. This does not mean that adoption works for all constellation members all the time, or that clinical issues related to individual development or family functioning will not emerge. It does mean that as part of a strengths perspective, practice, policy and research should view adoption as a solution, even if there are specific cases where there is doubt. Because the individuals and families who consider themselves to be successful, while in the majority, do not present themselves for service, it is easy to lose perspective.

Success in adoption is not just an outcome but a journey. Navigating one issue successfully may increase the likelihood that other issues may also be resolved, but it does not stop the issues from arising. They will surface in different ways for different constellation members throughout the life cycle. If we approach constellation members as if many of the difficulties they experience are normative crises (Pavao, 1992) to be expected, then practice, research, and policy can become focused less on pathology and more towards a normative and strength orientation. The strengths perspective does not require that real issues be ignored. Rather it is a framework through which successful outcomes can be defined and achieved.

Appendix 1

Parent Perception of the parent-child relationship

5.41 How do you and this adopted child get along?

1. Very well	2. Fairly well	3. Not so well	4. Very poorly
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5.42 How often do you and this adopted child spend time together?

1. Just about every day	2. 2-3 times per week	3. Once per week	4. Once per month or less
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5.43 How would you rate the communication between you and this adopted child?

1. Excellent	2. Good	3. Fair	4. Poor
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5.44 Do you trust this adopted child?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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5.45 Do you feel respected by this adopted child?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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5.46 Do you feel close to this adopted child?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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5.47 Overall, the impact of this adopted child's placement on your family has been:

1. Very positive	2. Mostly positive	3. Mixed	4. Mostly/Very negative
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Appendix 2

Child Perception of the parent-child relationship

1. How do you and your adoptive parents get along?

1. Very well	2. Fairly well	3. Not so well	4. Very poorly
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2. How often do you and your adoptive parents spend time together?

1. Just about every day	2. 2-3 times per week	3. Once per week	4. Once per month or less
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3. How would you rate the communication between you and your adoptive parents?

1. Excellent	2. Good	3. Fair	4. Poor
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4. Do you trust your adoptive parents?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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5. Do you feel respected by your adoptive parents?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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6. Do you feel close to your adoptive parents?

1. Yes, very much so	2. Yes, for the most part	3. Not sure	4. No
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7. Overall, the impact of being adopted by this family has been:

1. Very positive	2. Mostly positive	3. Mixed	4. Mostly/Very negative
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Appendix 3

Child Perceived Stress and Parent Perceived Stress

<p>The questions in this scale ask you about your feelings and thoughts.^{2, 3}</p>	<p>1 – never 2 – almost never 3 – sometimes 4 – fairly often 5 – very often</p>
<p>1. In the last month, how often have you been upset because of something that happened unexpectedly?</p>	<p>1. 2. 3. 4. 5.</p>
<p>2. In the last month, how often have you felt you were unable to control the important things in your life?</p>	<p>1. 2. 3. 4. 5.</p>
<p>3. In the last month, how often have you felt nervous and 'stressed'?</p>	<p>1. 2. 3. 4. 5.</p>
<p>4. In the last month, how often have you felt confident about your ability to handle your personal problems?</p>	<p>1. 2. 3. 4. 5.</p>
<p>5. In the last month, how often have you felt that things were going your way?</p>	<p>1. 2. 3. 4. 5.</p>
<p>6. In the last month, how often have you found that you could not cope with all the things that you had to do?</p>	<p>1. 2. 3. 4. 5.</p>
<p>7. In the last month, how often have you been able to control irritations in your life?</p>	<p>1. 2. 3. 4. 5.</p>
<p>8. In the last month, how often have you felt that you were on top of things?</p>	<p>1. 2. 3. 4. 5.</p>
<p>9. In the last month, how often have you been angered because of things that were outside of your control?</p>	<p>1. 2. 3. 4. 5.</p>
<p>10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?</p>	<p>1. 2. 3. 4. 5.</p>

² Perceived Stress Scale; S. Cohen and G. M. Williamson; Reprinted with Permission

Appendix 4

Family Functioning Style

SECTION 3. FAMILY DYNAMICS - The following statements ask about how your family gets along, the interactions between family members, and how you work through things. There are no right or wrong answers. Please read each statement. Then CIRCLE the response which is most true for your family since the last survey (for people living in your home).³

How is your family like the following statements	Not at All Like My Family	A Little Like My Family	Sometimes Like My Family	Usually Like My Family	Almost Always Like My Family
3.1 We make personal sacrifices if they help our family	1.	2.	3.	4.	5.
3.2 We usually agree about how family members should behave	1.	2.	3.	4.	5.
3.3 We believe that something good always comes out of even the worst situations	1.	2.	3.	4.	5.
3.4 We take pride in even the smallest accomplishments of family members	1.	2.	3.	4.	5.
3.5 We share our concerns and feelings in useful ways	1.	2.	3.	4.	5.
3.6 Our family sticks together no matter how difficult things get	1.	2.	3.	4.	5.
3.7 We usually ask for help from persons outside our family if we cannot do things ourselves	1.	2.	3.	4.	5.
3.8 We usually agree about the things that are important to our family	1.	2.	3.	4.	5.
3.9 We are always willing to "pitch in" and help each other	1.	2.	3.	4.	5.
3.10 We find things to do that keep our minds off our worries when something upsetting is beyond our control	1.	2.	3.	4.	5.
3.11 We try to look "at the bright side of things" no matter what happens	1.	2.	3.	4.	5.
3.12 We find time to be together even with our busy schedules	1.	2.	3.	4.	5.
3.13 Everyone in our family understands the "rules" about acceptable ways to act	1.	2.	3.	4.	5.
3.14 Friends and relatives are always willing to help whenever we have a problem or crisis	1.	2.	3.	4.	5.
3.15 Our family is able to make decisions about what to do when we have problems or concerns	1.	2.	3.	4.	5.
3.16 We enjoy time together even if it is doing household chores	1.	2.	3.	4.	5.

³ Family Functioning Style Scale, Copyright © 1988; A.G. Deal, C.M. Trivette, & C.J. Dunst; Reprinted with Permission

3.17 We try to forget our problems or concerns for a while when they seem overwhelming	1.	2.	3.	4.	5.
3.18 Family members listen to “both sides of the story” during a disagreement	1.	2.	3.	4.	5.
3.19 We make time to get things done that we all agree are important	1.	2.	3.	4.	5.
3.20 We can depend on the support of each other whenever something goes wrong	1.	2.	3.	4.	5.
3.21 We usually talk about the different ways we deal with problems and concerns	1.	2.	3.	4.	5.
3.22 Our family’s relationship will outlast our material possessions	1.	2.	3.	4.	5.
3.23 We make decisions like moving or changing jobs for the good of all family members	1.	2.	3.	4.	5.
3.24 We can depend upon each other to help out when something unexpected happens	1.	2.	3.	4.	5.
3.25 We try not to take each other for granted	1.	2.	3.	4.	5.
3.26 We try to solve our problems first before asking others to help	1.	2.	3.	4.	5.

References

- Abidin, R. R. (1983). *Parenting stress index*. Charlottesville, VA: Pediatric Psychology Press.
- Achenbach, T. M. (1991). *Integrative guide to the 1991 CBCL/4-18, YSR, and TRF profiles*. Burlington, VT: University of Vermont Department of Psychology.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington, VT: University of Vermont, Research Center for Child, Youth & Families.
- Adopted children and stepchildren: 2000. Census 2000 special reports*. (2003). Washington D.C.: U.S. Census Bureau.
- Ainsworth, M. D. S., Blehar, M. D., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Andreou, E., Alexopoulos, E. C., Lionis, C., Varogli, L., Gnardellis, C., Chrousos, G. P., & Darviri, C. (2011). Perceived stress scale: Reliability and validity study in Greece. *International Journal of Environmental Research and Public Health*, 8, 3287-3298.
- Atkinson, A., & Gonet, P. (2007). Strengthening adoption practice, listening to adoptive families. *Child Welfare*, 86(2), 87-104.
- Bae, H., Solomon, P. L., & Gelles, R. (2009). Multiple child maltreatment recurrence relative to single recurrence and no recurrence. *Children & Youth Services Review*, 31, 617-624.
- Barth, R. P., & Berry, M. (1988). *Adoption and disruptions: Rates risks and responses*. New York: Aldine de Gruyter.
- Barth, R. P., & Berry, M. (1990). Preventing adoption disruption. In D.G. Unger, & D. Powell (Eds.), *Prevention in human services* (pp. 205-222). New York: Haworth Press.
- Barth, R. P., Crea, T. M., John, K., Thoburn, J., & Quinton, D. (2005). Beyond attachment theory and therapy: Towards sensitive and evidence-based interventions with foster and adoptive families in distress. *Child & Family Social Work*, 10, 257-268.
- Barth, R. P., Gibbs, D., & Siebenaler, K. (2001). *Assessing the field of post-adoption service: Family needs, program models and evaluation issues. Literature review*.

- Chapel Hill and Research Triangle Park, NC: University of North Carolina School of Social Work, Jordan Institute for Families, and Research Triangle Institute.
- Barth, R. P., & Brooks, D. (1997). A longitudinal study of family structure and size and adoption outcomes. *Adoption Quarterly*, 1(1), 29-56.
- Barth, R. P., & Miller, J. M. (2000). Building effective post-adoption services: What is the empirical foundation? RID A-9782-2008. *Family Relations*, 49(4), 447-455. doi:10.1111/j.1741-3729.2000.00447.x
- Barth, R. P. (2002). Outcomes of adoption and what they tell us about designing adoption services. *Adoption Quarterly*, 6(1), 45-60. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=10109497&site=ehost-live>
- Barth, R. P., Berry, M., Yoshikami, R., Goodfield, R. K., & Carson, M. L. (1988). Predicting adoption disruption. *Social Work*, 33(3), 227-233. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=5273975&site=ehost-live>
- Becker-Weidman, A. (2009). Effects of early maltreatment on development: A descriptive study using the Vineland adaptive behavior scales-II. *Child Welfare*, 88(2), 137-161. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=43678518&site=ehost-live>
- Becvar, D. S., & Becvar, R. J. (2000). *Family therapy: A systemic integration* (4th ed.). Boston: Allyn and Bacon.
- Belsky, J. (1984.). The determinants of parenting: A process model. *Child Development*, 55, 83-96.
- Benson, P. L., Sharma, A., & Eugene, C. (1994). *Strength of adoptive families*. Minneapolis, MN: Search Institute.
- Berebitsky, J. (2002). Rescue a child and save the nation: The social construction of adoption in *The Delineator, 1907-1911*. In E. W. Carp (Ed.), *Adoption in America* (pp. 128-153). Ann Arbor, MI: University of Michigan Press.

- Berge, J., Mendenhall, T., Wrobel, G., Grotevant, H. D., & McRoy, R. G. (2006). Adolescents' feelings about openness in adoption: Implications for adoption agencies. *Child Welfare, 85*(6), 1011-1039.
- Bergquist, K. L. (2003). Exploring the impact of birth country travel on Korean adoptees. *Journal of Family Social Work, 7*(4), 45-62. doi:10.1300/J039v07n04_03
- Berry, M. & Barth, R. P. (1989). Behavior problems of children adopted when older. *Children and Youth Services Review, 11*, 221-228.
- Berry, M., & Barth, R. P. (1990). A study of disrupted adoptive placements of adolescents. *Child Welfare, 69*(3), 209-225. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9604165106&site=ehost-live>
- Bimmel, N., Juffer, F., van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2003). Problem behavior of internationally adopted adolescents: A review and meta-analysis. *Harvard Review of Psychiatry, 11*(2), 64-77.
- Bohnert, A. M., Kane, P., & Garber, J. (2008). Organized activity participation and internalizing and externalizing symptoms: Reciprocal relations during adolescence. *Journal of Youth & Adolescence, 37*(2), 239-250. doi:10.1007/s10964-007-9195-1
- Boris, N. W., Fueyo, M., & Zeanah, C. H. (1997). The clinical assessment of attachment in children less than five. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 291-293.
- Bornstein, M. H. (1989). Sensitive periods in development: Structural characteristics and causal interpretations. *Psychological Bulletin, 105*(2), 179-197.
- Bowlby, J. (1969). *Attachment and loss. volume I: Attachment*. London, UK: Hogarth Press.
- Bowlby, J. (1973). *Attachment and loss. volume II: Separation: Anxiety and anger*. London, UK: Hogarth Press.
- Bowlby, J. (1980). *Attachment and loss. volume III: Loss, sadness and depression*. London, UK: Hogarth Press.
- Bowlby, J. (1982). *Attachment and loss. volume I: Attachment*. (2nd ed.). London, UK: Hogarth Press.

- Boyne, J., Denby, L., Kettenring, J. R., & Wheeler, W. (1984). *The shadow of success: A statistical analysis of outcomes of adoptions of hard-to-place children*. Westfield, NJ: Spaulding for Children.
- Brand, A. E., & Brinich, P. M. (1999). Behavior problems and mental health contacts in adopted, foster, and nonadopted children. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 40(8), 1221. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=2605557&site=ehost-live>
- Briggs, S., & Webb, L. (2004). Matching and mismatching in teenage adoptions: Implications of the adoption act for practice. *Journal of Social Work Practice*, 18(2), 181-195. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=13775209&site=ehost-live>
- Brodzinsky, D. M. (1993). Long term outcome in adoption. *The Future of Children*, 3, 153-166.
- Brodzinsky, D. M. (2005). Reconceptualizing openness in adoption: Implications for theory, research, and practice. In D. M. Brodzinsky, & J. Palacios (Eds.), *Psychological issues in adoption: Research and practice* (pp. 145-166). Westport, CT: Praeger.
- Brodzinsky, D. M., & Pinderhughes, E. E. (2002). Parenting and child development in adoptive families. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 1. children and parenting* (2nd ed., pp. 279-311). Mahway, NJ: Lawrence Erlbaum Associates.
- Brodzinsky, D. M., Radice, C., Huffman, L., & Merkler, K. (1987). Prevalence of clinically significant symptomatology in a non-clinical sample of adopted and non-adopted children. *Journal of Clinical Child Psychology*, 16, 350-356.
- Brodzinsky, D. (2006). Family structural openness and communication openness as predictors in the adjustment of adopted children. *Adoption Quarterly*, 9(4), 1-18. doi:10.1300/J145v9n04-01
- Brodzinsky, D. M. (2011). Children's understanding of adoption: Developmental and clinical implications. *Professional Psychology, Research & Practice*, 42(2), 200-207. doi:10.1037/a0022415

- Brodzinsky, D. M., & Brodzinsky, A. B. (1992). The impact of family structure on the adjustment of adopted children. *Child Welfare, 71*(1), 69-76. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9204201297&site=ehost-live>
- Bronfenbrenner, U. (1951). Toward an integrated theory of personality. In R. R. Blake, & G. V. Ramsey (Eds.), *Perception: An approach to personality*. (). New York: Ronald.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1988). Strengthening family systems. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development* (pp. 260-273). New York: Sage Publications.
- Bronfenbrenner, U. (1992). Ecological systems theory. In U. Bronfenbrenner (Ed.), *Making human beings human: Bioecological perspectives on human development*. New York: Sage Publications.
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review, 101*(4), 568-586.
- Bronfenbrenner, U., & Morris, P. (1994). The ecology of developmental processes, In W. Damon (Ed.), *Handbook of child psychology: Volume 1. theoretical models of human development* (5th ed., pp. 993-1028). New York: Wiley.
- Brown, D., Ryan, S., & Pushkal, J. T. (2007). Initial validation of the open adoption scale: Measuring the influence of adoption myths on attitudes toward open adoption. *Adoption Quarterly, 10*(3), 179-196. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=35301365&site=ehost-live>
- Bryan, V., Flaherty, C., & Saunders, C. (2010). Supporting adoptive families: Participant perceptions of a statewide peer mentoring and support program. *Journal of Public Child Welfare, 4*(1), 91-112. doi:10.1080/15548730903563178

- Burnett, K., & Farkas, G. (2009). Poverty and family structure effects on children's mathematics achievement: Estimates from random and fixed effects models. *Social Science Journal, 46*(2), 297-318. doi:10.1016/j.soscij.2008.12.009
- Carlson, E., Sampson, M., & Sroufe, L. (2003). Implications of attachment theory and research for developmental-behavioral pediatrics. *Journal of Developmental and Behavioral Pediatrics, 24*(5), 364-379. doi:10.1097/00004703-200310000-00010
- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity assessment. University series on quantitative applications in the social sciences*. Thousand Oaks, CA: Sage.
- Carp, E. W., & Leon-Guerrero, A. (2002). When in doubt, count: World War II as a watershed in the history of adoption. In E. W. Carp (Ed.), *Adoption in America*. Ann Arbor, MI: University of Michigan Press.
- Chess, S., & Thomas, A. (1989). Issues in the clinical application of temperament. In G. A. Kohnstamm, J. E. Bates & M. K. Rothbart (Eds.), *Temperament in childhood* (pp. 377-403). New York: Wiley.
- Child Welfare Information Gateway. (2011). *How many children were adopted in 2007 and 2008?* Washington, D.C.: U.S. Department of Health and Human Services, Children's Bureau.
- Cicchetti, D., & Toth, S. L. (1998). The development of depression in children and adolescents. *American Psychology, 53*(2), 221-241.
- Coakley, J. F., & Berrick, J. D. (2008). Research review: In a rush to permanency: Preventing adoption disruption. *Child & Family Social Work, 13*(1), 101-112. doi:10.1111/j.1365-2206.2006.00468.x
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression / correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, N.J.: Lawrence Erlbaum Associates.
- Cohen, S. (1994). *Perceived stress scale*. Redwood City, CA: The Mind Garden, Inc.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.
- Cohen, S., & Williamson, G. M. (1983). Perceived stress in a probability sample of the United States. In S. Spacapan, & S. Oskamp (Eds.), *The social psychology of health* (pp. 31). Newbury Park, CA: Sage.

- Cook, A., Blaustein, M., Spinazzola, J., & Van der Kolk, B. (2003). *Complex trauma in children and adolescents: White paper from the national child traumatic stress network complex trauma task force*. Los Angeles: National Child Traumatic Stress Network.
- Cook, W. (2000). Understanding attachment security in family context. *Journal of Personality and Social Psychology*, 78(2), 285-294.
- Coulton, C. J., Korbin, J. E., & Su, M. (1999). Neighborhoods and child maltreatment: A multi-level study. *Child Abuse and Neglect*, 23(11), 1012-1040.
- Courtney, J.R. & Prophet, R. (2011). Predictors of placement stability at the state level: The use of logistic regression to inform practice. *Child Welfare*, 90(2), 127-142.
- Cowan, A. (2004). New strategies to promote the adoption of older children out of foster care. *Children and Youth Services Review*, 26(11), 1007-1020.
doi:10.1016/j.chilyouth.2004.08.002
- Cowan, P. A., & Cohn, D. A. (1996). Parents' attachment histories and children's externalizing. *Journal of Consulting & Clinical Psychology*, 64(1), 53. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9603295055&site=ehost-live>
- Crea, T. M., & Barth, R. P. (2009). Patterns and predictors of adoption openness and contact: 14 years postadoption. *Family Relations*, 58, 607-620.
- Crea, T. M., Griffin, A., & Barth, R. P. (2011). The intersection of home study assessments and child specific recruitment: The performance of home studies in practice. *Children and Youth Services Review*, 33(1), 28-33.
doi:10.1016/j.chilyouth.2010.08.008
- Crittenden, P. M. (1992). Quality of attachment in the school aged years. *Development & Psychopathology*, 4, 209-241.
- Crittenden, P.M., Claussen, A.H., & Kozłowska, K. (2007). Choosing a valid assessment of attachment for clinical use: A comparative study. *Australia New Zealand Journal of Family Therapy*, 28, 78-87.
- Crittenden, P. M., & Ainsworth, M. D. S. (1989). Child maltreatment and attachment theory. In D. Cicchetti, & V. Carlson (Eds.), *Child maltreatment: Theory and*

- research on the causes and consequences of child abuse and neglect.* (pp. 432-463). Cambridge, UK: Cambridge University Press.
- Crosson-Tower, C. (1999). *Understanding child abuse and neglect.* (4th ed.). Boston, MA: Allyn and Bacon.
- Cummings, E. M., Schermerhorn, A. C., Keller, P. S., & Davies, P. T. (2008). Parental depressive symptoms, children's representations of family relationships, and child adjustment. *Social Development, 17*(2), 278-305. doi:10.1111/j.1467-9507.2007.00425.x
- Curtis, R., & Pearson, F. (2010). Contact with birth parents: Differential psychological adjustment for adults adopted as infants. *Journal of Social Work, 10*(4), 347-367.
- Dance, C., & Rushton, A. (2005). Joining a new family: The views and experiences of young people placed with permanent families during middle childhood. *Adoption & Fostering, 29*(1), 18-28. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2009065523&site=ehost-live>
- Dance, C., & Rushton, A. (2005). Predictors of outcome for unrelated adoptive placements made during middle childhood. *Child & Family Social Work, 10*(4), 269-280. doi:10.1111/j.1365-2206.2005.00357.x
- Deal, A. G., Trivette, C. M., & Dunst, C. J. (1988). Family functioning style scale. In C. J. Dunst, C. M. Trivette & A. G. Deal (Eds.), *Enabling and empowering families: Principles and guidelines for practice* (pp. 179-184). Cambridge, MA: Brookline Books.
- Decker, S., & Omori, M. (2009). Age at adoption: Long-term measures of success in adulthood. *Adoption Quarterly, 12*(1), 37-52. doi:10.1080/10926750902791953
- DellaCava, F. A., Kolko Phillips, N., & Engel, M. H. (2004). Adoption in the U.S.: Emergence of a social movement. *Journal of Sociology & Social Welfare, 31*(4), 141-160.
- Demo, D. H., & Acock, A. C. (1996). Family structure, family process, and adolescent well-being. *Journal of Research on Adolescence (Lawrence Erlbaum), 6*(4), 457-488. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=17644594&site=ehost-live>

- Denby, R. W., Alford, K. A., & Ayala, J. (2011). The journey to adopt a child who has special needs: Parents' perspectives. *Children and Youth Services Review, 33*(9), 1543-1554. doi:10.1016/j.chilyouth.2011.03.019
- DeVellis, R. F. (2003). *Scale development theory and applications* (2nd ed.). Thousand Oaks, CA: Sage.
- DeVooght, K., Malm, K., Vandivere, S., & McCoy-Roth, M. (2011). *Trends in adoptions from foster care in the wake of child welfare reforms*. (No. 4). Washington, D.C.: Fostering Connections.org.
- Dhami, M. K., Mandel, D. R., & Sothmann, K. (2007). An evaluation of post-adoption services. *Children & Youth Services Review, 29*(2), 162-179. doi:10.1016/j.chilyouth.2006.06.003
- Dozier, M., Chase Stovall, K., Albus, K. E., & Bates, B. (2001). Attachment for infants in foster care: The role of the caregiver state of mind. *Child Development, 72*(5), 1467-1477.
- Dozier, M., Manni, M., Gordon, M. K., Peloso, E., Gunnar, M. R., Stovall-McClough, K. C., . . . Levine, S. (2006). Foster children's diurnal production of cortisol: An exploratory study. *Child Maltreatment, 11*(2), 189-197.
- Dunst, C. J., Trivette, C. M., & Deal, A. G. (1988). *Enabling and empowering families*. Cambridge, MA: Brookline Books.
- Early, T. J., Gregoire, T. K., & McDonald, T. P. (2001). An assessment of the utility of the child behavior checklist 4-18 for social work practice. *Research on Social Work Practice, 11*(5), 597-612.
- Edens, J. F., & Cavell, T. A. (1999). A review and reformulation of adoptive relationships from an attachment perspective. *Adoption Quarterly, 3*(2), 43-69.
- Ello, L. M., & Donovan, S. J. (2005). Assessment of the relationship between parenting stress and a child's ability to functionally communicate. *Research on Social Work Practice, 15*(6), 531-544.
- Enders, C. K. (2010). *Applied missing data analysis*. New York: Guilford Press.

- Erich, S., & Leung, P. (1998). Factors contributing to family functioning of adoptive children with special needs: A long term outcome analysis. *Children and Youth Services Review, 20*(1-2), 42-51.
- Erich, S., & Leung, P. (2002). The impact of previous type of abuse and sibling adoption upon adoptive families. *Child Abuse & Neglect, 26*(10), 1045-1058.
doi:10.1016/S0145-2134(02)00374-5
- Erich, S., Hall, S. K., Kanenberg, H., & Case, K. (2009). Early and late stage adolescence: Adopted adolescents' attachment to their heterosexual and Lesbian/Gay parents. *Adoption Quarterly, 12*(3), 152-170. doi:10.1080/10926750903330462
- Ermisch, J. F., & Francesconi, M. (2001). Family structure and children's achievements. *Journal of Population Economics, 14*(2), 249. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=5349711&site=ehost-live>
- Fairchild-Kienlen, S. (2001). *The clinical assessment of attachment disorder in children 3-18: An evaluation of the attachment disorder assessment scale (ADAS)*. (Unpublished PhD). University of Texas, Arlington.
- Farber, M. L. Z., Timberlake, E., Mudd, H. P., & Cullen, L. (2003). Preparing parents for adoption: An agency experience. *Child and Adolescent Social Work Journal, 20*(3), 175-196.
- Fendrich, M., Warner, V., & Weissman, M. M. (1990). Family risk factors, parental depression, and psychopathology in offspring. *Developmental Psychology, 26*(1), 40-50. doi:10.1037/0012-1649.26.1.40
- Ferdinand, R. F., van der Ende, , & Verhulst, F. C. (2004). Parent - adolescent disagreement regarding psychopathology in adolescents from the general population as a risk factor for adverse outcome. *Journal of Abnormal Psychology, 113*(2), 198-206. doi:10.1037/0021-843X.113.2.198
- Fernandez Molina, M., Jesus Fuentes, M., & Fernandez Berrocal, P. (2012). Parental satisfaction predictors in families with adopted adolescents. *Revista Mexicana De Psicologia, 29*(1), 49-56.
- Festinger, T. (1986). *Necessary risk: A study of adoptions and disrupted adoptive placements*. Washington, DC: Child Welfare League of America.

- Festinger, T. (2002). After adoption dissolution or permanence? *Child Welfare, 81*(3), 515-533.
- Festinger, T., & Maza, P. (2009). Displacement or post-adoption placement? A research note. *Journal of Public Child Welfare, 3*(3), 275-286.
doi:10.1080/15548730903129889
- Festinger, T. (2005). Permanency for children and youth: Adoption disruption. In (pp. 452-468) Columbia University Press. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=sih&AN=31473191&site=ehost-live>
- Fish, B., & Chapman, B. S. (2004). Mental health risks to infants and toddlers in foster care. *Clinical Social Work Journal, 32*(2), 121-140.
- Foli, K. J. (2009). Postadoption depression: What nurses should know. *American Journal of Nursing, 109*(7), 11-11. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=43200078&site=ehost-live>
- Forbes, H., & Dziegielewska, S. F. (2003). Issues facing adoptive mothers of children with special needs. *Journal of Social Work, 3*(3), 301-320. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=12364690&site=ehost-live>
- Frasch, K. M., Brooks, D., & Barth, R. P. (2000). Openness and contact in foster care adoptions: An eight-year follow-up. *Family Relations, 49*(4), 435-446. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=3583584&site=ehost-live>
- Galbraith, S., Daniel, J. A., & Vissel, B. (2010). A study of clustered data and its approach to analysis. *The Journal of Neuroscience, 30*(32), 10601-10608.
- Garvin, M. C., Tarullo, A. R., Van Ryzin, M., & Gunnar, M. R. (2012). Postadoption parenting and socioemotional development in postinstitutionalized children. *Development & Psychopathology, 24*(1), 35-48. doi:10.1017/S0954579411000642
- Ge, X., Natsuaki, M. N., Martin, D. M., Neiderhiser, J. M., Villareal, G., Reid, J. B., . . . Reiss, D. (2008). Bridging the divide: Openness in adoption and post adoption

- psychosocial adjustment among birth and adoptive parents. *Journal of Family Psychology*, 22(3), 529-540.
- Gennetian, L. (2005). One or two parents? half or step siblings? the effect of family structure on young children's achievement. *Journal of Population Economics*, 18(3), 415-436. doi:10.1007/s00148-004-0215-0
- Gibbs, D., Barth, R., & Houts, R. (2005). Family characteristics and dynamics among families receiving post-adoption services. *The Journal of Contemporary Social Services*, 86(4), 520-532.
- Gillum, N., & O'Brien, M. (2010). Adoption satisfaction of black adopted children. *Children & Youth Services Review*, 32(12), 1656-1663. doi:10.1016/j.chilyouth.2010.07.005
- Gleitman, I., & Savaya, R. (2011). Adjustment of adolescent adoptees: The role of age of adoption and exposure to pre-adoption stressors. *Children & Youth Services Review*, 33(5), 758-766. doi:10.1016/j.chilyouth.2010.11.020
- Glidden, L. M., Flaherty, E. M., & McGlone, A. P. (2000). Is more too many? Adjustment in families with adopted children with developmental disabilities. *Adoption Quarterly*, 4(1), 67-80.
- Glover, M. B., Mullineaux, P. Y., Deater-Deckard, K., & Petrill, S. A. (2010). Parents' feelings towards their adoptive and non-adoptive children. *Infant & Child Development*, 19(3), 238-251. doi:10.1002/icd.664
- Goldberg, W. A., Prause, J., Lucas-Thompson, R., & Himsel, A. (2008). Maternal employment and children's achievement in context: A meta-analysis of four decades of research. *Psychological Bulletin*, 134(1), 77-108. doi:10.1037/0033-2909.134.1.77
- Goldman, G. D. (2007). *A study of the pre-adoptive functioning and post-adoption adjustment of children who have been prenatally exposed to alcohol, tobacco, and/or other drugs*. (Unpublished PhD). The Florida State University College of Social Work, Tallahassee, FL.
- Goldman, G. D., & Ryan, S. D. (2011). Direct and modifying influences of selected risk factors on children's pre-adoption functioning and post-adoption adjustment.

Children and Youth Services Review, 33(2), 291-300.

doi:10.1016/j.childyouth.2010.09.012

- Goodnow, J. J., & Collins, W. A. (1990). *Development according to parents: The nature, sources and consequences of parents' ideas*. Hillsdale, NJ: Laurence Erlbaum Associates.
- Grand, M. P. (2010). *The adoption constellation: New ways of thinking about and practicing adoption*. CreateSpace.
- Greenland, S., & Mickey, R. M. (1989). The impact of confounder selection criteria on effect estimation. *American Journal of Epidemiology*, 130(5), 1066-1066.
- Groothues, C. L. M., Beckett, C. M., & O'Connor, T. G. (2001). Successful outcomes: A follow-up study of children adopted from Romania into the UK. *Adoption Quarterly*, 5(1), 5-22. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9691359&site=ehost-live>
- Grotevant, H. D., Dunbar, N., Kohler, J. K., & Lash-Esau, A. M. (2000). Adoptive identity: How contexts within and beyond the family shape developmental pathways. *Family Relations*, 49, 379-387.
- Grotevant, H. D., & McRoy, R. G. (2006). Openness arrangements and psychological adjustment in adolescent adoptees. *Journal of Family Psychology*, 20(3), 531-534.
- Grotevant, H. D., McRoy, R. G., Elde, C., & Fravel, D. L. (1994). Adoptive family system dynamics: Variations by level of openness in the adoption. *Family Process*, 33, 125-146.
- Grotevant, H. D. (2003). Counseling psychology meets the complex world of adoption. *Counseling Psychologist*, 31(6), 751-760. doi:10.1177/0011000003258388
- Grotevant, H. D. (1997). Family processes, identity development, and behavioral outcomes for adopted adolescents. *Journal of Adolescent Research*, 12(1), 139. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9701242431&site=ehost-live>
- Grotevant, H. D., Rueter, M., Von Korff, L., & Gonzalez, C. (2011). Post-adoption contact, adoption communicative openness, and satisfaction with contact as

- predictors of externalizing behavior in adolescence and emerging adulthood. *Journal of Child Psychology & Psychiatry*, 52(5), 529-536. doi:10.1111/j.1469-7610.2010.02330.x
- Grotevant, H. D., Wrobel, G. M., Von Korff, L., Skinner, B., Newell, J., Friese, S., & McRoy, R. G. (2007). Many faces of openness in adoption: Perspectives of adopted adolescents and their parents. *Adoption Quarterly*, 10(3), 79-101. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=35301361&site=ehost-live>
- Groza, V., Brindo, B., Fox, D., & Garcia, E. (2009). *Adoption in Ohio's heartland: Final evaluation report*. (Prepared with Bellefaire JCB, funded by the Department of Health and Human Services, Adoption Demonstration Grant Project). Cleveland, OH.
- Groza, V., & Rosenberg, K. (2001). *Clinical and practice issues in adoption: Bridging the gap between adoptees placed as infants and as older children. Revised and Updated*. Westport, CT: Bergin and Garvey.
- Groza, V., Ryan, S. D., & Cash, S. J. (2003). Institutionalization, behavior and international adoption: Predictors of behavior problems. *Journal of Immigrant Health*, 5(1), 5-17.
- Groza, V., & Ryan, S. D. (2002). Pre-adoption stress and its association with child behavior in domestic special needs and international adoptions. *Psychoneuroendocrinology*, 27(1-2), 181-197. Retrieved from http://journals.ohiolink.edu/ejc/article.cgi?issn=03064530&issue=v27i1-2&article=181_psaiawdsnaia
- Groze, V. (1986). Special needs adoption. *Children and Youth Services Review*, 8, 81-91.
- Groze, V. (1992). Adoption, attachment and self-concept. *Child & Adolescent Social Work Journal*, 9(2), 169-191. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=swh&AN=26941&site=ehost-live>
- Groze, V. (1996). *Successful adoptive families: A longitudinal study*. Westport, CT: Praeger.

- Groze, V., & Rosenthal, J. A. (1993). Attachment theory and the adoption of children with special needs. *Social Work Research and Abstracts*, 29(2)
- Groze, V., Ryan, S. D., & Cash, S. J. (2003). Institutionalization, behavior and international adoption: Predictors of behavior problems. *Journal of Immigrant Health*, 5(1), 5-17.
- Gunnar, M. R. (2010). Reversing the effects of early deprivation after infancy: Giving children families may not be enough. *Frontiers in Neuroscience*, 8(4), 170.
- Guo, S., & Wells, K. (2003). Research on timing of foster care outcomes: One methodological problem and approaches to its solution. *Social Service Review*, 77(1), 1. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=sih&AN=9426668&site=ehost-live>
- Hajal, F., & Rosenberg, E. B. (1991). The family life cycle in adoptive families. *American Journal of Orthopsychiatry*, 61(1), 78. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9102182874&site=ehost-live>
- Hanna, M. D., & McRoy, R. G. (2011). Innovative practice approaches to matching in adoption. *Journal of Public Child Welfare*, 5(1), 45-66.
doi:10.1080/15548732.2011.542722
- Hanna, M., Tokarski, K., Matera, D., & Fong, R. (2011). Happily ever after? the journey from foster care to adoption. *Adoption Quarterly*, 14(2), 107-131.
doi:10.1080/10926755.2011.560789
- Hansen, M. E. (2007). The value of adoption. *Adoption Quarterly*, 10(2), 65-85.
- Harter, S. (1985). *What am I like: Self perception profile for children*. Denver: University of Denver.
- Hartman, A. (1979). *Finding families: An ecological approach to family assessment in adoption*. *Sages human services guides, volume 7*. Beverly Hills, CA: Sage Publications.
- Hartman, A., & Laird, J. (1983). *Family-centered social work practice*. New York: The Free Press.

- Haugaard, J. J., Moed, A. M., & West, N. M. (2001). Outcomes of open adoptions. *Adoption Quarterly*, 4(3), 63-73.
- Haugaard, J. J., West, N. M., & Moed, A. M. (2000). *Open adoptions: Attitudes and experiences* Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9691332&site=ehost-live>
- Hawk, B. N., & McCall, R. B. (2011). Specific extreme behaviors of postinstitutionalized Russian adoptees. *Developmental Psychology*, 47(3), 732-738. doi:10.1037/a0021108
- Hawk, B., & McCall, R. (2010). CBCL behavior problems of post-institutionalized international adoptees. *Clinical Child & Family Psychology Review*, 13(2), 199-211. doi:10.1007/s10567-010-0068-x
- Hawkins, A., Beckett, C., Rutter, M., Castle, J., Colvert, E., Groothues, C., . . . Sonuga-Barke, E. (2007). Communicative openness about adoption and interest in contact in a sample of domestic and intercountry adolescent adoptees. *Adoption Quarterly*, 10(3-4), 131-152.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality & Social Psychology*, 59(2), 270-280. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9102111410&site=ehost-live>
- Hellerstedt, W. L., Madsen, N. J., Gunnar, M. R., Grotevant, H. D., Lee, R. M., & Johnson, D. E. (2008). The international adoption project: Population-based surveillance of Minnesota parents who adopted children internationally. *Maternal & Child Health Journal*, 12(2), 162-171. doi:10.1007/s10995-007-0237-9
- Henderson, D., & Scannapieco, M. (2006). Ecological correlates of effective foster care. *Journal of Family Social Work*, 10(1), 43-60.
- Herman, J. (1997). *Trauma and recovery: The aftermath of violence- from domestic abuse to political terror*. New York: Basic Books.
- Hodges, J., Steele, M., Hillman, S., Henderson, K., & Kaniuk, J. (2005). Change and continuity in mental representations of attachment after adoption. In D. M.

- Brodzinsky, & J. Palacios (Eds.), *Psychological issues in adoption* (pp. 93-116). Westport, CT: Praeger.
- Hoksbergen, R., Rijk, K., Dijkum, C. V., & Laak, J. T. (2004). Adoption of Romanian children in the Netherlands: Behavior problems and parenting burden of upbringing for adoptive parents. *Developmental and Behavioral Pediatrics, 25*(3), 175-180.
- Hollenstein, T., Leve, L. D., Scaramella, L. V., Milfort, R., & Neiderhiser, J. M. (2003). Openness in adoption, knowledge of birthparent information, and adoptive family adjustment. *Adoption Quarterly, 7*(1), 43-52.
- Holloway, J. (1997). Outcome in placements for adoption or long term fostering. *Archives of Disease in Childhood, 76*(3), 227-230.
- Hollows, A., & Nelson, P. (2006). Equity and pragmatism in judgment-making about the placement of sibling groups. *Child and Family Social Work, 11*, 307-315.
- Holmbeck, G. N., Paikoff, R. L., & Brooks-Gunn, J. (2002). Parenting adolescents. In M. H. Bornstein (Ed.), *Handbook of parenting volume 1: Children and parenting* (pp. 91-118). Mahwah, NJ: Erlbaum.
- Houston, D. M., & Kramer, L. (2008). Meeting the long-term needs of families who adopt children out of foster care: A three-year follow-up study. *Child Welfare, 87*(4), 145-170. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=37012293&site=ehost-live>
- Howard, J. A., Livingston Smith, S., & Ryan, S. D. (2004). A comparative study of child welfare adoptions with other types of adopted children and birth children. *Adoption Quarterly, 7*(3), 1-30.
- Howe, D. (1997). Parent reported problems in 211 adopted children: Some risk and protective factors. *Journal of Child Psychology & Psychiatry, 38*(4), 401-411.
- Howe, D., & Fearnley, S. (2003). Disorders of attachment in adopted and fostered children: Recognition and treatment. *Clinical Child Psychology & Psychiatry, 8*(3), 369-387.
- Howe, D. (2001). Age at placement, adoption experience and adult adopted people's contact with their adoptive and birth mothers: An attachment perspective.

- Attachment & Human Development*, 3(2), 222-237.
doi:10.1080/14616730110058025
- Hudziak, J. J., Copeland, W., Stanger, C., & Wadsworth, M. (2004). Screening for DSM-IV externalizing disorders with the child behavior checklist: A receiver-operating characteristic analysis. *Journal of Child Psychology and Psychiatry*, 45(7), 1299-1307.
- Hughes, D. A. (1999). Adopting children with attachment problems. *Child Welfare*, 78(5), 541-560. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=2331249&site=ehost-live>
- Hutchinson, E. D., & Charlesworth, L. W. (2000). Securing the welfare of children: Policies past, present and future. *Families in Society*, 81(6), 576-585.
- Hwa-ok, B., Solomon, P. L., & Gelles, R. (2009). Multiple child maltreatment recurrence relative to single recurrence and no recurrence. *Children and Youth Services Review*, 31, 617-624.
- Ingersoll, B. D. (1997). Psychiatric disorders among adopted children: A review and commentary. *Adoption Quarterly*, 1(1), 57-73.
- Ji, J., Brooks, D., Barth, R. P., & Kim, H. (2010). Beyond preadoptive risk: The impact of adoptive family environment on adopted youth's psychosocial adjustment. *American Journal of Orthopsychiatry*, 80(3), 432-442. doi:10.1111/j.1939-0025.2010.01046.x
- Johnson, D. E. (2002). Adoption and the effect on children's development. *Early Human Development*, 68, 39-54.
- Jones, C., & Hackett, S. (2007). Communicative openness within adoptive families: Adopted parents' narrative accounts of the challenges of adoption talk and the approaches used to manage these challenges. *Adoption Quarterly*, 10, 3-4.
- Judge, S. (2004). The impact of early institutionalization on child and family outcomes. *Adoption Quarterly*, 7(3), 31.
- Juffer, F., Stams, G. J. M., & Van IJzendoorn, M. H. (2004). Adopted children's problem behavior is significantly related to their ego resiliency, ego control, and sociometric

- status. *Journal of Child Psychology & Psychiatry*, 45(4), 697-706.
doi:10.1111/j.1469-7610.2004.00264.x
- Juye, J., Brooks, D., Barth, R., & Kim, H. (2010). Beyond preadoptive risk: The impact of adoptive family environment on adopted youth's psychosocial adjustment. *American Journal of Orthopsychiatry*, 80(3), 432-442.
- Kadushin, A. (1967). Reversibility of trauma: A follow-up study of children adopted when older. *Social Work*, 12(4), 22-33.
- Kadushin, A. (1970). *Adopting older children*. New York: Columbia University Press.
- Kadushin, A., & Seidl, F. (1971). Adoption failure: A social work post-mortem. *Social Work*, 16, 32-37.
- Kagan, R. M., & Reid, W. J. (1986). Critical factors in the adoption of emotionally disturbed youths. *Child Welfare*, 65, 63-73.
- Kane, P., & Garber, J. (2009). Parental depression and child externalizing and internalizing symptoms: Unique effects of fathers symptoms and perceived conflict as a mediator. *J Child Family Study*, 18, 465-472.
- Karen, R. (1998). *Becoming attached : Unfolding the mystery of the infant-mother bond and its impact on later life*. New York: Warner.
- Keck, G. C., & Kupecky, R. M. (1995). *Adopting the hurt child; hope for families with special needs kids*. Colorado Springs, CO: Pinon Press.
- Kernan, E., & Lansford, J. E. (2004). Providing for the best interests of the child? The Adoption and Safe Families Act of 1997. *Applied Developmental Psychology*, 25, 523-539.
- Keyes, M. A., Sharma, A., Elkins, I. J., Iacono, W. G., & McGue, M. (2008). The mental health of US adolescents adopted in infancy. *Archives of Pediatrics & Adolescent Medicine*, 162(5), 419-425. doi:10.1001/archpedi.162.5.419
- Kinkler, L. A., & Goldberg, A. E. (2011). Working with what we've got: Perceptions of barriers and supports among small-metropolitan-area same-sex adopting couples. *Family Relations*, 60(4), 387-403. doi:10.1111/j.1741-3729.2011.00654.x
- Kirk, D. (1964). *Shared fate: A theory of adoption and mental health*. New York: Free Press.

- Koh, B. D., & Rueter, M. A. (2011). Contributions of parent-adolescent negative emotionality, adolescent conflict, and adoption status to adolescent externalizing behaviors. *Journal of Clinical Child and Adolescent Psychology, 40*(6), 825-836. doi:10.1080/15374416.2011.614579
- Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2002). Adopted adolescents preoccupation with adoption: The impact on adoptive family relationships. *Journal of Marriage and Family, 64*, 92-104.
- Korbin, J. E. (2003). *Neighborhood and community connectedness in child maltreatment research* doi:10.1016/S0145-2134(02)00537-9
- Korff, L. V., & Grotevant, H. D. (2011). Contact in adoption and adoptive identity formation: The mediating role of family conversation. *Journal of Family Psychology, 25*(3), 393-401.
- Kriebel, D. K., & Wentzel, K. (2011). Parenting as a moderator of cumulative risk for behavioral competence in adopted children. *Adoption Quarterly, 14*(1), 37-60. doi:10.1080/10926755.2011.557945
- Kufeldt, K., Armstrong, J., & Dorosh, M. (1995). How children in care view their own and their foster families - a research study. *Child Welfare, 74*(3), 695-715.
- Kupfermann, K. (2010). Will you be my mommy? A quest of a child to fill in the gaps in the process of bonding with her adoptive parents. *Psychoanalytic Inquiry, 30*(1), 41-53. doi:10.1080/07351690903200143
- Lambert, M. C., Samms-Vaughan, M., Fairclough, M., Schmitt, N., Jeong, S. A., & Nutter, C. A. (2003). Is it prudent to administer all items for each child behavior checklist cross-informant syndrome? Evaluating the psychometric properties of the youth self-report dimensions with confirmatory factor analysis and item response theory. *Psychological Assessment, 15*(4), 550-568. doi:10.1037/1040-3590.15.4.550
- Lansford, J. E., Ceballo, R., Abbey, A., & Steward, A. J. (2001). Does family structure matter? A comparison of adoptive, two-parent biological, single-mother, stepfather, and stepmother households. *Journal of Marriage and Family, 63*, 840-851.
- Lavoie, J. A. A., & Douglas, K. S. (2012). The perceived stress scale: Evaluating configurable, metric and scalar invariance across mental health status and gender. *Journal of Psychopathology Behavioral Assessment, 34*, 48-57.

- Lawder, E. A., Lower, K. D., Andrews, R. A., Sherman, E. A., & Hill, J. G. (1969). *A follow-up study of adoptions: Post placement functioning of adoptive families*. New York: Child Welfare League of America.
- Le Mare, L., & Audet, K. (2011). Communicative openness in adoption, knowledge of culture of origin, and adoption identity in adolescents adopted from Romania. *Adoption Quarterly, 14*(3), 199-217. doi:10.1080/10926755.2011.608031
- Leung, P., & Erich, S. (2002). Family functioning of adoptive children with special needs: Implications of familial supports and child characteristics. *Children and Youth Services Review, 24*(11), 799-816. doi:10.1016/S0190-7409(02)00240-2
- Leung, P., Erich, S., & Kanenberg, H. (2005). A comparison of family functioning in gay/lesbian, heterosexual and special needs adoptions. *Children and Youth Services Review, 27*(9), 1031-1044. doi:10.1016/j.childyouth.2004.12.030
- Leve, L. D., Neiderhiser, J. M., Scaramella, L. V., & Reiss, D. (2010). The early growth and development study: Using the prospective adoption design to examine Genotype–Environment interplay. *Behavior Genetics, 40*(3), 306-314. doi:10.1007/s10519-010-9353-1
- Levy-Shiff, R. (2001). Psychological adjustment of adoptees in adulthood: Family environment and adoption-related correlates. *International Journal of Behavioral Development, 25*(2), 97-104.
- Lieb, R., Isensee, B., Hofler, M., Pfister, H., & Wittchen, H. (2002). Parental major depression and the risk of depression and other mental disorders in offspring: A prospective-longitudinal community study. *Archives of General Psychiatry, 59*(4), 365-374. doi:10.1001/archpsyc.59.4.365
- Lieberman, A. (2003). The treatment of attachment disorder in infancy and early childhood: Reflections from clinical intervention with later adopted foster care children. *Attachment and Human Development, 5*(3), 279-282.
- Lieberman, A., & Amaya-Jackson, L. (2005). Reciprocal influences of attachment and trauma: Using a dual lens in the assessment and treatment of infants, toddlers, and preschoolers. In L. Berlin, Y. Ziv, L. Amaya-Jackson & M. T. Greenberg (Eds.), *Enhancing early attachments: Theory, research, intervention, and policy* (pp. 100-124). New York: The Guilford Press.

- Logan, F. A., Morrall, P. M. E., & Chambers, H. (1998). Identification of risk factors of psychological disturbance in adopted children. *Child Abuse Review, 7*, 154-164.
- Logan, J. (2010). Preparation and planning for face-to-face contact after adoption: The experience of adoptive parents in a UK study. *Child and Family Social Work, 15*, 315-324.
- Loman, M. & Gunnar, M.R. and the Early Experience, Stress and Neurodevelopment Center Team. (2010). Early experience and the development of stress reactivity and regulation in children. *Neuroscience and Biobehavioral Reviews, 34*(6), 867-876.
- Main, M., & Goldwyn, R. (1998). *Adult attachment classification system*. London: University College.
- Main, M., & Weston, D. R. (1981). The quality of toddlers' relationship to mother and father: Related to conflict behavior and readiness to establish new relationships. *Child Development, 52*, 932-940.
- Mainemer, H., Gilman, L., & Ames, E. (1998). Parenting stress in families adopting children from Romanian orphanages. *Journal of Family Issues, 19*(2), 164-180.
- Mallon, G.P. (2007). Assessing lesbian and gay prospective foster and adoptive families: A focus on the home study process. *Child Welfare, 86*(2), 67-86.
- Mangione, T.W. (1995). *Mail surveys: Improving the quality*. Thousand Oaks, CA: Sage.
- Martin, B., Kelly, M. M., & Towner-Thyrum, E. (1999). Adoptive family adjustment and its relation to perceived family environment. *Adoption Quarterly, 3*(1), 49-60.
- Marvin, R., & Whelan, W. (2003). Disordered attachments: Toward evidence-based clinical practice. *Attachment and Human Development, 5*(3), 283-288.
- McCall, R. B., & Appelbaum, M. I. (1991). Some issues of conducting secondary analyses. *Developmental Psychology, 27*(6), 911-917. doi:10.1037/0012-1649.27.6.911
- McCarthy, G. D. E. (2007). Understanding adoption: Clinical work with adults, children, and parents. *Clinical Social Work Journal, 35*(2), 141-142. doi:10.1007/s10615-007-0080-x
- McCay, J. M., Pickens, J., & Stewart, A. L. (1996). Inventoried and observed stress in parent-child interactions. *Current Psychology, 15*(3), 223-234.

- McDonald, T. P., Propp, J. R., & Murphy, K. C. (2001). The post adoption experience: Child, parent and family predictors of family adjustment to adoption. *Child Welfare, 80*(1), 71-94.
- McGlone, K., Santos, L., Kazama, L., Fong, R., & Mueller, C. (2002). Psychological stress in adoptive parents of special-needs children. *Child Welfare, 81*(2), 151-173.
- McGuinness, T. M., Ryan, R., & Robinson, C. B. (2005). Protective influences of families for children adopted from the former soviet union. *Journal of Nursing Scholarship, 37*(3), 216-221. doi:10.1111/j.1547-5069.2005.00038.x
- McGuinness, T., & Pallansch, L. (2000). Competence of children adopted from the former Soviet Union. *Family Relations, 49*(4), 457-464. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=3583600&site=ehost-live>
- McKay, J. M., Pickens, J., & Stewart, A. L. (1996). Inventoried and observed stress in parent-child interactions. *Current Psychology, 15*(3), 223-234.
- McKay, K., Ross, L. E., & Goldberg, A. E. (2010). Adaptation to parenthood during the post-adoption period: A review of the literature. *Adoption Quarterly, 13*(2), 125-144. doi:10.1080/10926755.2010.481040
- Mertler, C. A., & Vannatta, R. A. (2002). *Advanced and multivariate statistical methods: Practical application and interpretation* (2nd ed.). Los Angeles, CA: Pyrczak Publishing.
- Merz, E. C., & McCall, R. B. (2011). Parent ratings of executive functioning in children adopted from psychosocially depriving institutions. *Journal of Child Psychology and Psychiatry, 52*(5), 537-546. doi:10.1111/j.1469-7610.2010.02335.x
- Miall, C., & March, K. (2005). Open adoption as a family form - community assessments and social support. *Journal of Family Issues, 26*(3), 380-410. doi:10.1177/0192513X04270210
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Sampson, & W. S. Rholes (Eds.), *Attachment theory and close relationships*. New York: Guilford.

- Miller, B. C., Fan, X., Christensen, M., Grotevant, H.D., & van Dulman, M.H.M. (2000). Comparisons of adopted and nonadopted adolescents in a large, nationally representative sample. *Child Development, 71*(5), 1458-1743.
- Miller, B. C., Fan, X., & Grotevant, H. D. (2005). Methodological issues in large-scale survey data for adoption research. In D. M. Brodzinsky, & J. Palacios (Eds.), *Psychological issues in adoption: Research and practice* (pp. 233-255). Westport, CN: Praeger.
- Miller, L., Chan, W., Tirella, L., & Perrin, E. (2009). Outcomes of children adopted from Eastern Europe. *International Journal of Behavioral Development, 33*(4), 289-298.
- Morton, N., & Browne, K. D. (1998). Theory and observation of attachment and its relation to child maltreatment: A review. *Child Abuse and Neglect, 22*(11), 1093-1104.
- Nalavany, B. A., Glidden, L. M., & Ryan, S. D. (2009). Parental satisfaction in the adoption of children with learning disorders: The role of behavior problems. *Family Relations, 58*(5), 621-633.
- Nalavany, B. A., Ryan, S. D., Howard, J. A., & Smith, S. L. (2008). Preadoptive child sexual abuse as a predictor of moves in care, adoption disruptions, and inconsistent adoptive parent commitment. *Child Abuse & Neglect, 32*(12), 1084-1088. doi:10.1016/j.chiabu.2008.07.001
- Natsuaki, M. N., Leve, L. D., Shaw, D. S., Scaramella, L. V., Ge, X., Neiderhiser, J. M., . . . Reiss, D. (2010). Genetic liability, environment, and the development of fussiness in toddlers: The roles of maternal depression and parental responsiveness. *Developmental Psychology, 46*(5), 1147-1158. doi:10.1037/a0019659
- Neal, J., & Frick-Horbury, D. (2001). The effects of parenting styles and childhood attachment patterns on intimate relationships. *Journal of Instructional Psychology, 28*(3), 178-183.
- Neil, E. (2003). Understanding other peoples perspectives: Tasks for adopters in open adoption. *Adoption Quarterly, 6*(3), 3-30.
- Neil, E. (2012). Making sense of adoption: Integration and differentiation from the perspective of adopted children in middle childhood. *Children and Youth Services Review, 34*, 409-416.

- Neil, E. (2007). Supporting post-adoption contact for children adopted from care: A study of social workers attitudes. *Adoption Quarterly*, 10(3-4), 3-28.
- Neil, E. (2009). Post-adoption contact and openness in adoptive parents' minds: Consequences for children's development. *British Journal of Social Work*, 39(1), 5-23. doi:10.1093/bjsw/bcm087
- Nelson, D. B. (2003). Family functioning measures: Convergent and discriminant validity. *Journal of Theory Construction & Testing*, 7(1), 18-26. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=12835595&site=ehost-live>
- Nickman, S., Rosenfeld, A., Fine, P., Macintyre, J., Pilowsky, D., Howe, R., . . . Sveda, S. (2005). Children in adoptive families: Overview and update. *Journal of the American Academy of Child and Adolescent Psychiatry*, 44(10), 987-995. doi:10.1097/01.chi.0000174463.60987.69
- Niemann, S., & Weiss, S. (2011). Attachment behavior of children adopted internationally at six months post adoption. *Adoption Quarterly*, 14, 246-267.
- Niemann, S., & Weiss, S. (2012). Factors affecting attachment in international adoptees at 6 months post adoption. *Children and Youth Services Review*, 34(1), 205-212. doi:10.1016/j.childyouth.2011.10.001
- Nilsson, R., Rhee, S. H., Corley, R. P., Rhea, S., Wadsworth, S. J., & DeFries, J. C. (2011). Conduct problems in adopted and non-adopted adolescents and adoption satisfaction as a protective factor. *Adoption Quarterly*, 14(3), 181-198. doi:10.1080/10926755.2011.608030
- O'Connor, T. G., & Zeanah, C. H. (2003). Attachment disorders: Assessment strategies and treatment approaches. *Attachment and Human Development*, 5(3), 223-244.
- O'Connor, T. G., & Zeanah, C. H. (2003). Current perspectives on attachment disorders: Rejoinder and synthesis. *Attachment and Human Development*, 5(3), 321-326.
- Oosterman, M., & Schuengel, C. (2008). Attachment in foster children associated with caregivers' sensitivity and behavioral problems. *Infant Mental Health Journal*, 29(6), 609-623.

- Orucu, M. C., & Demir, A. (2009). Psychometric evaluation of perceived stress scale for Turkish university students. *Wiley InterScience*, February 1, 2011. doi:DOI: 10.1002/smi.1218
- Pace, C. S., Zavattini, G. C., & D'Alessio, M. (2012). Continuity and discontinuity of attachment patterns: A short-term longitudinal pilot study using a sample of late-adopted children and their adoptive mothers. *Attachment & Human Development*, 14(1), 45-61. doi:10.1080/14616734.2012.636658
- Palacios, J., & Brodzinsky, D. (2010). Adoption research: Trends, topics, outcomes. *International Journal of Behavioral Development*, 34(3), 270-284. doi:10.1177/0165025410362837
- Palacios, J., Román, M., Moreno, C., & León, E. (2009). Family context for emotional recovery in internationally adopted children. *International Social Work*, 52(5), 609-620. doi:10.1177/0020872809337679
- Palacios, J., & Sanchez-Sandoval, Y. (2006). Stress in parents of adopted children. *International Journal of Behavioral Development*, 30(6), 481-487. doi:10.1177/0165025406071492
- Partridge, S., Hornby, H., & McDonald, T. P. (1986). *Legacies of loss-visions of gain: An inside look at adoption disruption*. Portland, ME: University of Southern Maine Press.
- Pavao, J. (1992). Normative crises in the development of the adoptive family. *Adoption Therapists*, 3(2), 1-4.
- Pederson, D. R., Gleason, K. E., Moran, G., & Bento, S. (1998). Maternal attachment representations, maternal sensitivity, and the infant-mother attachment relationship. *Developmental Psychology*, 34(5), 925-933.
- Perris, C., & Anderson, P. (2000). Experiences of parental rearing and patterns of attachment in adulthood. *Clinical Psychology and Psychotherapy*, 7, 279-288.
- Perry, B. D., Pollard, R. A., Blakley, T. L., Baker, W. L., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and "use-dependent" development of the brain: How "states" become "traits". *Infant Mental Health Journal*, 16(4), 271-291. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=12032661&site=ehost-live>

- Peters, B. R., Atkins, M. S., & McKernan-McKay, M. (1999). Adopted children's behavior problems: A review of five explanatory models. *Clinical Child Psychology Review, 19*(3), 297-328.
- Pfeffer, P. F. (2002). A historical comparison of catholic and Jewish adoption practices in Chicago, 1833-1933. In E. W. Carp (Ed.), *Adoption in America*. Ann Arbor, MI: University of Michigan Press.
- Phillips, T. M. (2012). The influence of family structure vs. family climate on adolescent well-being. *Child & Adolescent Social Work Journal, 29*, 103-110.
- Pickert, K., & Shuster, S. (2010). When the adopted can't adapt. *Time, 175*(25), 34-39. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=51549986&site=ehost-live>
- Pinderhughes, E. E. (1996). Toward understanding family readjustment following older child adoptions: The interplay between theory generation and empirical research. *Children and Youth Services Review, 18*(1-2), 115-138.
- Pinderhughes, E. E., & Rosenberg, K. (1990). Family bonding with high-risk placements: A therapy model that promotes the process of becoming a family. In L. M. Glidden (Ed.), *Formed families: Adoption of children with handicaps*. (). New York: Haworth Press.
- Pirila, S., Van, D. M., Seppänen, R., Ojala, L., Jaakkola, A., Korpela, R., & Nieminen, P. (2005). Children with functional motor limitations: The effects on family strengths. *Child Psychiatry & Human Development, 35*(3), 281-295. doi:10.1007/s10578-004-6462-1
- Ponciano, L. (2010). Attachment in foster care: The role of maternal sensitivity, adoption, and foster mother experience. *Child & Adolescent Social Work Journal, 27*, 97-114.
- Porter, S. L. (2002). A good home. Indenture and adoption in nineteenth-century orphanages. In E. W. Carp (Ed.), *Adoption in America*. Ann Arbor, MI: University of Michigan Press.

- Priel, B., Melamed-Hass, S., Besser, A., & Kantor, B. (2000). Adjustment among adopted children: The role of maternal self-reflectiveness. *Family Relations*, 49(4), 389-396. doi:10.1111/j.1741-3729.2000.00389.x
- Proctor, C., & Groza, V. (2008). The relationship of parenting style to child outcomes in adoptive families of children from India: A cross-national perspective. *International Journal of Child & Family Welfare*, 2(3), 126-143.
- Quinton, D., Rushton, A., Dance, C., & Mayes, D. (1988). *Joining new families: A study of adoption and fostering in middle childhood*. Chichester: Wiley and Sons.
- Radel, L. F., & Bramlett, M. D. (2010). Commentary: Research possibilities using the national survey of adoptive parents. *Adoption Quarterly*, 13(3), 292-301. doi:10.1080/10926755.2010.524877
- Radke-Yarrow, M., Cummings, E. M., Leon Kuczynski, & Chapman, M. (1985). Patterns of attachment in two- and three-year-olds in normal families and families with parental depression. *Child Development*, 56(4), pp. 884-893. Retrieved from <http://www.jstor.org/stable/1130100>
- Reilly, T., & Platz, L. (2004). Post-adoption service needs of families with special needs children: Use, helpfulness, and unmet needs. *Journal of Social Service Research*, 30(4), 51-67. doi:10.1300/J079v30n04_03
- Reiss, D., & Neiderhiser, J. M. (2000). The interplay of genetic influences and social processes in developmental theory: Specific mechanisms are coming into view. *Development & Psychopathology*, 12, 357-374.
- Reitz, M., & Watson, K. W. (1992). *Adoption and the family system: Strategies for treatment*. New York: Guilford Press.
- Renk, K., Roddenberry, A., Oliveros, A., & Sieger, K. (2007). The relationship of maternal characteristics and perceptions of children to children's emotional and behavioral problems. *Child and Family Behavior Therapy*, 29(1), 37-56.
- Respler-Herman, M., Mowder, B., Yasik, A., & Shamah, R. (2012). Parenting beliefs, parental stress, and social support relationships. *Journal of Child & Family Studies*, 21(2), 190-198. doi:10.1007/s10826-011-9462-3
- Rice, F. P. (2001). *Human development* (4th ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.

- Rijk, C. H., Hoksbergen, R. A., Laak, J. J., Dijkum, C. V., & Robbroeckx, L. H. M. (2006). Parents who adopt deprived children-have a difficult task. *Adoption Quarterly*, 9(2-3), 37-61.
- Rishel, C. W., Green, C., Marcus, S. C., Shear, M. K., & Anderson, C. (2005). Use of the Child Behavior Checklist as a diagnostic screening tool in community mental health. *Research on Social Work Practice*, 15(3), 195-203.
- Roberti, J. W., Harrington, L. N., & Storch, E. A. (2006). Further psychometric support for the 10-item version of the Perceived Stress scale. *Journal of College Counseling*, 9, 135-147.
- Rosenberg, E. B. (1992). *The adoption life cycle: The children and their families through the years*. New York: The Free Press.
- Rosenthal, J. A. (1992). Outcomes of adoption of children with special needs. *The Future of Children*, 3(1), 77-88.
- Rosenthal, J. A., & Groze, V. (1991). Behavioral-problems of special needs adopted-children. *Children and Youth Services Review*, 13(5-6), 343-361. doi:10.1016/0190-7409(91)90025-D
- Rosenthal, J. A., & Groze, V. (1992). *Special needs adoption: A study of intact families*. New York: Praeger.
- Rosenthal, J. A., Schmidt, D., & Conner, J. (1988). Predictors of special needs adoption disruption: An exploratory study. *Children and Youth Services Review*, 10, 101-117.
- Rosenthal, J. A., & Groze, V. K. (1994). A longitudinal study of special-needs adoptive families. *Child Welfare*, 73(6), 689-706. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=24227544&site=ehost-live>
- Rosnati, R., Lafrate, R., & Scabini, E. (2007). Parent-adolescent communication in foster, inter-country adoptive and biological Italian families: Gender and generational differences. *International Journal of Psychology*, 42(1), 36-45. doi:10.1080/00207590500412128
- Royse, D. (1995). *Research methods in social work*. (2nd ed.). Chicago, IL: Nelson-Hall, Inc.

- Rubin, A. & Babbie, E. (1997). *Research methods for social work*. (3rd ed.). Pacific Grove, CA: Brooks/Cole.
- Rueter, M. A., Keyes, M. A., Iacono, W. G., & McGue, M. (2009). Family interactions in adoptive compared to nonadoptive families. *Journal of Family Psychology, 23*(1), 58-66. doi:10.1037/a0014091
- Rueter, M. A., & Koerner, A. F. (2008). The effect of family communication patterns on adopted adolescent adjustment. *Journal of Marriage and Family, 70*(3), 715-727. doi:10.1111/j.1741-3737.2008.00516.x
- Rushton, A., Dance, C., & Quinton, D. (2000). Findings from a UK based study of late permanent placements. *Adoption Quarterly, 3*(3), 51-71.
- Rushton, A., & Dance, C. (2006). The adoption of children from public care: A prospective study of outcome in adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*(7), 877-883. doi:10.1097/01.chi.0000220850.86768.e8
- Rushton, A., Mayes, D., Dance, C., & Quinton, D. (2003). Parenting late-placed children: The development of new relationships and the challenge of behavioural problems. *Clinical Child Psychology & Psychiatry, 8*(3), 389. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=10561251&site=ehost-live>
- Rushton, A., Monck, E., Leese, M., McCrone, P., & Sharac, J. (2010). Enhancing adoptive parenting: A randomized controlled trial. *Clinical Child Psychology & Psychiatry, 15*(4), 529-542. doi:10.1177/1359104510365041
- Rutter, M. (1990). Commentary: Some focus and process considerations regarding effects of parental depression on children. *Developmental Psychology, 26*(1), 60-67. doi:10.1037/h0092669
- Rutter, M., Colvert, E., Kreppner, J., Beckett, C., Castle, J., Groothues, C., . . . Sonuga-Barke, E. J. S. (2007). Early adolescent outcomes for institutionally deprived and non-deprived adoptees. I: Disinhibited attachment (vol 48, pg 17, 2007). *Journal of Child Psychology and Psychiatry, 48*(8), 848-848. doi:10.1111/j.1469-7610.2007.01797.x

- Ryan, E. (2002). Assessing sibling attachment in the face of placement issues. *Clinical Social Work Journal*, 30(1), 77-93. doi:10.1023/A:1014278412336
- Ryan, S. D., Harris, G., Brown, D., Houston, D. M., Smith, S. L., & Howard, J. A. (2011). Open adoptions in child welfare: Social worker and foster/adoptive parent attitudes. *Journal of Public Child Welfare*, 5(4), 445-466. doi:10.1080/15548732.2011.599772
- Ryan, S. D., & Nalavany, B. (2003). Adopted children: Who do they turn to for help and why? *Adoption Quarterly*, 7(2), 29-52. doi:10.1300/J145v07n02_03
- Ryan, S. D., Nelson, N., & Siebert, C. F. (2009). Examining the facilitators and barriers faced by adoptive professionals delivering post-placement services. *Children & Youth Services Review*, 31(5), 584-593. doi:10.1016/j.childyouth.2008.11.003
- Rycus, J., & Hughes, R. (1998). *Field guide to child welfare*. Washington D.C.: Child Welfare League Press.
- Salant, P., & Dillman, D. A. (1994). *How to conduct your own survey*. New York: John Wiley & Sons, Inc.
- Salbach-Andrae, H., Lenz, K., & Lehmkuhl, U. (2009). Patterns of agreement among parent, teacher and youth ratings in a referred sample. *European Psychiatry*, 24(5), 345-351. doi:10.1016/j.eurpsy.2008.07.008
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147-177.
- Schofield, G. (2002). The significance of a secure base: A psychosocial model of long-term foster care. *Child and Family Social Work*, 7, 259-272.
- Schore, A. (1994). *Affect regulation and the origin of the self: The neurobiology of emotional development*. Hillside, NJ: Erlbaum.
- Schore, A. (2000). Attachment and the regulation of the right brain. *Attachment and Human Development*, 2(1), 23-47.
- Schore, A. K. (2002). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1-2), 201-269.
- Schweiger, W. K., & O'Brien, M. (2005). Special needs adoption: An ecological systems approach. *Family Relations*, 54(4), 512-522.

- Sexton, D., & Snyder, P. (1991). Considerations in using written surveys to identify family strengths and needs during the IFSP. *Topics in Early Childhood Special Education, 11*(3), 81. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9602292011&site=ehost-live>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghtlin Mifflin Company.
- Shaff, K. A., Wolfinger, N. H., Kowaleski-Jones, L., & Smith, K. R. (2008). Family structure transitions and child achievement. *Sociological Spectrum, 28*(6), 681-704. doi:10.1080/02732170802342966
- Shapiro, V. B., & Shapiro, J. R. (2006). The adoption of foster children who suffered early trauma and object loss: Implications for practice. In K. Hushion, S. B. Sherman & D. Siskind (Eds.), *Understanding adoption: Clinical work with adults, children, and parents* (pp. 91). Lanham, MD: Jason Aronson.
- Sharma, A., McGue, M., & Benson, P. (1996). The emotional and behavioral adjustment of United States adopted adolescents .1. An overview. *Children and Youth Services Review, 18*(1-2), 83-100. doi:10.1016/0190-7409(95)00055-0
- Sharma, A., McGue, M., & Benson, P. (1996). The emotional and behavioral adjustment of United States adopted adolescents .2. Age at adoption. *Children and Youth Services Review, 18*(1-2), 101-114. doi:10.1016/0190-7409(95)00056-9
- Sharma, A., McGue, M., & Benson, P. (1998). The psychological adjustment of United States adopted adolescents and their nonadopted siblings. *Child Development, 69*(3), 791-802. doi:10.1111/j.1467-8624.1998.tb06243.x
- Shepard, M. P., Carroll, R. M., Mahon, M. M., Moriarty, H. J., Feetham, S. L., Deatrick, J. A., & Orsi, A. J. (1999). Conceptual and pragmatic considerations in conducting a secondary analysis. *Western Journal of Nursing Research, 21*(2), 154-167. doi:10.1177/019394599902100204
- Sherrill, C. L., & Pinderhughes, E. E. (1999). Conceptions of family and adoption among older adoptees. *Adoption Quarterly, 2*(4), 21-47.

- Shriner, M., Mullis, R. L., & Shriner, B. M. (2010). Variations in family structure and school-age children's academic achievement: A social and resource capital perspective. *Marriage & Family Review, 46*(6), 445-467.
doi:10.1080/01494929.2010.528709
- Siegel, D. H., & Smith, S. L. (2012). *Openness in adoption: From secrecy and stigma to knowledge and connections*. New York: Evan B. Donaldson Adoption Institute.
- Silverstein, D., & Roszia, S. K. (1999). Openness: A critical component of special needs adoption. *Child Welfare, 78*(5), 637-651.
- Simmel, C. (2007). Risk and protective factors contributing to the longitudinal psychosocial well-being of adopted foster children. *Journal of Emotional & Behavioral Disorders, 15*(4), 237-249. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=27615678&site=ehost-live>
- Simmel, C., Barth, R. P., & Brooks, D. (2007). Adopted foster youths' psychosocial functioning: A longitudinal perspective. *Child & Family Social Work, 12*(4), 336-348. doi:10.1111/j.1365-2206.2006.00481.x
- Sinclair, I., & Wilson, K. (2003). Matches and mismatches: The contribution of carers and children to the success of foster placements. *British Journal of Social Work, 33*(7), 871-884. doi:10.1093/bjsw/33.7.871
- Skinner-Drawz, B., Wrobel, G. M., Grotevant, H. D., & Von Korff, L. (2011). The role of adoption communicative openness in information seeking among adoptees from adolescence to emerging adulthood. *Journal of Family Communication, 11*(3), 181-197. doi:10.1080/15267431003656587
- Smith, S., L. (2010). *Keeping the promise: The critical need for post-adoption services to enable children and families to succeed*. New York: Evan B. Donaldson Adoption Institute.
- Smith, S., L., & Howard, J., A. (1991). A comparative study of successful and disrupted adoptions. *Social Service Review, 65*(2), 248-265. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=swh&AN=24968&site=ehost-live>

- Smith, S. L., Howard, J. A., & Monroe, A. D. (1998). An analysis of child behavior problems in adoptions in difficulty. *Journal of Social Service Research, 24*(1-2), 61-84. doi:10.1300/J079v24n01_03
- Smith-McKeever, T.C. (2004). Child behavioral outcomes in African American adoptive families. *Adoption Quarterly, 7*(4), 29-56.
- Southerland, D. G., Mustillo, S. A., Farmer, E. M. Z., Stambaugh, L. F., & Murray, M. (2009). What's the relationship got to do with it? Understanding the therapeutic relationship in therapeutic foster care. *Child & Adolescent Social Work Journal, 26*, 49-63.
- Staff, I., & Fein, E. (1992). Together or separate: A study of siblings in foster care. *Child Welfare, 71*(3), 257-270.
- Stams, G. J. M., Juffer, F., & vanIjzendoorn, M. H. (2002). Maternal sensitivity, infant attachment, and temperament in early childhood predict adjustment in middle childhood: The case of adopted and their biologically unrelated parents. *Developmental Psychology, 38*(5), 806-821.
- Steele, M., Hodges, J., Kaniuk, J., Hillman, S., & Henderson, K. (2003). Attachment representations and adoption: Associations between maternal states of mind and emotion narratives in previously maltreated children. *Journal of Child Psychotherapy, 29*(2), 187. doi:10.1080/0075417031000138442
- Steele, M., Hodges, J., Kaniuk, J., & Steele, H. (2010). Mental representation and change: Developing attachment relationships in an adoption context. *Psychoanalytic Inquiry, 30*(1), 25-40. doi:10.1080/07351690903200135
- Steelman, L. M., Assel, M. A., Swank, P. R., Smith, K. E., & Landry, S. H. (2002). Early maternal warm responsiveness as a predictor of child social skills: Direct and indirect paths of influence over time. *Applied Developmental Psychology, 23*, 135-156.
- Sternberg, K. J., Lamb, M. E., Guterman, E., & Abbott, C. B. (2006). Effects of early and later family violence on children's behavior problems and depression: A longitudinal, multi-informant perspective. *Child Abuse & Neglect, 30*(3), 283-306. doi:10.1016/j.chiabu.2005.10.008

- Stevens, J. P. (1984). Outliers and influential data points in regression analysis. *Psychological Bulletin*, 95(2), 334-344. doi:10.1037/0033-2909.95.2.334
- Sullivan, R., & Lathrop, E. (2004). Openness in adoption: Retrospective lessons and prospective choices. *Children and Youth Services Review*, 26, 393-411.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston: Allyn & Bacon.
- Tan, T. X. (2006). History of early neglect and middle childhood social competence: An adoption study. *Adoption Quarterly*, 9(4), 59-72.
- Tan, T. X., Camras, L. A., Deng, H., Zhang, M., & Lu, Z. (2012). Family stress, parenting styles, and behavioral adjustment in preschool-age adopted chinese girls. *Early Childhood Research Quarterly*, 27(1), 128-136.
doi:10.1016/j.ecresq.2011.04.002
- Tan, T. X., Dedrick, R. F., & Marfo, K. (2008). Factor structure and clinical implications of child behavior checklist /1.5-5 ratings in a sample of girls adopted from china. *Psychological Assessment*, 20(2), 70-75.
- Tan, T. X., Marfo, K., & Dedrick, R. F. (2007). Special needs adoption from china: Exploring child-level indicators, adoptive family characteristics, and correlates of behavioral adjustment. *Children and Youth Services Review*, 29(10), 1269-1285.
doi:10.1016/j.childyouth.2007.05.001
- Taussig, H. N. (2002). Risk behaviors in maltreated youth placed in foster care: A longitudinal study of protective and vulnerability factors. *Child Abuse & Neglect*, 26, 1179-1199.
- Tessler, R., Adams, G., Houlihan, L., & Groza, V. (2004). Mother-daughter relationships among Chinese and Romanian adoptees. *International Journal of Child & Family Welfare*, 7(1), 26-43.
- Teti, D. M., & Nakagawa, M. (1991). Security of attachment between preschoolers and their mothers: Relations among social interaction. *Developmental Psychology*, 27(3), 440. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9109020663&site=ehost-live>

- Teti, D. M., & Messinger, D. S. (1995). Maternal depression and the quality of early attachment: An examination of infants, preschoolers. *Developmental Psychology*, 31(3), 364. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9505310348&site=ehost-live>
- Timm, T. M., Mooradian, J. K., & Hock, R. M. (2011). Exploring core issues in adoption: Individual and marital experience of adoptive mothers. *Adoption Quarterly*, 14(4), 268-283. doi:10.1080/10926755.2011.628264
- Timms, J. E., & Thoburn, J. (2006). Your shout! Looked after children's perspectives on the Children Act 1989. *Journal of Social Welfare and Family Law*, 28(2), 153-170.
- Tornello, S.M., Farr, R.H. Patterson, C.J. (2011). Predictors of parenting stress among gay adoptive fathers in the United States. *Journal of Family Psychology*, 25(4), 591.
- Tortoreto, M. (2004, December 2004). The silcock family: An ordinary life for an extraordinary couple. *Exceptional Parent Magazine*, 34(12), 25-27.
- Toth, S. L., Cicchetti, D., & Kim, J. (2002). Relations among children's perceptions of maternal behavior, attributional styles, and behavioral symptomatology in maltreated children. *Journal of Abnormal Psychology*, 30(5), 487-500.
- Trivette, C. M., & Dunst, C. J. (1990). Assessing family strengths and family functioning style. *Topics in Early Childhood Special Education*, 10(1), 16. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=9602291996&site=ehost-live>
- Tully, E. C., Iacono, W. G., & McGue, M. (2008). An adoption study of parental depression as an environmental liability for adolescent depression and childhood disruptive disorders. *American Journal of Psychiatry*, 165(9), 1148-1154. doi:10.1176/appi.ajp.2008.07091438
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social Science and Medicine*, 62, 13-27.
- Turner, H. A., Finkelhor, D., & Ormrod, R. (2010). Child mental health problems as risk factors for victimization. *Child Maltreatment*, 15(2), 132-143. doi:10.1177/1077559509349450

- Unrau, Y. A., Seita, J. R., & Putney, K. S. (2008). Former foster youth remember multiple placement moves: A journey of loss and hope. *Children & Youth Services Review, 30*(11), 1256-1266. doi:10.1016/j.childyouth.2008.03.010
- Urban Research and Engineering. (1985). *Evaluation of state activities with regard to adoption disruption*. Washington D.C:
- Van der Kolk, B. (2001). The psychobiology and psychopharmacology of PTSD. *Human Psychopharmacology, 16*, S49-S64.
- Van der Kolk, B., & McFarlane, A. C. (1996). The black hole of trauma. In B. Van der Kolk, A. C. McFarlane & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience on mind, body, and society* (pp. 3-23). New York: Guilford Press.
- van IJzendoorn, M. H., & Juffer, F. (2005). Adoption is a successful natural intervention enhancing adopted children's IQ and school performance. *Current Directions in Psychological Science (Wiley-Blackwell), 14*(6), 326-330. doi:10.1111/j.0963-7214.2005.00391.x
- van IJzendoorn, M. H., & Juffer, F. (2006). The Emanuel Miller memorial lecture 2006: Adoption as intervention. Meta-analytic evidence for massive catch-up and plasticity in physical, socio-emotional, and cognitive development. *Journal of Child Psychology & Psychiatry, 47*(12), 1228-1245. doi:10.1111/j.1469-7610.2006.01675.x
- Viana, A. G., & Welsh, J. A. (2010). Correlates and predictors of parenting stress among internationally adopting mothers: A longitudinal study. *International Journal of Behavioral Development, 34*(4), 363-373.
- Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis, & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology*. (pp. 223-243). Cambridge, London: University Press.
- Von Korff, L., & Grotevant, H. D. (2011). Contact in adoption and adoptive identity formation. *Journal of Family Psychology, 25*(3), 393-401. doi:10.1037/a0023388
- Vorria, P., Papaligoura, Z., Sarafidou, J., Kopakaki, M., Dunn, J., Van IJzendoorn, M. H., & Kontopoulou, A. (2006). The development of adopted children after institutional

- care: A follow-up study. *Journal of Child Psychology and Psychiatry*, 47(12), 1246-1253. doi:10.1111/j.1469-7610.2006.01666.x
- Ward, M. (1978). Full house: Adoption of a large sibling group. *Child Welfare*, 57(4), 233-241.
- Ward, M. (1984). Sibling ties in foster care and adoption planning. *Child Welfare*, 4, 321-332.
- Ward, M. (1987). Choosing adoptive families for large sibling groups. *Child Welfare*, 66(3), 259-268.
- Webster, D., Shlonsky, A., Shaw, T., & Brookhart, M. (2005). The ties that bind II: Reunification for siblings in out-of-home care using a statistical technique for examining non-independent observations. *Children and Youth Services Review*, 27(7), 765-782.
- Wegar, K. (2000). Adoption, family ideology, and social stigma: Bias in community attitudes, adoption research and practice. *Family Relations*, 49, 363-370.
- Weinberg, R. A., Waldman, I., van Dulman, M. H. M., & Scarr, S. (2004). The Minnesota transracial adoption study: Parent reports of psychosocial adjustment at late adolescence. *Adoption Quarterly*, 8(2), 27-45.
- Weinfield, N. S., Whaley, G. J. L., & Egeland, B. (2004). Continuity, discontinuity, and coherence in attachment from infancy to late adolescence: Sequelae of organization and disorganization. *Attachment & Human Development*, 6(1), 73-97. doi:10.1080/14616730310001659566
- Welsh, J. A., Viana, A. G., Petrill, S. A., & Mathias, M. D. (2007). Interventions for internationally adopted children and families: A review of the literature. *Child & Adolescent Social Work Journal*, 24(3), 285-311.
- Whelan, D. J. (2003). Using attachment theory when placing siblings in foster care. *Child & Adolescent Social Work Journal*, 20(1), 21-36.
- Whitten, K. L., & Weaver, S. R. (2010). Adoptive family relationships and healthy adolescent development: A risk and resilience analysis. *Adoption Quarterly*, 13(3), 209-226. doi:10.1080/10926755.2010.524873
- Wierzbicki, M. (1993). Psychological adjustment of adoptees: A meta-analysis. *Journal of Clinical Child Psychology*, 22(4), 447. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=6397494&site=ehost-live>

- Wilkes, J. R. (1974). The impact of fostering on the foster family. *Child Welfare*, 53(6), 373-379.
- Wilson, S. L. (2004). A current review of adoption research: Exploring individual differences in adjustment. *Children and Youth Services Review*, 26(8), 687-696. doi:10.1016/j.chilyouth.2004.02.013
- Wind, L. H., Brooks, D., & Barth, R. P. (2005). Adoption preparation: Differences between adoptive families of children with and without special needs. *Adoption Quarterly*, 8(4), 45-74.
- Wind, L. H., Brooks, D., & Barth, R. P. (2007). Influences of risk history and adoption preparation on post-adoption services use in U.S. adoptions. *Family Relations*, 56(4), 378-389. doi:10.1111/j.1741-3729.2007.00467.x
- Winton, M. A., & Mara, B. A. (2001). *Child abuse & neglect: Multidisciplinary approaches*. Boston, MA: Allyn and Bacon.
- Wolfgram, S. M. (2008). Openness in adoption: What we know so far- A critical review of the literature. *Social Work*, 53(2), 133-142.
- Wrobel, G. M., Grotevant, H. D., & Korff, L. V. (2011). The role of adoption communicative openness in information seeking among adoptees from adolescence to emerging adulthood. *Journal of Family Communications*, 11, 181-197.
- Wrobel, G. M., Kohler, J. K., Grotevant, H. D., & McRoy, R. G. (2003). The family adoption communication (FAC) model: Identifying pathways of adoption-related communication. *Adoption Quarterly*, 7(2), 53-84.
- Yegidis, B. L., Weinbach, R. W., & Morrison-Rodriguez, M. (1991). *Research methods for social workers*. (3rd ed.). Boston, MA: Allyn and Bacon.
- Yu, R., & Ho, S. C. (2010). Psychometric evaluation of the Perceived Stress scale in early postmenopausal Chinese women. *Psychology*, 1, 1-8.
- Zill, N. (1994). *Adopted children in the United States: A profile based on a national survey of child health*. Washington, D.C.: Child Trends.
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