PRESCHOOLERS' ATTACHMENT TO GRANDPARENT CAREGIVERS

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PREFACE

While attending graduate school, I began working in a moderately sized day care center. At one point during my second year at the center, I noticed that only a very small percentage of the children lived in traditional family systems, where the children live with both their natural mother and father. In a class of 18 preschoolers, only about 6 lived in such a system. Four of the boys had fathers who were incarcerated, one child was adopted and lived with her two lesbian mothers, and several of the children lived with their single mothers and siblings if they had any. At least 2 of the single mothers lived in the same household with one of their own parents, and one group of brothers (one attended the preschool program, the other's, aged 6 and 8, attended our school-aged program) lived in the foster care of their grandparents. One other girl lived with her grandparents as well, but her mother lived with them on and off for several weeks at a time. During this same period, I was taking a Developmental Psychology course and began noticing how some of children's behaviors seemed to be related to their interactions and relationships with their parents and other caregivers.

I soon developed close relationships with each of the three brothers that lived with their grandparents, mostly due to the fact that they were so often referred to my office because of their disciplinary problems. In a short period of time, I discovered that each of them had a very unique way of acting out in stressful situations. For example, the preschool aged child became very reclusive and cried quietly wherever he had been playing; the 6-year old became verbally aggressive and hid under tables and in corners; the 8-year old sometimes urinated on the bathroom walls when he suspected no one would notice him.

For several months I observed the brothers social, emotional, and aggressive behaviors. It seemed apparent to me that they were expressing feelings of sadness and loss, each in their own distinctive ways through specific externalizing behaviors. I suspected that the boys' behaviors may have been due to their family history and the circumstances leading to the placement with their grandparents. In general, they were very well behaved and polite; however, they were not able to handle stressful situations including disagreements with other children, sharing and taking turns, and being corrected by adults in the center.

I became very concerned for the boys and for the other children coming through my center with grandparent and foster caregivers. The abundance of attachment research I had read thus far focused on the importance on the presence of the mother for the development of healthy attachments. Most of the children in my center cared for by grandparents and other foster caregivers had been suddenly removed from their homes and from their mothers. Their attachment processes had been interrupted indefinitely. Often they displayed similar behavior issues apparently triggered by stressful situations, most apparent during transition periods throughout the day (i.e., cleaning up, coming to the table for a project, or coming inside from the playground). My concerns were validated when other adults in the center noticed these patterned behaviors among the children living in foster care or with their grandparents. Over the next few years, I cared for at least 6 other preschool aged children living with their grandparents. Most of them had similar behavior problems.

The three brothers have been at my center for almost three years now. I have met with the grandmother on many occasions. We have worked together with other staff

members on identifying specific stressors for each of the boys and implementing effective methods of managing their aggression. In the meantime, the boys have become very close to their grandmother who is both nurturing and very receptive to their needs. Over time, the externalizing behaviors became less intense until they had virtually disappeared. I believe that the grandmother's nurturing behavior and responsiveness to her grandchildren were key factors in successfully satisfying the boys' attachment needs.

When I began this project, I wondered, what happens to all these kids when they lose their parents? What happens when their emotional development is disrupted so drastically? I felt as if there was plenty of research to describe attachment and possible factors related to insecure attachment, but came across very little that followed up with any type of intervention to help a child achieve secure attachment to another caregiver once the original attachment figure has been removed. While I have not come across any literature that suggests secure attachment is unattainable for children in this situation, I have found very little empirical evidence that suggests that it is possible. In this paper, I explore this possibility. Perhaps in the future it may be expanded in order to improve upon instruments of attachment measurement and effective therapeutic intervention for both displaced children and their surrogate caregivers.

Abstract

Currently, there are over 2.4 million children in the United States living in the custodial care of their grandparents. Grandparents as caregivers and the problems their grandchildren face have received little attention in developmental research. The purpose of this paper is to address the possibility that secure attachment relationships with grandparents can serve as a protective factor against the risks of disrupted attachments with parents. In order to address this question, a framework is proposed that combines central elements of two differing perspectives on young children's relationships, traditional attachment theory, and a social network model. An example of how this model can be used to investigate important developmental questions is outlined.

PRESCHOOLERS' ATTACHMENT TO GRANDPARENT CAREGIVERS

It is estimated that 2.4 million Americans act as primary caregivers for their grandchildren (Simmons & Dye, 2003). An additional 1.3 million children were in adoptive care with other relatives (688,000) or non-relative (622,000) foster care at the time of the U.S Census report in 1996 (Fields, 2001). Currently, there is very little research addressing the effects of children's relationships with surrogate caregivers on social and emotional development. More specifically, there are few empirical studies that address the effects of attachment disruptions in children when they are separated from their parents, nor studies that examine whether secure attachments can be formed to new caregivers once these children have been placed in the physical care of their grandparents.

According to attachment theory, disruptions in relationships with primary caregivers in early life put children at risk for a variety of developmental, emotional, and social difficulties, including chronic instability related to loss and feelings of abandonment by their parents (Kelly, et al, 2001). Such disruptions have been found to increase children's hostile interactions and socially avoidant behavior (Wood, Emerson, & Cowen, 2004). Consistent with these findings, hyperactivity, aggressiveness, and need for attention are among the primary behavioral problems in grandchildren reported by grandparents who are raising them after earlier disruptions in the caregiving environment (Smith, et al. 2002). These disruptions include, but are not limited to, parental substance abuse, incarceration, and mental illness, which add to the emotional stress of the child and to his or her overwhelming feelings of distrust and abandonment (Kelly, et al., 2001; Smith, et al., 2002). As 3.7 million children in the United States currently live under the guardianship of relatives and\or foster care, it is important to examine factors that influence the quality and impact of these relationships.   In particular, I focus on attachment relationships

between young children and their grandparents, and ask, can secure attachments with grandparents serve as a protective factor against the risks resulting from earlier attachment disruptions?

In light of the statistics of children not living with their natural parents in the United States, the possibility of children's forming secure attachments with grandparents is of concern. It would be helpful to understand whether similar processes are involved in the formation of young children's attachments with grandparent caregivers as with their parents. John Bowlby, who first proposed attachment theory, himself expresses that there exists a misconception about who is considered a child's primary attachment figure (Bowlby, 1980).

> In the discussion so far it has been implied that a child directs his attachment behavior towards one particular figure referred to either as his mother-figure even simply as his mother. This usage, which for the sake of brevity is unavoidable, has nonetheless given rise on occasion to misunderstanding (p.303).

Bowlby explains that attachment to caregivers is actually based on a combination of caregiving behaviors (of the adult) and internal representations (of self, caregiver, and environment). He is very clear that a child's attachment figure is not necessarily limited his or her biological mother. However, the majority of existing empirical research in the area of (children's) attachment is based on subject populations of mother-child dyads (Howes, 1999; Lewis, 2005; Nash, 1993; van IJzendoorn, 2005).

It is thus important to broaden the study of attachment relationships to include non-parent caregivers, and in particular, grandparent caregivers. I present arguments and a theoretical framework for the empirical investigation of two central issues:

(1) Can preschool aged children (3-6 years) form secure attachments to grandparent caregivers after relationship disruptions to the primary caregiver have occurred, and if so,

(2) Do secure attachments with grandparents serve the same function as secure attachments with parents – that is, to promote children's healthy psychological adjustment?

Overview

Traditional attachment theory (monotropic attachment) explains the formation of attachment relationships of young children to their primary caregivers, most often represented by the mother. Monotropic attachment provides a powerful paradigm for understanding the influence of caregiver-child relationships on children's adjustment, and has stimulated thousands of empirical studies for over three decades (for a review, see Lewis, 2005). It does not, however, provide a framework for understanding how several important relationships can work together to affect children's adjustment. This theory is limited to the impact of children's relationships with one primary caregiver.

In contrast, an alternative *social network perspective* broadens attachment theory by addressing the influences of a network of important relationships. The social network model proposes that attachments may be formed simultaneously to multiple attachment figures including mothers, fathers, siblings, grandparents, and other non-kin caregivers such as day care providers (Lamb 2005; Lewis, 2005; Nash, 1988; Van IJzendoorn, 2005). Although Bowlby argued that the infant is biologically prepared to form an attachment to his or her primary caregiver, Nash (1988) proposed that multiple relationships are not only possible, but a likely evolutionary adaptation (Nash, 1988).

In this paper, I argue that monotropic attachment theory and a social network model are not necessarily contradictory. The social network perspective upholds the relevance of

attachment as a function of human nature, but introduces the possibility that a child may direct attachment behaviors towards several different caregivers. Adding a social network perspective to monotropic attachment theory provides a broader framework in which to investigate the impact of young children's significant relationships, and in particular, to grandparent caregivers. A theoretical model which combines aspects of the monotropic and network approaches is better suited for investigating the impact of relationships that may be formed to surrogate caregivers who take on caregiving roles after primary attachments are severed. After the theoretical arguments, an example is presented of how this combined model can be used to investigate important developmental questions about the impact of relationships with caregiving grandparents.

Issues Concerning Grandparent Caregiving

The incidence of grandparent caregiving, and foster care in general, has risen dramatically in recent years. The prevalence of physical abuse, parental drug abuse, neglect and maltreatment are among the leading reasons that children are removed from the care of their parents (Child Welfare League of America, 1994; Lawrence, Carison, & Egeland, 2006; Glass & Huneycutt, 2002; Smith, Savage-Stevens, & Fabian, 2002; Solnit, Nordhaus, & Lord, 1992). These children are at risk for a variety of emotional, behavioral and physical problems at the time of physical placement with the grandparent (Smith, Savage-Stevens, & Fabian, 2002). Specific areas of concern in terms of emotional development include stress and anxiety of the child due to separation and loss. Feelings of abandonment and betrayal of trust have been found to be related to externalizing behaviors, low self-esteem and chronic insecurity in children in general. For children who are physically and emotionally displaced from their homes and from

their families, these risks are greatly increased (Smith, Savage-Stevens, & Fabian, 2002; Solnit, Nordhaus, & Lord, 1992).

Caregiving grandparents who are aware and attuned to their grandchildren's emotional and behavioral problems may be able to provide a consistent and nurturing environment in which to raise these children. Such nurturing caregiving behaviors may enhance children's ability to emotionally adapt to his or her new setting, and to form secure attachments based on these new relationships. Unfortunately, while there is an abundance of evidence concerning the negative effects of disrupted and insecure parental attachment in children, there is little attention to the possibility that other, secure attachments, particularly with grandparents, can reduce these risks.

Benefits of Grandparent Caregiving

In cases when children must be removed from the custody of their parents, child welfare services often look toward kinship care as an optimal placement situation (Child Welfare League of America, 1994). Such arrangements can cause minimal disruptions to the children's lives, as in many cases the children already have relationships with these relatives. Grandparents are seen as particularly suitable, as in American society, it is common for grandparents to have already been involved in some of the routine activities of their grandchildren, including child care (Baydar & Brooks-Gunn, 2001; Gattai & Musatti, 1999). Indeed, grandparents may already be deeply committed to their grandchildren's well-being and may have formed close relationships with them.

In addition to these practicalities, perspectives from three very different areas of psychology highlight the supportive role that grandmothers provide. First, cross-cultural research indicates that in many cultures children live in extended families with grandmothers with whom they have close relationships and who are involved in their daily care (Ingoldsby & Smith, 1995;

Trommsdorff, 2006). Second, a resiliency perspective indicates that close bonds with a non-parent caregiver serve as a protective factor for children living in stressful family situations (Werner, 1993; 1995), with grandmothers in particular often fulfilling this role (Hess, Papas, & Black, 2002; Musil, Warner, Zauszniewski, et. al. ,200x; McCubbin, Thompson, McCubbin, 2001). Third, an evolutionary psychology perspective highlights the important biological connection between grandchildren and grandparents, and the benefits to grandparents for caring for their grandchildren. According to the principle of "inclusive fitness," grandparents can increase their own reproductive success by providing care and nurturance for their grandchildren, thereby increasing the chance that they grow into healthy adults who find mates and reproduce (Barrett, 2002; Buss, 1999; Hrdy, 1999).

Thus there are both practical and theoretical advantages for choosing grandparents to serve as primary caregivers for children who are removed from their parents care. However, there are many difficulties that may be encountered as well.

Problems Encountered by Grandparents

Grandparent caregivers are likely to experience a number of stressors that can cause strain on the caregiving relationship. Health problems, economic difficulties, lack of government support (social service assistance) and social isolation are among some of the issues reported by grandparents that have taken on the roles of surrogate caregivers (Baydar & Brooks-Gunn, 1998; Minkler & Roe, 1996; Smith, et al., 2002).

In addition to these stressors, it could be argued that the grandparents themselves may be partially responsible for the instability in their grandchildren's lives. In particular, the grandparents' poor parenting behavior may have contributed to their own children's emotional difficulties and subsequently, to their poor parenting behaviors. In support of this, research on

the inter-generational transmission of attachment indicates that insecure attachments can be passed down through generations.   In other words, parents with insecure attachments to their children may have had insecure attachment relationships to their own parents (the children's grandparents) as well (Bretherton, 1994; Benoit, &. Parker, 1994).

In summary, there are arguments for and against choosing grandparents to serve as primary caregivers for children who have been removed from their parents' care. However, the reality of the situation is that grandparents are often the only available relatives to take over primary caregiving responsibilities. It is therefore important to provide grandparents with the supports that they need to address the problems described above. These concerns must be addressed, as they may physically and emotionally obstruct the grandparents' ability to cope with their grandchildren's pre-existing emotional and behavioral problems.

Furthermore, research indicates that preschoolers' maladaptive behavior puts children at risk for a variety of problems throughout childhood, such as peer rejection and poor school performance (Howes, 1999; Muris, Meesters, & van den Berg, 2003). It is therefore crucial to understand how grandparent caregivers affect their grandchildren's socio-emotional adjustment. There is an abundance of research on the influences of *parents*. Indeed, almost 40 years of attachment research shows that the quality of the parent child relationship provides the foundation for children's socio-emotional development throughout childhood and into adulthood (for reviews, see Bretherton, 1994; Sroufe & Waters, 1977; Waters, 1997). Questions remain if these relationships are disrupted early in life, do subsequent relationships with grandparent primary caregivers provide a similar foundation? Current major theoretical perspectives on young children's close relationships have provided little guidance for answering this important

question. After presenting an overview of these theoretical perspectives, their limitations will be elucidated.

Theoretical Approaches to Young Children's Relationships with Caregivers

Monotropic Attachment Theory

Monotropic attachment theory, as posited by John Bowlby, is noted as being the most prevalent model of attachment theory in current literature (Lewis, 2005; Lewis & Takahashi, 2005). Monotropic attachment assumes that there is a hierarchy of caregivers (Ainsworth, 1982; Howes, 1999) with the mother typically serving as the primary caregiver. It is believed that attachment behaviors (of the child) become directed primarily towards one specific person, the primary caregiver (Bowlby, 1969, 1980). Relationships beyond that of the primary caregiver are secondary and are assumed to be based on the primary attachment relationship.

Attachment refers to the relationship, or bond, between a caregiver and a child (Hinde, 1982; Waters, 1981). According to attachment theory (Bowlby, 1969) infants form attachments with their primary caregivers during the first year of life. It is believed that these attachments are crucial, and have long-lasting developmental effects. Although the formation of attachments is a normative developmental process, there are individual differences in the quality of attachment relationships.

Attachment behaviors are believed to result from an instinctive proximity seeking mechanism within the child (Bretherton, 1994). Behaviors are used to either seek or maintain proximity to the caregiver. Bowlby describes attachment behavior as an evolutionary adaptation that protects the infant from danger, isolation and fear (Ainsworth, 1979; Bretherton, 1994). Just as humans instinctively seek food for survival, attachment serves to promote proximity to

caregivers for the purpose of protection and security (Main & Weston, 1982; Sroufe & Waters, 1977).

Within the first year of life, an infant can organize his own behavior on a goal-corrected basis to achieve a satisfactory proximal distance to his caregiver (Ainsworth, 1979; Bretherton, 1994; Sroufe & Waters, 1977; Waters, 1981). In other words, as the child develops and learns new methods of communication, proximity seeking behaviors develop, but the goal of maintaining proximity remains the same. Bretherton (1994) notes that while infants generally seek proximity to any caregiver, they soon become focused on one primary caregiver based on the frequency of their interactions. The quality of the infants' attachment with the primary caregiver depends on the sensitivity and responsiveness of the caregiver to the infants' emotional cues. Sroufe and Waters (1977) attribute differences in security to "variations in reliability, responsively, and sensitivity of caregiver" (p. 1187).

Development of Individual Differences in Attachment Security. The secure base phenomenon refers to specific patterns of predictable attachment behaviors (Ainsworth, 1982; Waters, 1981). Ainsworth (1982) describes three distinctive patterns that are observable upon separation and reunion of the mother and her one-year-old infant in a structured setting known as the Strange Situation. In an early study, Ainsworth (1978) and her colleagues found that 66% of their subject population (of infants) were securely attached to their mothers (as cited in Ainsworth, 1982). Thirty-three percent of this population was anxiously attached; 20% of anxiously attached infants showed patterns of avoidant behaviors and 12% were ambivalent. The foundation of attachment security is based on the child's ability to use the caregiver as a secure base from which to explore (Main & Weston, 1982; Sroufe & Waters, 1977; Waters, 1981; Waters & Deane, 1986). Secure base behavior is developed over time and is not

considered object or situation specific. Rather, as mentioned earlier, behaviors result from the internal representations of early experiences with caregivers.

As an infant becomes more mobile, he or she begins to explore his or her surroundings knowing that the caregiver is available to provide comfort and safety when needed. Upon reunion, the child will likely seek proximity to the mother and possibly physical contact, then return to play (Bates, Maslin, & Frankel, 1986; Waters, 1981). After one year, an infant becomes aware of his or her attachment figure's existence, even when she is not present (Waters, 1981). A secure infant explores actively because he or she is confident that they will be greeted with close bodily contact or a similar positive interaction upon reunion with the mother. Children who are anxiously attached show much different reunion behaviors. Both avoidant and ambivalent groups of children resist contact with their mothers after brief separations (Ainsworth, 1982). While the secure child expects a warm reunion with his mother, an anxiously attached child's internal working model of relationships causes him to be apprehensive due to a history of inconsistent or rejecting reunions. These infants lack of confidence in their caregivers responsiveness and are often left feeling frustrated and unsatisfied (Ainsworth, 1982).

Internal Working Models of Attachment. From infancy, a child internalizes the emotional and interpersonal responses of his or her caregivers. He or she learns to expect positive or hostile responses in social situations based on past experiences with parents and other influential caregivers. These experiences become incorporated into the child's internal working model of relationships. As an infant learns to interpret signals from his caregivers, he or she becomes capable of using an organized system of behaviors such as smiling, clinging and crying to draw the adult caregiver near (Ainsworth, 1979; Bretherton, 1994; Magai, 1999; Sroufe & Waters, 1977). Main and Weston (1982) and Marcus and Cramer (2001) state that certain angry

behaviors, such as tantrums and other disruptive behaviors, are also used by the infant to draw the caregiver near.

Secure attachments are believed to be formed when the needs of the infant are consistently satisfied and the infant learns to expect similar results over time (Ainsworth, 1979; Richters & Waters, 1991; Sroufe & Waters, 1977). When an infant is distressed or hungry, he or she may cry causing the adult caregiver to pick up and cuddle the baby or feed him or her. These social interactions become recognizable patterns of attachment, and over the course of the first few years become consolidated into mental representations or internal constructs of attachment. Cognitive structures within the infant are responsible for forming such representations or internal working models of attachment figures based on their repeated behaviors (Hinde, 1982). Bowlby (1980) and Erikson, Sroufe, & Egeland (1955) compare attachment to basic trust. Secure attachment develops when the infant learns to expect that the caregiver will come to satisfy his or her needs when summoned using proximity seeking behaviors such as crying or reaching out to be picked up. Alternatively, an infant who learns to expect rejection from caregivers (doesn't respond to child's crying or pushes the child away when they want to be picked up) creates an internal working model in which all relationships would be perceived as neglectful or unsatisfying (Marcus & Cramer, 2001).

Hinde (1982) argues that the attachment structure is not a finished structure but continues to evolve as the child encounters new social experiences. However, the majority off attachment theories view internal working models of attachments that are formed in the first few years of life as providing a template for relationships throughout one's life (Bowlby, 1980; Erickson, Sroufe, & Egeland, 1986; Liable & Thompson, 2000; Shaw, Woens, Giovannelli, &

Winslow, 2001). Such internal working models are thought to play a central role in children's

psychological adjustment.

    Correlates of Attachment During Pre-school Years. The preschool years are a crucial

stage of social and emotional development. At this stage, children begin forming relationships

outside their families in daycares, nursery schools, and with children in their neighborhood or

parents' social network. They are becoming aware of themselves as individuals as they come

into contact with others like them. This new social network acts as a mirror which enables

children to identify themselves as members of a group of individuals (DeMulder, et al., 2000;

Liable & Thompson, 2000). Children who have secure relationships with their caregivers are

better equipped to manage their emotional arousal in social situations and to use self-control to

optimize positive social interactions, therefore resulting in fewer externalizing behavior

problems such as aggression, physical violence, and tantrums (Gilliom, Shaw, Beck, Schonberg,

& Lukon, 2002; Sroufe & Waters, 1977).

    As a child's social world expands, so does his resources and tools of communication.

Secure attachment is marked by children's ability to explore and acquire new patterns of

interaction and communication with a low occurrence of externalizing behavior problems

because they have learned how to manage their emotions and impulses in stressful situations

(DeMulder, et. al, 2000; Erikson, Sroufe, & Egeland, 1986; Gilliom, et al., 2002). For many,

including preschool children, new people and new social interactions (such as group games and

learning activities) create emotionally stressful situations. An insecure child who is not equipped

to manage such situations may be perceived negatively by others in this new network of peers

due to aggressiveness or other externalizing behavior problems that are common in insecure

children (Cassidy, Kirsh, Scolton, & Parke, 1996; Wood, Emerson, & Cowan, 2004). For

example, Wood, Emerson, and Cowan (2004) have demonstrated that insecure attachment is linked to later peer rejection and other social adjustment difficulties. They found that difficulties such as externalizing behavior disorders in 3-year-olds were linked to rejection from their peers whereas securely attached preschoolers received positive responses and friendships among their peers.

Implications of Insecure and Disrupted Attachments. A variety of studies have found that insecure attachments are related to children's later verbal and nonverbal communication difficulties (Penz, 1975) and negative interactions with peers (Ainsworth et. al., 1978; Lieberman, 1977). Furthermore, numerous studies have found a link between insecure attachment and externalizing behaviors in preschoolers. For example, Wood, Emerson, and Cowen (2004) found that "insecure attachment and later peer rejection may be mediated b externalizing behavior" (p. 245. For further reviews, see Behar & Stringfield; Erikson, Sroufe & Egeland, 1986). Consistent with traditional attachment research, these studies were based on mother-child relationships that were still intact.

Children who have been removed from their parents' care and placed with grandparents are likely to have had previous insecure attachments to their parents (Pearce & Pezzot-Pearce, 2001; Stams, et. al., 2001). This is because the reason that the majority of children are removed is due to parental maltreatment (including physical and sexual abuse and neglect), which puts children at particularly high risk for the development of insecure attachments (Pearce & Pezzot-Pearce, 2001). These children are also likely to display high incidences of maladaptive behavior problems and social difficulties that have been correlated to insecure attachment. However, regardless of the quality of prior attachment relationships, the transition into grandparent foster care causes an inherent disruption in the primary attachment relationship. It has been established

that such disruptions lead to a pervasive sense of insecurity, with the consequent behavior patterns associated with insecure attachments (Ainsworth, 1979; Bowlby, 1980; Pearce & Pezzot-Pearce).

Summary. Monotropic attachment theory provides a thorough explanation of how attachment relationships develop in young children and the impact they have on later social and emotional adjustment. However, this model limits the scope of relationships of children to one primary caregiver. As the foundation of early research on attachment has been based on traditional family systems, the notion that children can form attachments to other members in their social network has been overlooked. The social network perspective of attachment provides an alternative model which supports the view that attachments can be formed to several caregivers simultaneously.

Social Network Perspective

Lewis (2005) has referred to the social network perspective as a polytropic view of attachment. This view is similar to Bowlby's view that attachment representations are formed based on early interactions with a caregiver. However, the polytropic view suggests that attachment constructs are based on the interactions of many caregivers. Attachment theory advocates that there is a hierarchy of caregivers, where one primary caregiver, usually the mother, becomes the central focus of the child's social world (Ainsworth, 1982; Howes, 1999; van IJzendoorn, 2005). In contrast, Lewis (2005) claims, that there is sufficient evidence that infants can form simultaneous attachments to multiple attachment figures. He views attachment relationships as concurrent rather than hierarchal. Keeping in mind that secure attachment is based on trusting and satisfying interactions, the network model draws from the fact that infants are subjected to "myriads of social interactions" with multiple figures (van IJzendooorn, 2005, p.

85). The experiences of repeated interactions with multiple caregivers over time develop the child's working model of relationships.

Proponents of a social network perspective argue that attachment theory has been misrepresented to reflect a monotropic view where only one attachment figure is primary (Howes, 1999; van IJzendoorn, 2005). This could be partly attributed to the fact that the majority of empirical attachment research is based on Western Anglo-Saxon family living systems which are unrepresentative of most humans (Lamb, 2005). Lewis and Takahashi (2005) suggest that the dominant perspective on attachment – the monotropic attachment model - has been adopted by many current researchers and has restricted attachment research. Most attachment studies focus on nuclear families where mothers are by default the primary influence on their infants, as in this atypical situation, mother-infant pairs are relatively isolated from others.

Indeed, most studies of attachment refer to the primary caregiver as "the mother." However, Bowlby himself noted that the primary attachment figure need not necessarily be a biological parent (Bowlby, 1980). Bretherton later (1994) highlighted this idea, agreeing that a permanent substitute who satisfies the needs of an infant can also serve as a child's permanent attachment figure. Nash and Hay (1993) concur that the term "mother" in Bowlby's research recognizes the mothering figure as anyone who serves as a primary caregiver and not necessarily a female or one who gave birth to the child. According to Bowlby (1980) and Ainsworth (1975) attachments are based on the quality of the interactions between the infant and primary caregiver. It is therefore not necessary for the biological mother to be present in order for a child to form and maintain secure attachments to a nurturing substitute caregiver.

While Bowlby's monotropic model allows for attachments to primary caregivers who are not mothers, it clearly does not account for extended family systems where multiple members of the family and society are responsible for the various caregiving needs of an infant. Indeed, the monotropic model fails to explain the formation of secure attachment to multiple caregivers in entire populations of Eastern cultures, to Israeli metaplot (nonparent caregivers in kibbutzim), and to grandparent caregivers in the context of extended families who share caregiving responsibilities (Howes, 1999; Lewis, 2005; Sagi, van IJzendoorn, Aviezer, Donnell, et al., 1995; van IJzendoorn, 2005;). For example, in a study that measured attachment of infants to non-related caregivers in an Israeli kibbutz, researchers found that infants were, in fact, capable of forming secure attachments to their metaplot caregivers (Sagi, van IJzendoorn, et al. 1995). In another study, infants who were adopted by lesbian mothers demonstrated secure attachments to both adoptive mothers, even when the child was adopted after the age of one (Bennett, 2003). There is, in fact, a large body of research that supports the formation of secure attachments to multiple caregivers (Howes, 1999; Lamb, 2005; Lewis & Takahashi, 2005; van IJzendoorn, 2005). However, the focus of these studies is restricted to relationships formed from infancy.

Bowlby's argument that infants were biologically prepared to form one primary attachment provided a strong rationale for the research focus on infant-*mother* attachment. However, in contrast to Bowlby's argument that monotropic attachments evolve through natural selection, Nash and Hay (1993) provide an evolutionary analysis of multiple attachments. In support of the polytropic view, or the social network model, they discuss social imprinting in avian species. Although Bowlby used the imprinting model to support his theory of monotropic attachment, Nash and Hay review findings from imprinting studies indicating that multiple relationships could be formed within the first few days of life. If attachment behaviors evolved

as a function to protect infants from predators, attachments to more than one individual makes more sense. Nash (1988) suggested that whoever is responsible for protecting and caring for the child, regardless of biology, is capable of satisfying the child's attachment needs, and therefore can serve as an alternative attachment figure within the child's social network.

In this view, attachment relationships work the same way in the social network model as they do in the monotropic model. Infants seek security and derive comfort from attachment figures. The monotropic perspective assumes one primary caregiver is responsible for all these needs. In contrast, the network model considers the social context of relationships - that infants are literally exposed to a network of influential figures that satisfy a variety of needs (Lamb, 2005; Lewis, 2005; Howes, 1999).   Howes (1999) outlines specific criteria for attachment figures in a child's social network; 1) they must partake in the physical and emotional care of the child; 2) interactions must be consistent and continuous throughout development, 3) they must have an emotional investment in the child. This criterion allows for siblings, child care providers, and grandparents who spend regular time with the infant to be included (Howes, 1999). Again, these relationships run concurrent to the mother-child relationship. Therefore, according to the theory, needs not satisfied by the mother can be fulfilled by another receptive member of the network. Lewis (2005) proposes that unmet needs can be satisfied by other individuals even if the mother-child relationship fails. Howes (1999) agrees that even if initial attachment relationships (to mother for example) are lost or maladaptive, children are still capable of forming new attachments to caregivers who respond sensitively to the child's needs.

<div align="center">Critique of Existing Relationship Models</div>

There is general agreement that attachment relationships begin to form early in childhood and serve as the foundation of a child's internal working model of relationships. However,

Bowlby suggests that these internal working models are based on primarily one relationship, though they become more complex and sophisticated as the child gets older. In contrast, according to the social network model, reorganization of internal representations takes place whenever positive interactions with new caregivers are introduced and nurtured (Howes, 1999). For example, Howes (1999) argues that children are capable of forming new constructs of attachment based on the interactions with particular caregivers, and provides empirical evidence that children with prior maladaptive relationships can form secure attachments to a new caregiver. However, these studies are limited to infants who have been adopted within the first year of life and do not address children's attachments to people who have become primary caregivers after infancy.

The idea that only one caregiver during infancy sets the stage for social development leads to a bleak outlook for millions of children in the United States alone who are either not cared for, or are poorly cared for by their natural mothers. On the other hand, a social network perspective suggests that infants can form secure, long-lasting attachments to many caregivers and develop positive internal representations of themselves and others within their social networks. This view suggests that there exist alternative pathways to healthy development for children who have poor attachment experiences in their early years. The social network model of attachment thus views attachment relationships and internal working models of attachment as much more flexible than the monotropic model. It is therefore crucial to conduct empirical studies to better understand the constraints and flexibility of attachments and internal working models.

Considering the large and rapidly growing population of grandparent-child caregiving situations in the United States today, it is necessary to explore the developmental impacts that

these relationships have. Traditional attachment theory provides a base explanation for the

formation of secure attachment relationships; the social network model provides evidence that

multiple secure relationships can occur simultaneously. Both monotropic and social network

models of attachment track the development of attachment from infancy.   Yet neither model

alone can answer the question of whether or not secure attachment relationships can be formed

between the child and the surrogate (grandparent) caregiver after children are physically

removed from the custody of their parents and their initial attachment relationships have been

disrupted. Nor can they explain whether or not these newly formed secure relationships with

other individuals serve as a protective factor, decreasing the risk of earlier, disrupted or insecure

attachments.

A further drawback of the social network perspective is that it does not provide specific

techniques to investigate how particular relationships affect children's development. While this

perspective is theoretically useful for describing the occurrence of multiple attachment

relationships, consequences of later adjustment based on these relationships have not been

investigated. Lamb (2005) concurs that although it seems clear that from infancy, an array of

individuals may influence children's psychological development, there are no longitudinal

studies that directly investigate such impact. In other words, although there is theoretical support

and descriptive evidence for the social network perspective, there is no paradigm for the

empirical investigation of the quality and impact of multiple relationships over time (Lamb,

2005; Lewis; 2005; Crittenden, 1985).

In contrast, the monotropic attachment paradigm provides techniques to actually measure

the security of attachment relationships. There are several valid tools with which to conduct

empirical studies to assess the quality of children's attachment to their primary caregivers in both

infancy and in the preschool period. The Strange Situation (Ainsworth, 1979), discussed earlier, is considered a reliable and valid measure of attachment security in infancy, and has been used in thousands of studies of infants around the world (for reviews, see Ainsworth 1982; Lewis, 2005; van IJzendoorn, 2005). The attachment Q-sort (Waters, 1997; Waters & Deane, 1986) is considered a reliable and valid measure of attachment security in the preschool period, and will be described below (in 'Future Directions for Research'). Furthermore, the monotropic attachment paradigm provides techniques to investigate the impact of the quality of attachment relationships on children's adjustments. Indeed, there are hundreds of studies that examine the relationship between attachment security in infancy and later indices of adjustment, such as externalizing behavior (for reviews see DeMulder, et. al, 2000; Erikson, Sroufe, & Egeland, 1986; Shaw, et. al, 2001).

Although empirical studies using these techniques have documented the negative impact of children's' primary attachment relationships, there is little attention to the possibility that secure attachments can be formed after initial attachments to primary caregivers have been severed. Not only does the focus on one primary caregiver overlook the types of extended family arrangements found in most of the world, but it fails to provide a framework with which to explain what happens when initial attachments are disrupted. Can later secure relationships protect children from the risks incurred by earlier, disrupted and/or insecure attachments? A synergistic social networks/attachment perspective can be used to guide empirical investigation of this question. I next discuss how such a model can be used to guide future research on questions that have not been addressed by traditional attachment theory or a social network perspective.

<center>Directions for Future Research</center>

As previously stated, an abundance of research in the area of childhood attachment assumes that a biological mother or one hierarchal mother figure serves as the primary emotional caregiver to a child. But what happens when a parent caregiver is no longer available? The dominant theory view of monotropic attachment, as recently put forth by Takahashi & Lewis (2005), does not address whether or not children in these circumstances are able to form later attachments, and if so, whether the quality of these relationships affects children's adjustment in ways similar to infant-parent attachments. Combining the tools developed from traditional attachment theory with a social network perspective can provide a powerful paradigm for future research. I will provide an example of how this paradigm can guide empirical research in order to illustrate both the usefulness of the paradigm, and a specific study that can address the compelling needs of caregiver grandparents and their grandchildren.

The proposed study focuses specifically on the relationships of preschool-aged children whose primary caregivers are not mothers, but grandparents who have taken over caregiving responsibilities. The study replicates existing correlational research on mother-child attachments using an understudied population of grandparent caregivers and their at-risk preschool-aged children. It thus incorporates the research paradigm used in traditional attachment studies with the assumption that attachment can be directed towards several members in a child's social network. What makes this theoretical model unique is that it provides a method to assess the quality of a child's attachment to a caregiver with whom the child formed a relationship after infancy. Specifically, it provides a framework for a study that addresses the two questions posed at the start: 1) can secure attachments can be formed to grandparent caregivers after disruptions in earlier relationships, and if so, 2) do these secure relationships to grandparent caregivers serve as a protective factor by reducing the risks of externalizing behavior problems.

Proposed Study

According to the social network model, attachment bonds work the same way with other members in the network as they do with biological mothers. Nash and Hay (1988) proposed that even when children are deprived of secure relationships in infancy, they may be capable of forming secure loving relationships later in life with other caregivers in their social network. Therefore, it is possible that secure attachment behavior patterns may be identified in children that are securely attached to their grandparent caregivers in the same way that they are identified in children cared for by their mothers. If so, secure grandparent-child attachments would be associated with fewer externalizing behavior problems, whereas insecure grandparent-grandchild attachments would be associated with increased externalizing behavior problems such as aggressiveness, kicking, biting, and other oppositional behaviors.

Design. Participants would include grandparent caregivers and preschool-aged children who have been in the care of their grandparents. The quality of grandchild-grandparent attachment would be measured using the Attachment Behavior Q-sort (Waters, 1997). The Attachment Q-sort is a widely-accepted and highly valid measurement tool used in assessing the quality of attachment relationships (secure or insecure) (Waters, 1997; Waters & Dean, 1986). Externalizing behaviors would be measured using the Preschool Behavior Questionnaire (PBQ), designed by Behar & Stringfield (1974), which has been proven to be a reliable measure of externalizing behavior disorders in preschoolers (Erikson, Sroufe, & Egeland, 1986; Bates, Maslin, & Frankel, 1986).

This questionnaire would be completed by a teacher or outside childcare provider who readily observes the child's behaviors and interactions with other children.

Implications. The findings from this study would make important practical and theoretical contributions toward understanding the development and impact of young children's close relationships. In practical terms, if findings show that secure attachments can be formed to grandparent primary caregivers, interventions can be developed to help grandparents with supports and strategies that help promote the formation of secure attachments. In theoretical terms, such findings would challenge a widely-accepted central tenet of attachment theory which proposes that internal working models of attachments are formed during *infancy*. This assumption, that the infancy period is formative and is crucial for the child's socio-emotional development, has led to a plethora of attachment studies that focus on infant-parent attachments, with little attention to later important relationships. However, both early (Ainsworth, 1979), and recent (Lewis, 2005; Takahashi and Lewis, 2005), leading attachment theorists agree that while many studies have been inspired by Bowlby's theoretical attachment paradigm, it is not clear that attachments formed in infancy remain stable throughout ones life. Much further research is needed to assess the qualities of attachments formed later in life and the impact these relationships have on a child's development.

Summary. It is important to study attachment security in grandparent populations as well as in the mother-child population for several reasons. The first is to the test the synergistic social network/attachment theory predictions about the formation and impact of attachment relationships. As previously stated, traditional attachment theory maintains that early insecure or disrupted attachments with the primary caregiver put a child at risk for externalizing problems during the pre-school years. The social network perspective predicts that children can form secure attachments to caregivers other than the mother, but does not address whether or not secure attachments formed after infancy can protect the child from such risks. The synergistic

model proposes that secure attachments can be formed after initial primary attachments have been disrupted, and that these new relationships serve as a protective factor against externalizing behavior problems that have been found to be related to insecure attachment.

Another important reason to study this population is to provide a basis for the possible implementation of attachment intervention therapy to alleviate the emotional disturbances and externalizing behavior problems of a child who is insecurely attached to the grandparent caregiver. To date, there are only a few studies that investigate the possibility of attachment intervention. Stams, Juffer, van IJzendoorn, & Hoksbergen (2001) were able to implement a behaviorally based intervention that was effective in improving sensitive responsiveness of mothers of adopted infants. Roberts, Joe, and Rowe-Hallibert (1992) have found that parent training is the primary recommended treatment for parents whose children demonstrate behavior problems. In their review, they cite several strategies for intervention that may lead to an increase in parental control and a decrease in behavior problems of the child. Externalizing behavior problems are strong indicators of unmet attachment needs. If detected early, it is possible to relate these problems to relationship difficulties, such as insecure attachment or other parenting factors. It may be possible to correct some of the externalizing problems of preschool children by addressing the unmet emotional needs of the child.

Additional Questions to be Addressed

In addition to questions that address the formation and impact of children's attachments to grandparents who become primary caregivers, it would be important to include descriptive information on other important relationships. In particular, research uses the term grandparents, but most studies focus on grand*mothers* as primary caregivers. What role, if any, do grandfathers play? Questions should be asked about grandfathers' involvement, and in addition,

about siblings that may or may not be living in the same household, and current parental

involvement, if any, including the children's fathers. Other factors that might affect attachment

relationships and behaviors include the circumstances that caused the child to be removed from

parental care, how long the child has been in the care of the grandparent caregiver, and the

child's relationship with the parent and grandparent before the time of separation. While it

would be difficult to asses, future studies might also include information regarding children's

previous externalizing behaviors as well as the quality of their attachments to parents. These and

other factors would be useful in understanding factors that may affect children's relationships

with grandparent primary caregivers, and the network of relationships that can impact children's

lives.

Conclusion

Considering the importance of attachment relationships to human development and the

large and rapidly increasing population of children in situations in which parental attachments

have been disrupted, research on the formation and impact of non-parent attachments is

necessary.

Over the last few decades, the majority of attachment studies have relied on the

monotropic view that the mother-child relationship dominates all other relationships as the

primary basis for a child's internal representation of attachment relationships. The social

network perspective, however, expands the limits of one primary caregiver to include a multitude

of influential people within the child's social network. Even though a parent may be completely

unavailable, rejecting, or emotionally unpredictable, other members of the child's social

network, including grandparents, may satisfy children's security needs if they are

responsiveness, consistent, and emotionally invested in the child (Bates, Maslin, & Frankel,

1986; Howes, 1999). Unfortunately, empirical studies investigating this view are lacking. The

integration of a social network perspective with traditional attachment theory can provide a

framework for exploring the formation and influences of later important relationships

 Such a framework would be useful for investigating the large, understudied population of

preschool-aged children who have been removed from their parents' home and are cared for by

their grandparents. Studies of these families can reveal whether secure relationships with

grandparents can serve to protects children against the risk of earlier disrupted and often insecure

attachments to parents. If so, interventions can be developed to promote the formation of later,

secure relationships in this vulnerable population.

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