To the Graduate Council:

I am submitting herewith a dissertation written by Katherine Elizabeth Green entitled "Attachment Parenting: New Ideas, Old Practices." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Human Ecology.

Deborah Tegano, Major Professor

We have read this dissertation
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Attachment Parenting:
New Ideas, Old Practices



A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

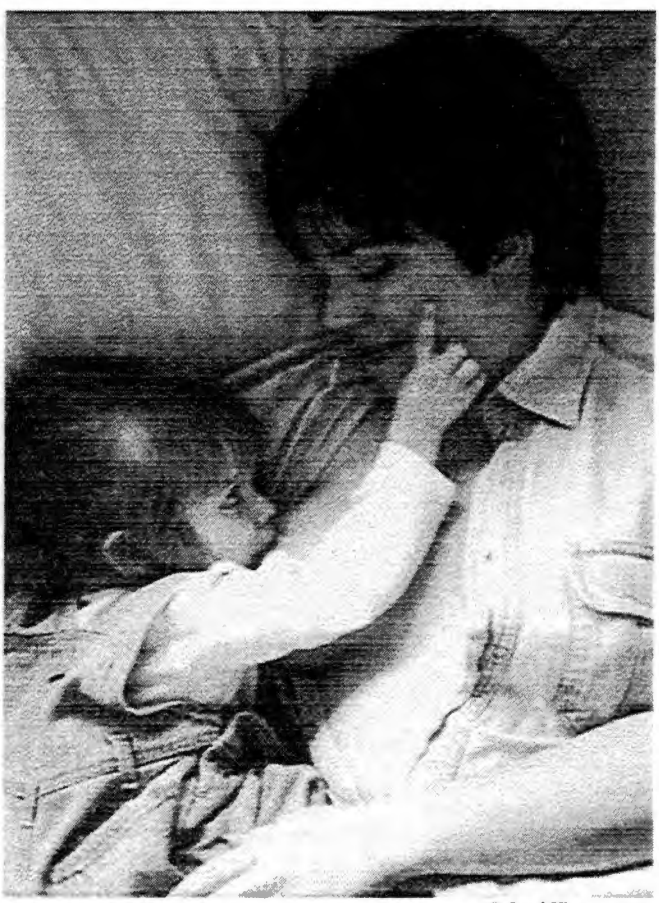
Katherine Elizabeth Green
August 2000

DEDICATION

This dissertation is dedicated to my grandmother,
Elizabeth Ann Fisk
and mother,
Janet Newton

And to my husband and children:

Mark, Samuel, Jacob, and Benjamin.



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ACKNOWLEDGMENTS

I would like to thank the very first people who made this dissertation possible; my three children, Samuel, Jacob, and Benjamin. Through them I discovered the necessity and the joy of learning about parenting practices and the importance of understanding child development. My husband Mark has also been a paragon of strength and support throughout this process while having the opportunity to finely tune his own domestic engineering skills.

I would also like to thank my wonderful doctoral committee chair Dr. Deborah Tegano for giving me encouragement, support, and freedom to research my interests. Dr. Melissa Groves also deserves a great deal of recognition for all her hard work while keeping me on a grounded course and for her continuing support and friendship. The other two members of my committee, Dr. James Moran and Dr. Sky Huck, have both provided continuous guidance and help, not only in my research but with my teaching and career goals. This committee truly worked as a team and I couldn't have asked for better.

More thanks must go out to the editors of *Compleat Mother* magazine, graphic designer Nancy Carow, and all the Attachment Parenting mothers who took the time in their busy schedules to complete the questionnaire. These was truly a lovely sample to work with.

ABSTRACT

This study examined a sample of practitioners of Attachment Parenting (AP) in the Western culture. Questionnaire data on a sample of mothers (n=275) was gathered to identify the demographics and practices of AP mothers and the use of transitional objects (TOs) by their children. To further assess these practices a smaller sub-sample of this was interviewed (n=15). The mothers primarily breastfed on the infant's cues, practiced extended breastfeeding (mean weaning age was 35.8 months), used little or no childcare, carried children in slings, coslept, and nursed or held their infant during the transition to sleep. Children whose mothers practiced high contact parenting (defined as: breastfeed, feed on cue, cosleep, and feed or hold during the transition to sleep) used traditional TOs much less frequently than children who are not parented in this high contact style. Children who did not use a traditional TO or who were reported to use the mother's breast as a TO were weaned at a much later age than were children who used traditional TOs or a part of the mother's body (i.e. hair, ear) as a TO. This is discussed in terms of cultural interpretations and Winnicott's theory of TO use.

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CHAPTER 1

INTRODUCTION

In the United States and other similar Western countries, parenting trends have come and gone over the decades. Current mainstream thought encourages mothers to give birth in hospitals but to try for natural labor. Mothers are told that breastfeeding is best but that formula provides an excellent, healthy alternative (Eisenberg, Murkoff, & Hathaway, 1989). About half all of new mothers are breastfeeding when they leave the hospital after birth and about 6% are found to be nursing at 12 months of age (Dettwyler, 1995). Parents are told that babies should sleep on their sides or backs in a crib that meets government safety standards. Parents are also told they should never sleep with their babies for fear of rolling over and suffocating the infant (Drago & Dannenberg, 1999). Soft toys and blankets are often added to the crib to provide warmth and comfort for the infant and as they grow they often come to place great value in these objects.

These types of parenting practices form the dominant view in the United States which is organized around the perspective of independence or individualism as opposed to interdependence or collectivism (Bornstein, Tal, & Tamis-Lemonda, 1991). One example of this is reflected in mother and child cosleeping practices. Cultures that stress dependence tend to cosleep whereas those that stress independence tend to encourage children to sleep alone (Greenfield, 1994). No culture is exclusively independent or interdependent because humans are both

individuals and members of a social group. Yet Greenfield (1994) stated that cultures have an idealized cultural script of independence or interdependence and these scripts influence the path of human development.

Although the dominant cultural script within the United States and other Western countries is one of independence there are various segments of society that do not always practice this path. Some of these groups include minority cultures such as African Americans, Hispanics, and Native Americans. Historically much of the work with other cultures has been done under the guise of a deficit model of minority child development in which differences are seen as deficiencies (Greenfield, 1994). In fact, developmental psychology still tends to be ethnocentric and dominated by Euro-American ideas. Yet, within the United States and other English speaking countries there are a rich variety of cultures with a wide array of parenting behaviors. Much can be gained from understanding these behaviors and how they affect children's development.

The culture of parenting can be divided not only among racial and ethnic lines but also by the types of parenting practices. One group that has broken away from the mainstream Western parenting mold is that of Attachment Parents. Dr. William Sears (Granju, 1999) coined the term Attachment Parenting (AP) 20 years ago but it is only within the last few years that this style of parenting has really become more widespread within Western countries. AP is based on sensitive and responsive care-giving and includes five primary features: birth bonding, breastfeeding (on the cues of the infant and allowing for child-led weaning), bedsharing (cosleeping), babywearing

(carrying infants in slings or carriers), and belief in the signal value of the infant's cry (Granju, 1999).

These individual practices have some positive support in the existing research. Babywearing or carrying infants has been shown to increase the rate of secure attachment in infants of low-income mothers (Anisfeld, Casper, Nozyce, & Cunningham, 1990). Cosleeping has been shown by some researchers (McKenna, 1996) to reduce the chance of sudden infant death syndrome (SIDS) and result in neurophysical and/or developmental differences in infants (Richard, Mosko, & McKenna, 1998).

Another aspect of AP is breastfeeding. There are numerous studies that show the benefits of breastfeeding with regards to physical and immunological benefits (Baumslag & Michels, 1995; Pisacane, de Luca, Impagliazzo, & Russo, 1995; Wang & Wu, 1996; Wright, Bauer, Naylor, Sutcliffe, & Clark, 1998), and cognitive gains (Bauer, Ewald, Hoffman & Dubanoski, 1991; Fergusson, Beautrais, & Silva, 1982; Johnson, Swank, Howie, Baldwin & Owen, 1996; Morrow-Tlucak, Haude. & Ernhart, 1988; Temboury, Otero, Polanco & Arribas, 1994).

These types of parenting behaviors are identified by pediatricians and writers as being part of Attachment Parenting. Magazines such as *Compleat Mother* and *Mothering*, AP books, AP web sites, discussion boards, and lists, and television shows such as ABC's 20/20 that discuss AP practices, are indicators that many families are practicing this parenting style. However, little is known about the demographics of the parents or actual parameters of the parenting practices. Parents

may indeed practice one behavior and not others while still maintain that they are AP families. There is no existing research that describes these types of families.

Within the United States many parents and practitioners have formed views of parenting behaviors that they believe to be "the correct and only way" to raise young children. Examining parenting behaviors that differ from the dominant culture is beneficial and necessary as it provides a check against an ethnocentric world view (Bornstein, 1991).

Objectives of This Study

This study had two objectives. First English speaking AP parents in various countries around the world were looked at in order to gain a better understanding of this growing group of families. The study identified demographic information such as maternal socio-economic status, race, marital status, age, and education. This was then compared to some existing breastfeeding literature to see if AP parents were similar to other breastfeeding mothers in the United States. The study also investigated which behaviors self-identified attachment parents use; practices such as cue-feeding, child-led weaning, cosleeping, and babywearing.

The second objective was to investigate the use of a self-soothing object (coined by Winnicott, 1971, as a transitional object). The hypothesis was that children who have had extended contact with their mothers, defined as contact during the night and in the transition to sleep, and breastfeeding on cue would be significantly less likely to develop an attachment to a traditional transitional object.

CHAPTER 2

LITERATURE REVIEW

Theoretical Perspectives

The types of parenting behaviors espoused by Attachment Parents are not new creations. Throughout history until the last 100 years or so, and still in the majority of cultures around the world, parents sleep with their infants, feed them on cue, and carry the baby around with them. In fact, the parenting practices used by the majority of people in Western countries are not necessarily the best or the most natural for babies (Small, 1998). Parenting practices and beliefs are only cultural constructions.

In order to even begin to understand the relationship between a child and mother one must look at many intertwined and complex aspects. The development of the relationship begins at conception and continues to grow and develop throughout the life-span. Various theoretical viewpoints have sought to better understand this relationship; ethological attachment theory and ethnopediatrics.

Attachment is defined as an enduring affectional tie that unites one person to another, over time and across space (Ainsworth, 1973). One of the core tenets of ethological attachment theory is that attachments develop within the context of early infant-mother interaction (Ainsworth, 1973; Bowlby, 1969; Isabella & Belsky, 1991). Maternal sensitivity is thought to be the primary contributor in creating the optimal or secure pattern of attachment (Thompson, 1998). For the optimum attachment relationship, mothers need to respond to the infant's signals more positively,

consistently, and warmly (Isabella & Belsky, 1991; Thompson, 1998). Understanding how these types of responses change based on culture can provide a deeper knowledge of the attachment process (see Appendix C for more extensive review of the theories).

And a new field of study has been developed that seeks to better understand parents and infants in different cultures. Ethnopediatrics combines culture and biology to provide an integrated conceptual framework for cross-cultural comparative research (Worthman, 1995). The goal is to study infants and parents across cultures and see how the differing parenting styles affect the health, development, and well-being of children.

Attachment Parents provide an interesting group to study within an ethnopediatric construct. Many AP behaviors have been shown to be adaptive and necessary for other species as well as other cultures around the world. For instance breastfeeding for extended periods of time could save thousands of infant lives worldwide every year (Cunningham, 1995). Cosleeping may reduce the chance of Sudden Infant Death Syndrome (McKenna, 1996), and babywearing increases the development of a secure maternal-child attachment (Anisfeld, et al., 1990).

Studying Attachment Parents from both ethological attachment and ethnopediatric theoretical approaches provides more insight into what types of practices AP mothers choose, why they are chosen, and how these parenting behaviors affect children's outcomes. This is a subculture within the Western world

that has adopted parenting practices usually seen in Nonwestern cultures. Whether these practices are adaptive and beneficial to Western children remains to be seen.

Transitional Object Use

Current portrayals of young children in Western countries often include a "blankie" or stuffed toy from which the child is inseparable. The popular cartoon Peanuts has a young child, Linus, who drags around his blanket and is nervous and seemingly lost without it.

Winnicott (1971) was one of the first people to organize and put a name to children's behavior concerning these special objects. Writing from the perspective of Western culture, he called these items the first "not-me" items and claimed they are a regular feature of normal development. Winnicott stated that from an early age infants start to caress and mouth items and to babble and make repetitive noises. He classified these behaviors as transitional phenomena. They may include relatively intangible phenomena such as thoughts, sounds, feelings, and movements as well as more tangible, physical items. Out of this phenomena can come an attachment to a specific object such as a blanket or soft toy which would then be called a transitional object (Winnicott, 1971).

It is the basic premise of many psychoanalysts and other therapists that the use of a TO is normal and is in fact associated with healthy development (Applegate,1989). Winnicott stated that TO attachment cannot be developed unless the child has first experienced care from the "good-enough" mother (Winnicott,

1971). In this type of parenting the mother meets all of the baby's needs and, according to Winnicott, provides the illusion that her breast is part of the infant. He used the idea of the breast to represent the whole technique of mothering. Winnicott (1971) stated that the transitional object is healthy and universal.

More credence to the psychoanalytic presumption for the necessity of TO attachment and healthy development comes from the finding that children who were institutionalized at early ages show an absence of TO use (Provence & Ritvo, 1961, cited in Applegate, 1989). In addition, some evidence seems to indicate a relationship between the lack of TO use and autism, various psychoses, personality disorders, and anxiety neuroses (Applegate, 1989).

Attachment and Transitional Objects

The idea that TO use is universal is questionable. Attachment theorist John Bowlby (1969) proposed that infants' attachment to inanimate objects would not be as frequent in more simple, less complex societies because infants may spend most of the day in close physical contact with the mother. In many of these cultures infants are carried or held most of the time, sleep with the mother, and are breastfed very frequently. The infants' needs are met immediately and the attachment components of non-nutritive sucking and clinging are directed towards the mother's body. Yet in Western societies these needs are often not met by the mother and so other outlets must be found. Young children suck on pacifiers or thumbs instead of the breast and cling to a blanket or toy instead of to the mother's hair, breast, or body (Bowlby, 1969).

In later attachment research, Ainsworth (1978, cited in Passman, 1987) proposed that infants probably require a secure attachment to their mother before they can substitute some type of object for her. Infants whose needs are responded to in a sensitive and consistent manner tend to have a more secure attachment to their mother (Anders, 1994). Therefore one would presume that in less complex societies where infants spend most of their time in the mother's presence, they would have high levels of secure attachment. While one of the preliminary attachment status studies was done in Uganda by Mary Ainsworth (1967), there is a limited amount of research that has been done to determine the attachment classifications of Nonwestern cultures as of yet, so this is still a generally unknown area.

Cross-Cultural Transitional Object Use

Of the work that has been done outside of the mainstream U.S., much of it casts doubt on Winnicott's assertion that the use of TOs is universal (1971). One of these by Gaddini and Gaddini (1970) looked at the use and incidence of TOs in three groups of Italian children; rural, urban, and Anglo-Saxon children living in an urban area. The study looked at the use of transitional objects and other parenting interventions such as feeding patterns, sleeping arrangements, and the extent of rhythmic physical contact (holding, rocking, back rubbing etc.) with the primary caretaker. The results showed great differences in the groups. Of the children in the rural group, only 5% developed attachments to TOs, while in the city group, 31% developed attachments. What stands out more is that 61% of the Anglo-Saxon children developed TO attachments. Much of the (albeit ethno-centric) research

within the United States points to at least 54% of children having an attachment to a TO (Free & Goodrich, 1985)

With regard to sleeping arrangements, about 77% of the rural group and the city group slept either in the same bed or in the same room as their parents. More than 75% of both these groups of children were breastfed but 53% of the rural mothers reported rhythmic holding contact as compared with only 28% of the city mothers. The Anglo-Saxon group had only 32% sleeping in the same room as the parents, only 60% were breastfed, and 33% had frequent rhythmic physical contact. Gaddini and Gaddini (1979) stated that the children who had not had a TO were often reassured by the mother in the form of direct rhythmic contact. These authors found the rural group had a distinct pattern of progression in TO development. The primary object was the breast, which then went to the precursors (thumb or pacifier), to rocking, and on to the physical contact of sleeping with the mother. This pattern was not as evident in the groups from the city who tended to use TOs as a means of consolation. They suggested (no research was done to investigate their hypothesis) that children who had the physical presence of their mother during the transition to sleep and who did not develop an attachment to a TO would not be able to later produce a "symbolization" of her. Gaddini and Gaddini believed this could limit the child's ability to use imaginative play as a preschooler and lower the degree of creativity, affection, and symbolic expression used in adult life.

The authors' general tone was one of approval of the parenting practices in the city group and even more so of the foreign, Anglo-Saxon group, with little

approval for the rural parent groups. This approval of Western parenting and negative view towards styles that fall outside of this "norm" is still present today. Researchers need to be aware that many of the "universal milestones" and "best practices" are actually based on a very small sample of the world's population (Bhavnagri & Gonzalez-Mena, 1997). Children studied in the context of modern industrialized cultures, like the United States and Europe, are a select group and not representative of most other cultures and times of human history (Lozoff, 1977, cited in Bhavnagri & Gonzalez-Mena, 1997). In fact, New (1994, cited in Bhavnagri & Gonzalez-Mena, 1997) found that only 9.3% of the studies published in the journal Child Development between 1986 and 1990 were studies on culturally and linguistically diverse populations outside the United States.

The amount of studies that focus on children outside of the United States is definitely limited and much of the work is dated. One must go back to the work by Gaddini and Gaddini (1979) and Hong and Townes (1976) to examine TO use and sleeping arrangements cross-culturally. Hong and Townes work compared the use of TOs in Korean and American children. Mothers in three cultural groups were surveyed: American, Korean but living in the U.S., and Korean living in Korea. Attachments to a TO were highest (54%) in the American group, with the Koreans living in the U.S. next (34%), and the lowest in the Koreans living in Korea (18%). The differences were significant. Sleeping arrangements were significantly different as well. None of the Korean children slept alone until at least the fifth month, whereas by the time they were six months old, all of the U.S. infants slept alone or with

siblings. The Korean group living in the U.S. was an intermediate group with about half of them sleeping in the same room as the parents until late in their first year. Differences were also found in breastfeeding duration (the Korean infants were breastfed much longer than the American) and the amount of time of direct maternal infant care.

The authors stated that the use of a TO is lower in cultures or social groups in which an infant receives a greater amount of physical contact, has a higher rate of breastfeeding, and in which the mother is more involved during the sleep transitions. This is validated by research done by Wolf and Lozoff (1988) who found that children who had an adult present as they fell asleep were less likely to use an attachment object or suck their thumbs. Their research was slightly contradictory in that the nightly sleeping arrangements and method of feeding were found to not be as important as the presence of an adult during the actual sleep transition. It is this presence of the mother or mother-substitute during the transition to sleep that consistently comes across as having the most effect on the presence and use of TOs by young children (Gaddini & Gaddini, 1979; Hong & Townes, 1976; Wolf & Lozoff, 1988). The use of TOs is lower in cultures in which infants receive more physical contact including breastfeeding, and in which the mother is more physically involved and available to the infant during the transition to sleep (Hong & Townes, 1976).

These finding are similar to those found by Caudill and Schooler (1973) who, while not specifically researching the use of transitional objects, looked at differences

among Japanese and American child raising practices. They found that the middle-class American infants played with toys and other objects more than a matched sample of Japanese infants. The American mothers did more looking at and positioning the body of the baby, and chatting to the infant while Japanese mothers did more caring, rocking, and lulling of their infants. American mothers were found to de-emphasize the importance of physical contact, while Japanese mothers placed more importance on physical contact and less on vocal communication.

Cross-Cultural Transitional Object Research Within the United States

Another study to look at cross-cultural aspects of transitional object use was done by Litt (1981). This study was done within the United States with a group of 119 White, middle and upper-class children from a private pediatric practice and the other group comprised of 166 Black, lower and lower-middle class children from a hospital clinic. Significant differences were found in the incidence of TO attachment between the two groups. Of the private group, 77% developed a TO attachment with only 46% of the clinic group forming similar attachments. Of the children who did use a TO, the children in the private group formed their attachments earlier (1.03 years) than did the clinic group (1.31 years) and used the TOs in a wider variety of stressful situations. For the private group a blanket was the most popular object of attachment (66%) while for the clinic group stuffed toys or dolls were the most popular (59%).

Litt (1981) also found two other significantly different variables between the two groups. With regard to sleeping arrangements, 83% of the private group slept

alone in their own rooms during the first year, while only a quarter of the clinic group did so. Many of the clinic group children shared a parents' bed or room. These findings are similar to those made by Lozoff, Wolf, & Davis (1984) who found that more than half of all the White children in their study never slept in their parents' bed and about half of all the Black children frequently slept the whole night with their parents.

Litt (1981) stated that: "An enduring attachment to a specific inanimate object may be a function of certain family living arrangements and child-rearing practices, primarily those related to the sleeping arrangements made for the child" (p. 138). She suggested that children who sleep in their own rooms from infancy on are more likely to develop a TO attachment than children who sleep with or in the same room as others. Litt stated that this strengthens the findings by other TO researchers that the need for TOs arises out of the anxiety experienced by the child during separation from the mother at bedtime.

This supports Bowlby's (1969) belief that infants in less complex societies who spend most of the day and night in close, physical contact with their mother would not be as likely to develop a TO attachment. It also adds some confusion to the attachment research findings. Infants need to have their needs responded to in a timely and consistent manner in order to develop a secure attachment. Therefore an infant who consistently experiences separation anxiety during the transition to sleep must surely feel less confident in the degree of secure attachment to the mother. And it is primarily the children who experience this nighttime separation anxiety who go

on to develop the attachment to a TO. Ainsworth (1978, cited in Passman, 1987) stated that infants probably need to first be securely attached to their mother before they are able to attach to a TO. Yet one has to wonder if this is truly the case or if other factors are involved. More research needs to be done with regard to attachment classification and TO use to understand this phenomena better. Research is especially needed with Nonwestern cultures and with different cultures within the United States.

As stated before, the use of transitional objects does not appear to be in any way a universal phenomenon. It seems to have developed as a part of modern, Western parenting styles. While none of the research shows the use of TOs to be detrimental and, in fact, usually their use is seen as beneficial, it is important to remember that a childhood phenomenon or parenting practice that is seen in one culture and absent in others is not necessarily the standard that all cultures should be held to. Different parenting practices and beliefs necessitate different actions and responses from infants and children. The Euro-centric standard is not the only one that produces psychologically and physically healthy and happy individuals; a fact that is often forgotten by some Western researchers.

Breastfeeding

Breastfeeding and Health

The American Academy of Pediatrics has recently updated its stance on breastfeeding. In a policy statement released in December 1997, the Academy said that recent studies have prompted them to encourage mothers to feed their infants nothing but breastmilk for the first four to six months and then to continue nursing for at least one year. This is in concurrence with the World Health Organization's

recommendations for infants worldwide. Currently in the United States only 21% of mothers are breastfeeding at six months (McDaniel, 1997). Breastfeeding also varies according to race, education, and socioeconomic status. White and Hispanic women with some college education, are older, and who are middle to upper middle class, tend to breastfeed more frequently and for a longer time (Horwood & Fergusson, 1998; Morrow-Tlucak, Haude & Ernhart, 1988; Small, 1998).

Looking at breastfeeding worldwide some researchers claim that not breastfeeding in underdeveloped countries increases the risk of infant mortality tenfold (Small, 1998). Infants in Western countries such as the United States are not exempt from problems stemming from the use of breastmilk substitutes. The U.S. National Institute of Environmental Health and Safety estimates that four out of every thousand infants in the U.S. die because they are not breastfed (Small, 1998).

Breastfeeding and Cognitive Development

There is also a growing body of research that has shown a relationship between breastfeeding in infancy and future cognitive gains (Bauer, Ewald, Hoffman & Dubanoski, 1991; Fergusson, Beautrais, & Silva, 1982; Johnson, Swank, Howie, Baldwin & Owen, 1996; Morrow-Tlucak, Haude. & Ernhart, 1988; Temboury, Otero, Polanco & Arribas, 1994). These gains are found even when the two confounding factors (maternal education and family socio-economic status) that potentially confound the association between method of infant feeding and later development are controlled for (Leeper, Tamar & Collins, 1983).

While breastfeeding in itself seems to have an impact on developmental and cognitive gains, the length of time the child is breastfed is another consideration. Most studies indicated that the longer a child is breastfed the greater the gains in development and cognition (Horwood & Fergusson, 1998; Rogan & Gladen, 1993; Taylor & Wadsworth, 1984).

Long-Term Breastfeeding

Little is known also about long-term or extended breastfeeding. Weaning in Western research is usually reported in terms of day or weeks as so many women wean their infant from the breast within the first three months after birth (Bass & Groer, 1996; Lanting et al , 1994; Pisacane et al, 1996; Reamer & Sugarman, 1987). Many women are believed to nurse past this age yet often do so in somewhat of a secretive way (Avery, 1977; Reamer & Sugarman, 1987). This has been termed as "closet nursing" and is done to lessen societal criticism while still providing nourishment and nurturance to the young child.

Reamer and Sugarman (1987) studied mothers who breastfed past six months. They found most of them were White, older, higher SES, and more educated than typical American mothers. Most of them belonged at one time to La Leche League (LLL) and few were employed outside the home. The average weaning age for this group was 18 months with a range of 3 weeks to 5 years. Avery (1977) looked at a smaller sample of 45 mothers who were members of LLL and found that 35% of them nursed past 2 years. Thus, there have been small segments of Western society over the last few decades who have been practicing long-term breastfeeding. Exact

details or numbers are sketchy because of the tendency to "closet nurse" for fear of reprisals from medical professionals and family members.

Mother and Infant Sleep

Western Sleep Perspectives

Many parents may also not share details of their child's sleeping arrangements with medical practitioners. The dominant Western view often espoused by experts is that infants and toddlers should sleep in a crib in their own room (Lozoff, Abraham, & Davis, 1984; Schachter, Fuchs, Bijur, & Stone, 1989). One popular book, *What to Expect The First Year* (Eisenberg, Murkoff, & Hathaway,1989), states that babies who sleep with their parents in the same bed can create problems such as: sleep problems in children, dental problems in children (due to night nursing), developmental problems (creation of separation anxiety in older children), peer problems (older children will be ridiculed by their peers), marital problems (sex is inhibited which can be "fatal" to the relationship), safety problems, and drawing-the-line problems (when and how to say no to children who want to sleep in the same bed). This same book states that even infants sleeping in their parents room (not cosleeping just sleeping within the same room) can create serious problems including: less sleep for parents, less sleep for babies, less lovemaking, and more problems adjusting later (during the move to the child's own room).

It is easy to see how advice like this can encourage parents who are either cosleeping or have the child in a bed within the parents' room can feel guilty and worried as to whether what they are doing is "normal." Yet some research has shown

that despite the grave warnings a good number of parents in the United States are cosleeping. Schachter et al, (1989) found that about 21% of Hispanic-Americans in a sample from New York City were having frequent all-night cosleeping. Lozoff, Wolf, and Davis, (1984) found similar ethnic differences with cosleeping being a routine practice in 35% of White and 70% of Black families. In both studies cosleeping was also associated with bedtime routines such as staying with the child until they fell asleep or allowing the child to fall asleep out of bed. The cosleeping parents emphasized parental involvement and body contact both at bedtime and during the night.

Both studies reported increased sleep problems for some groups of children who were cosleeping. Lozoff et al (1984) found that 56% of the cosleeping White children were rated as having problems such as bedtime struggles or night waking however only 15% of the non cosleeping White children had similar problems. With the Black children the differences were reversed with more problems reported in the non-cosleeping group. Schachter et al (1989) found there were three times as many sleep problems among cosleepers as non cosleepers. The studies also found ethnic differences as to when the cosleeping first started. Most of the White cosleeping children and Hispanic-American children did not start sleeping with their parents until after age one, however only 14% of the Black children began cosleeping this late with most starting in the newborn period (Lozoff et al, 1984; Schachter et al, 1989). Both studies also showed an increase in cosleeping amongst single-parent families.

Cross-cultural Sleep Perspectives

As can be seen in the American research, sleep, while a biological necessity, also entails many cultural issues. In many societies around the world putting a child to sleep in a separate room is seen as bordering on abusive. Mayan Indian and Japanese mothers express shock and pity when learning that Americans encourage infants to sleep apart from their parents (Brazelton, 1990; Morelli et al., 1992, cited in Greenfield and Suzuki, 1998). Sleeping arrangements, carrying, holding, and styles of feeding are all behaviors influenced by culture. Western culture incorporates various practices that encourage early independence such as sleeping alone and being "trained" to go to sleep by themselves. This is no where near universal as many parents in Asia, Africa, and indigenous America cosleep with their babies and also put their babies to sleep by nursing and holding them (Greenfield and Suzuki, 1998). It is believed that this pattern of behavior better fits with the physiology of the young infant.

> There are two types of mammals; those that "nest" their young and those that remain in continuous proximity to their young. Mammals that raise their young in nests produce milk with a high protein and fat content, and feed their offspring at widely spaced intervals. Mammals that carry their young produce milk with a low protein and fat content, and feed their young more or less continuously. Humans, like all higher primates, have the milk composition and suckling characteristics of "carrier" species. (Blurton-Jones, 1972 p.308, cited in Greenfield and Suzuki, 1998)

Konner (1977) found that !Kung mothers follow this biological pattern and nurse their infants about four times an hour. In this and other similar cultures, infants do not have sleep problems nor do they experience long bouts of daytime crying or colic unlike many of their Western counterparts. There is also no reference or documentation of the use of TOs.

Thus, one must consider the possibility that the Western-style of parenting that encourages early independence in the form of sleeping alone, not carrying infants constantly, and scheduled feedings may be "fighting the biology of the human infant that has evolved over hundreds of thousands of years" (Greenfield and Suzuki, 1998, p.1067). Some researchers (Anders & Taylor, 1994, cited in Bhavnagri & Gonzalez-Mena, 1997) found that children who practice some of these Nonwestern behaviors such as sleeping with their parents and having more frequent daytime contacts were less likely to need a psychological substitute for human contact (a TO).

Holding and Carrying

Western Carrying Perspectives

One of the tenets of Attachment Parenting is that of babywearing; carrying or holding the baby as much as possible. Granju (1999) writes in her book *Attachment Parenting: Instinctive Care for Your Baby and Young Child:*

> Attachment parents utilize one or more of the various types of modern baby carriers -- as a cloth sling, frontpack, or backpack – in order to "wear" their children. This allows busy parents more freedom to get things done while still offering their little ones the physical closeness that they need. (p. 6)

How the baby is carried has been shown to be very important because it has a direct influence on infant attachment. Anisfeld, et al., (1990) experimentally tested whether carrying an infant for a longer period of time each day affected attachment security. They found that children who were carried in a baby carrier against the mother's body were significantly more securely attached to the mother (83%) than were babies carried in a plastic infant seat (38%).

In addition to being more secure the group using the body carriers was also found to have a higher degree of maternal sensitivity and a significantly higher degree of maternal responsivity. Infants who were carried in a body carrier were also found to vocalize alone less and smile later than those carried in plastic carrier. They also were found to cry less than when carried next to the body. This is thought to be supportive of Bowlby's theory that vocalizing, smiling, and crying are social releasers that infants use in early months to encourage proximity to the mother. Anisfeld, et al., (1990) suggested the carried infants had less need to activate these proximity-seeking behaviors because they were already in close proximity to the mother. The method of feeding (breast or bottle) in their study was not related to maternal sensitivity or attachment but did show a slight association with maternal responsivity.

This was not the first study to show that infant holding is related to a secure attachment. In her classic study in Uganda, Ainsworth (1967), found that the amount of time mothers held their infants was related to the security-of-attachment rating the child received. Other studies also showed that mothers of avoidant infants had

rejected or sought to minimize physical contact with their infants (Anisfeld, et al., 1990).

Cross-cultural Carrying Perspectives

A compilation of ethnographic cross-cultural data showed that of 186 Nonwestern cultures, 119 of them practiced infant carrying as the usual mode of transportation (Barry & Paxson, 1980). Only in 37 societies (30 had missing data) was it reported that infants were transported in carriers (baskets or cradleboards).

Research shows that from a neurological perspective physical holding and carrying of the infant is the most important factor responsible for the infants' normal mental and social development (Restak, 1979, cited in Greenfield & Suzuki, 1998). Yet compared to other cultures, infants in the United States have been found to be in bodily contact with someone for relatively short periods of time. Konner (1977) showed that !Kung babies were in bodily contact with someone approximately 75% of the time until this level started to drop off around 9 months of age. This high level of holding is true also for the Efe (a foraging group living in Zaire) in which it was found that infants were only out of contact with another person for about 3% of the time. The contact fell from 97% during infancy to about 30% at age 3 (Tronick, 1995). This same amount of contact was not found in Western countries. In the United States and England infants were found to be in bodily contact with another person less than 30% of the time (Konner, 1977).

It is currently unknown as to how much touch is required for optimal infant development. Western children are held much less than many infants in other countries however it is unknown if this minimized holding (as compared cross-

culturally) has any effect on development, or whether it is, perhaps, offset by different parenting behaviors. As should be recognized in all cross-cultural work; differences are not always deficits.

CHAPTER THREE

METHODS

The objectives of this study were: (1) to provide a demographic description of the growing number of mothers who identify themselves as Attachment Parents, and to describe some of the parenting behaviors AP mothers practice; and (2) to investigate whether children who have had higher contact with their mothers do not develop an attachment to a traditional transitional object. The following section describes the research design, sample characteristics, methods, and procedures that were used to collect the data.

Research Design

A descriptive research design was chosen for this study. The first purpose involved the description of the parenting behaviors of an AP sample. This was accomplished through self-report questionnaire on a large sample of mothers (n = 275) and a telephone interview with a smaller sub-sample of the same mothers (n = 15). The demographics and parameters of these parenting practices have not previously been studied therefore a descriptive design was the best means for studying AP families. Katie Granju, the author of the newly published book *Attachment Parenting* (1999) said that she has been asked questions concerning who the parents are, how many there are, and the actual behaviors the parents are doing (personal communication, Oct.,1999). Granju reported that she has no specific answers to these queries and commented on the importance of descriptive research to accurately describe AP families. The second purpose was to use the questionnaire

data to explore the relationship between some AP practices such as cosleeping and breastfeeding with traditional transitional object use. The categorical data were examined using parametric and nonparametric statistics for evidence of a negative relationship between AP parenting behaviors and TO use.

Sample

Questionnaire Sample

The 275 questionnaire respondents were self-selected readers of the magazine *Compleat Mother*. The magazine has a publication rate of 14,000 and a subscription rate of 5,000. The editor of the magazine states the magazine's purpose is to promote natural, vaginal birth and extended breastfeeding. Many readers of the magazine also state, (through letters and contact with the editor) that they practice such parenting behaviors as cue-feeding, child-led weaning, cosleeping, and baby wearing. These types of behaviors are being identified by many parents and practitioners as aspects of Attachment Parenting (Granju, 1999). Therefore it was believed that the majority of readers of this magazine identify themselves as attachment parents. This was confirmed when the majority of respondents who self-selected themselves by returning the questionnaire identified themselves as attachment parents.

The magazine is sent to many countries including the United States, Canada, the United Kingdom, Australia, New Zealand, Germany, France, Japan, and Korea. The magazine is only printed in English. It is sold by subscription and on newsstands.

Interview Sample

Questionnaire respondents were asked to voluntarily provide name, address, and phone number indicting that they would be willing to participate in further parenting research. Respondents were assured of confidentiality of their responses if they gave consent to participate in an interview. A random sample of 15 respondents who provided identifying information was drawn for a telephone interview. The sample from which these 15 interviewees were drawn was comprised of only respondents who consented to participating in continuing research, who live in the United States, and who stated they are very familiar with Attachment Parenting.

Procedure

Questionnaire

For the first stage of the research a two-page questionnaire (Appendix A) was created. The questions were developed after an extensive survey of the literature to ensure response choices were broad enough and to avoid bias or one-sided questions. Questions were worded simply but care was taken not to be insulting to parental knowledge (Oppenheim, 1992; Neuman, 1997). Then the questions were given to experts in respective areas for review. These experts included professionals writing in the field of Attachment Parenting, child development specialists, and cosleeping and parenting researchers. These experts were asked to provide feedback as to whether the questions covered AP issues with enough breadth and depth. To address content validity of the questions, the experts were asked how well the questionnaire actually

measured what was being attempted to measure. Questions were added, deleted, or changed based on this feedback.

In addition, the questionnaire was piloted with six mothers. Of these, three were chosen because they had previously professed to practicing AP and three were chosen who had traditional Western parenting styles. The length of time, question comprehension, and ease of answering were all assessed by the mothers.

Neuman (1997) reported the average rate of survey return to be approximately from 10% to 50 %. However, this estimate was based on questionnaires that are mailed directly to respondents and usually include return envelope and paid postage. The questionnaire in this study was published as a tear-out page in *Compleat Mother* and respondents provided their own return envelope and postage. A postage-paid envelope would have limited the respondents to only those in the United States. Because of this lack of supplied postage a lower response rate was expected, though the response rate of 5% of the subscription rate (275 out of 5000) was considered appropriate under the conditions explained above. Likewise, it was not practical nor methodologically astute to attempt a follow-up mailing.

Interview

Additional data were collected using a semi-structured interview (Appendix B) with a sample of respondents initially identified via the questionnaire. The interviews lasted approximately 30 minutes and were done by telephone. The interview was in a conversational tone and the answers were recorded in writing by the researcher. In addition to noting answers to specific questions, the mother's

additional comments to these topics and related areas were also recorded. The questions asked for information in the same domains as previously sought: feeding, weaning, sleeping, holding, and use of child care. Some questions were asked about the practices that parents stated in the questionnaire were also part of their AP beliefs. These included circumcision, educational choices, place mother gave birth, and vaccinations.

As with the questionnaire, the interview questions were designed after an extensive review of the literature and then given to a panel of experts for review. The interview was also done with a small group of mothers prior to the actual data collection in order to clarify possible misunderstandings and to test the length of the interview.

The responses were coded but not entered into the computer for analysis because of the small sample size. The interview data is discussed in the results and discussion section with the literature as a way to help interpret and better explain the questionnaire findings.

CHAPTER 4

RESULTS AND DISCUSSION

The objectives of this study were: (1) to provide a demographic description of the growing number of mothers who identify themselves as Attachment Parents, and to describe some of the parenting behaviors these mothers practice; and (2) to investigate whether children who have had extended contact with their mothers, defined as contact during the night and in the transition to sleep, and breastfeeding on cue would be significantly less likely to develop an attachment to a traditional transitional object.

This study consisted of two parts: questionnaire and interview. The questionnaire data was entered and analyzed using SPSS version 9.0. Interpretations involved descriptive methods as well as chi square and analysis of variance to interpret the effect of weaning age, place of sleep, and method of going to sleep on the use of traditional transitional objects.

Descriptors

One of the objectives of this study was to describe attachment parents and the behaviors they practice. Of 275 respondents to the questionnaire, 78.5% said they were very familiar with attachment parenting with only 6.5% respondents reporting not familiar. The remaining respondents were somewhat familiar. Ninety-one percent also reported they practiced attachment parenting with the child they were reporting. Most of the respondents were from the United States (85.1%) with Canada having the

next largest group (13.5%). Questionnaires were received from Australia, Iceland, and Singapore.

The mothers had a mean age of 34 years (SD = 6.69), with a range from 19 to 52 years. Most of the mothers were White, married, and were predominantly college educated (see Figures, 1, 2, and 3). Existing studies (Bass & Groer, 1996; Skinner et al., 1997; Switzky, Vietze, & Switzky, 1979) show that these descriptions are representative of breastfeeding mothers as a whole in the United States. These previous studies also show breastfeeding mothers to be of middle to upper socioeconomic status. The respondents in the present study may have differed to some degree as 27.3% of them described themselves as being very low to low-medium income. The majority, 55.3%, reported being medium to high-medium income with 16.7% stating they were high-medium to very-high income. As the mothers are primarily college educated, the lower family income does seem to be a choice for these families.

An unexpected finding was that a very high number (81.1%) of the mothers provided their email addresses. Thus, the majority of these mothers are using online resources to some degree. During the second stage of data collection, 6 of the 15 mothers interviewed reported initially learning about this style of parenting from online sources. Only 18 of the 275 respondents chose to send the information back anonymously and many wrote notes and even full letters providing further explanations and descriptions of their parenting.

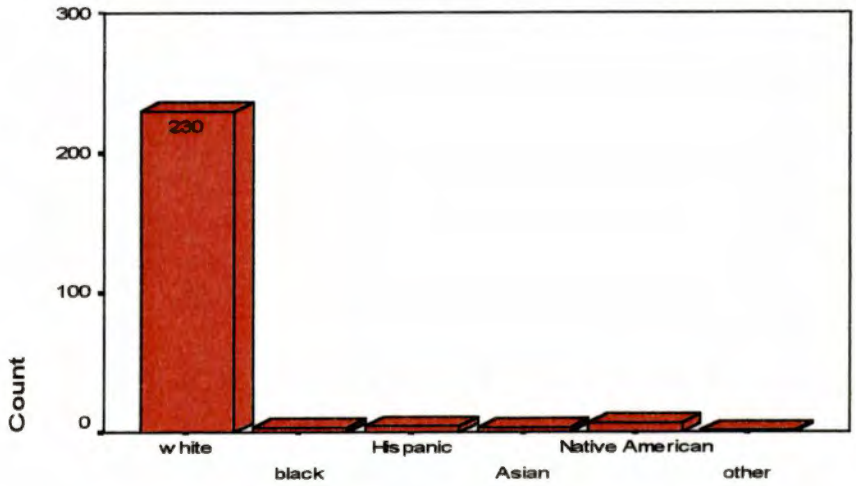


Figure 1. Race of AP Mothers. N=275

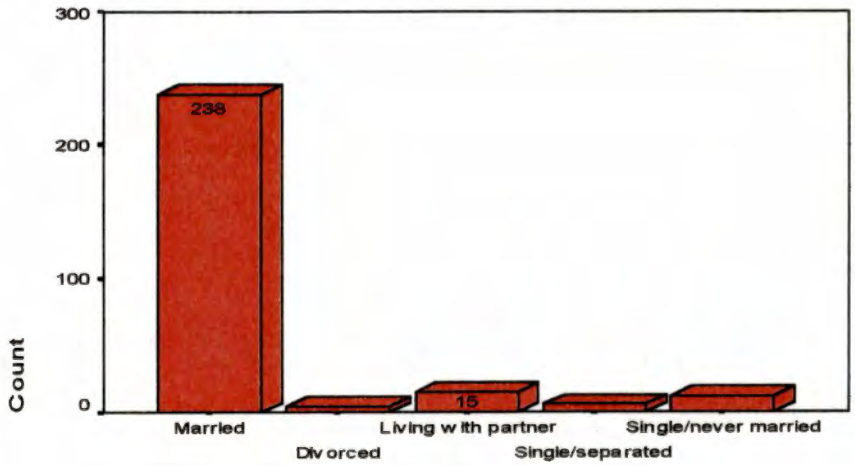


Figure 2. Marital Status of AP Mothers. N=275

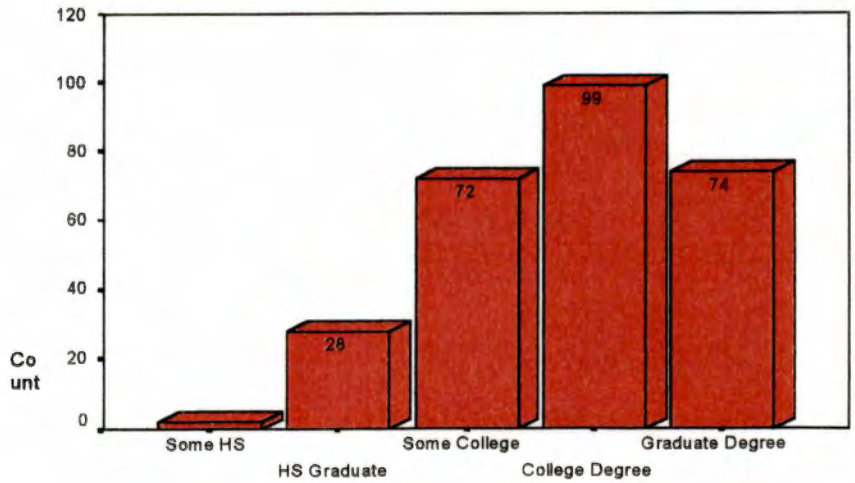


Figure 3. Level of Education of AP Mothers. N=275

The size of the respondents' families was quite diverse, ranging from one to ten children. The mean number of children for each family was 2.1 (SD = 1.29). The mothers were asked to report on their youngest child over the age of 10 months. Gender of the children was balanced with 53.8 % male and 46.2 % female. The mean age of the children was 3.68 (SD = 3.41) with a range from 3 months to 22 years.

This sample was similar to other breastfeeding samples in that it was predominantly White and highly educated. The SES was lower than previous studies have found. Because of differences in the data collection procedures in this study compared to previous ones, it is hard to accurately assess what this means. More than 90% of the sample reported practicing AP with their child thus this sample is primarily one of Attachment Parents.

Feeding and Weaning

As was previously expected 89.1% breastfed exclusively, 7.6% breastfed supplemented with formula, and only 2.9% reported exclusive formula feeding. Two of the mothers who reported exclusively formula feeding noted that their child was adopted. The mean weaning age of the breastfeeding children was 35.8 (SD = 17.66) months, which is twice as long as has previously been found in studies of extended nursing (Avery, 1977; Reamer & Sugarman, 1987). There was a wide range of weaning age in this sample from 1 month to 90 months. Some mothers (25%) chose to not answer this question because the child was still nursing and the weaning age

would be determined by the child. The mothers who were still nursing and who gave an estimated weaning age had an even higher timeframe for weaning with a mean age of 41.2 months (SD= 14.6). A significant relationship was found in that the older the mother was, the later their child weaned from the breast ($n=275$, $r = .315$, $p<.001$).

Of the 13% of mothers who did report using either formula or expressed breastmilk in bottles, there was a reported weaning age of 16.16 months (SD = 8.44) with a range from 2 to 36 months. And 41% of these mothers had weaned their children by 12 months. The bottle weaning age was significantly younger than breastfeeding weaning age, $t(199) = 28.69$, $p<.001$.

There were no differences in weaning age based on gender with males being weaned at 35.82 (SD = 16.99) months and girls at 35.82 (SD = 18.62) months. The latest age of weaning in this sample was 7.5 years (90 months) which was also much later than previous research in extended breastfeeding indicates. Twenty-one percent of the sample reported their child was not weaned from the breast until age four or older. The higher mean weaning age of this sample more closely reflects that of traditional societies. Ford's survey (1964) of 64 non-US, non-European societies showed a mean weaning age of approximately 35 months (Dettwyler, 1995).

Little is known about long-term nursing. Studies with older children who continue to be nursed may provide an interesting sample for investigations of related cognitive and emotional factors and may provide valuable insight about the effects of extended breastfeeding. These AP mothers were also open and willing to discuss this issue and may not fit the role of "closet nurser" as has been previously reported

(Avery, 1977; Reamer & Sugarman, 1987). These previous studies reported that the closet nursers were reluctant to talk to medical staff or even family members for fear of negative comments or actions taken against them. Perhaps as a defensive action to this perceived attitude, some AP mothers have found common bonds with each other and actively seek out other AP parents to form friendships. These alliances may be seen as both personal alliances, such as through La Leche League (LLL), and impersonal alliances such as online in lists or discussion boards. The respondents to this questionnaire were open and willing to discuss their parenting choices, however it isn't known how many mothers still remain unidentified because they have been concerned about negative feedback or repercussions.

And while 89.1% breastfed exclusively, an interesting finding was that of the 28 (10.18%) mothers who reported a weaning age for both breast and bottle, 14 of them reported weaning from the bottle before the breast. Only 11 mothers reported a later weaning age from the bottle than the breast and 3 stated their child weaned at the same time from both breast and bottle. A view held by many Western parents is that if infants receive a bottle they will become "lazy nursers" and give up breastfeeding. While the number of mothers who did give a bottle while still nursing is small in this sample, it does show that babies will continue to nurse even after receiving food from a bottle. This ability to continue the nursing relationship even with the addition of bottle-fed nutrients is consistent with information from other countries such as Jamaica and Zaire (Raphael & Davis,1985).

Mothers in this sample were also more likely to feed their baby on the infant's cues rather than on a maternal-created schedule. Most said they would always feed the baby when he or she needed comforting or when fussy or whiny (see Table 2). Advice such as following the infant cues, nursing frequently, and nursing whenever the baby fusses is not generally recommended in many Western parenting books. In fact, mothers are told to make demands of their own, that hourly nursing is an emotional and physical strain for the mother, and that babies need to be looking at something other than the breast (Eisenberg et al., 1989). Yet this current pattern in Western feeding practices is very recent for the human species as humans evolved with babies being sustained on a continuous supply of breastmilk (Small, 1999). The general composition of breastmilk is such that humans need to nurse "on demand" because the milk is relatively low in fat and protein (Dettwyler, 1995). AP practices recognize the need for babies to be fed often and on cue. " The fact is that sometimes, thriving, perfectly healthy breastfed infants will want to nurse more frequently – sometimes more than once an hour" (Granju, 1999, p. 130).

Ainsworth (1967) did not find a difference in attachment based on whether babies were fed on scheduled or demand/cue feeding in her Uganda study. She did see a tendency for the mothers of the securely attached babies to give the breast for comfort while none of the mothers of the non-attached babies did so. Future research with AP parents may include a measure of attachment to further investigate this relationship.

Childcare

Mothers were asked to report how many hours a week their child was in the care of someone other than themselves during their child's first year. Many of the children were not cared for by anyone other than the mother and when they were it was primarily with the father or another relative. The mean number of hours per week that the infants were left with someone other than the mother was 8.22 (SD = 13.35). More than a quarter of all the mothers (30.2%) said that they *never* left their infant with anyone even the father, and another quarter (27.6%) reported only leaving their infant with the father or another close relative for up to 2 hours a week. Twenty of the mothers (7.3%) stated that they left their infants with another caretaker for 40 or more hours a week (maximum reported hours of 62). The amount of non-maternal childcare used is much lower in this sample than found in other segments of US society where half of all mothers with children under the age of one are employed outside the home (Barglow, Contreras, Kavesh, & Vaughn, 1998; Belsky, 1986; National Institute of Health, 1997).

As was stated, mothers primarily relied on the father or other relative to provide most of the nonmaternal care. In-home care-providers such as a nanny or baby sitters were used by 8.4% of the sample with a range of 1 to 55 hours a week. Family-style home day care providers were used by 2.9% with a range of 15 to 45 hours a week. Child care centers were used by 2.2% with a range of 2 to 40 hours a week. And other forms of child care were used by 0.7% with a range of 5 to 20 hours a week. These findings are similar to others in which 77% of non-maternal care was

given within a private home and not a daycare center (Belsky, 1986). Within this sample the amount of childcare used rose as the level of maternal education became higher, ($r = .214$, $p < .001$).

When asked to describe what their AP practices were, 31.3% of the mothers believed in little or no non-parental childcare. This was also addressed during the interviews. Thirteen of the fifteen mothers interviewed stated they never or rarely left their baby with another person. Also during the interviews these respondents indicated that parental-only care continued into the toddler and preschool years if the child was uncomfortable or showed distress at separation.

The mothers in this sample are not reflective of general Western parents. More than half (67%) did not use any form of non-maternal care (defined as less than five hours a week) during the first year of life. Many indicated this was an active decision that was made in order to parent their child in AP fashion.

Sleeping

With regard to sleeping arrangements, the majority of the sample practiced cosleeping. Of the sample, 79.3% of the mothers reported that their child slept in a bed with them during the first six months of age. This only dropped to 75.6% when the child was between 6 and 18 months of age. Another 9.1% (first six months) and 11.3% (6 to18 months) started the night in their own bed but finished the night in bed with their mothers. Only 4% of babies up to six months of age slept in a crib in their own room. This rose to 8.4% between the ages of 6 and 18 months. Another small percentage (7.3% up to 6 months and 2.9% from 6 to 18 months) slept in a crib in the

Table 1. Bedtime Routine for AP Infants

Go to sleep alone	4.0%
Go to sleep with mom by side	2.2%
Hold or rock until asleep	4.7%
Feed until asleep	89.1%

N=275

mother's room. The infants who were formula fed more frequently slept alone in their own rooms and not with the mother, χ^2 (1, N = 275) = 26.309; p < .001.

Mothers were the primary caregiver when it came to bedtimes. Most AP mothers held and breastfed their child during the transition to sleep (see Table 1). Only 4% of the infants in this sample were expected to go to sleep by themselves. Formula fed infants were more frequently not held or fed while going to sleep, χ^2 (1, N = 275) = 11.827; p = .001.

Feeding or holding the baby during the transition to sleep is another practice generally not encouraged by Western child care manuals. "Helping her fall asleep – with a breast, a bottle, rocking …, will only postpone her learning how to do it herself," and "Just let him cry until he's exhausted himself - and the possibility, in his mind, that he's going to get anywhere, or anyone, by crying – and has fallen back asleep" (Eisenberg et al., 1989, p.261).

Table 2. Where AP Babies Sleep Based on Gender

		(0 - 6 Months of Age)	
		Male	**Female**
Slept in crib in own room	Count	10	1
Slept in crib in mother's room	Count	11	9
Slept in bed with mother	Count	116	102
Start in own bed but move to mother's bed	Count	11	14
Slept with another family member	Count	0	1

N=275

Bowlby (1958) identified crying as one of the instinctive patterns of behavior through which the infant actively seeks to sustain contact. Ainsworth (1967) found that frequent and sustained contact, soothing through physical contact when distressed, and sensitivity and responsiveness to infant cues were necessary for the development of a secure relationship. Therefore, it would seem more advantageous to the development of a secure attachment relationship to hold infants during the transition to sleep rather than the encouragement to let infants "cry it out."

There were no significant gender differences seen in where infants slept, χ^2 (4, $\underline{N}$ = 275) = 8.267; $\underline{p}$ = .082. However there was a tendency for male infants to sleep alone in a crib (see Table 2). The higher number of males sleeping alone could be related to the Western belief in independence. Males are perhaps encouraged to separate from the mother at an earlier age than girls which may be reflected in the

higher number of boys sleeping in their own rooms. More research would be needed to investigate this.

Holding and Carrying

The mothers in this sample preferred to carry their pre-walking child in their arms or in a sling. The types of equipment used the most were primarily the ones that involve body contact (see Table 3).

Table 3. Use of Infant Equipment By AP Mothers

1 = Never 4 = Always

	1 (%)	2 (%)	3 (%)	4 (%)
Parental Arms	0.4	4.0	21.6	74.0
Sling	19.4	10.6	19.0	50.9
Chest Carrier	46.3	22.1	14.7	16.9
Backpack	37.7	19.8	26.7	15.8
Stroller	14.2	50.7	24.8	10.2
Crib/Cot	64.1	22.3	6.6	7.0
Swing	49.5	38.8	8.8	2.9
Cradle/Bassinet	62.3	27.8	7.0	2.9
Bucket Carrier	55.5	34.6	7.4	2.6
Bouncy Chair	51.5	39.3	7.4	1.8

N=275

During the interviews all the mothers stated that babies need to be held as much as possible and one mother said babies need to be held as much as they need to eat. Five mothers said that in their opinions, their babies "never" cried or cried much less because of the constant holding. This opinion is consistent with findings by Hunziker and Barr (1986) who showed experimentally that increasing the amount of carrying during the day between the ages of 4 and 12 weeks resulted in a 43% reduction in total daily duration of crying. !Kung San babies who are held 75% of the time as young infants have also been shown to have much lower total amounts of crying than do Western babies (Konner, 1977; Lummaa, Vuorisalo, Barr, & Lehtonen, 1998). Anisfeld et al.(1990) found that babies who are carried in a body carrier on the mother's chest are more securely attached to the mother than are those carried in a bucket-type carrier. Future research should include a measure of attachment to assess whether the AP mothers who carry their babies in slings have a higher than average proportion of secure attachments.

Transitional Object Use

Respondents were asked to state whether or not their child has/had a transitional object and were provided with six response categories; none, thumb or fingers, soft toy or doll, blanket, pacifier, or part of mother's body. Prior research has not included children using the mother as a TO, however in this study, 48.7% of the mothers stated their child used them (the mother) as their "cuddly object." This included identifying the mother's breast, hair, and face as a TO. This group was further broken into two sections: those identifying the breast during nursing as a TO

(40%) and those identifying another maternal body part (8.7%). Only 18.2% of the children were reported to use a traditional TO which was defined in this study as any external object such as a blanket or pacifier or thumb sucking. This is much lower than previously found where 63% of middle class Western children are estimated to use TOs (Lehman, Denham, Moser, & Reeves, 1992). It does match the work of Hong and Townes (1976) where they found that only18% of Korean children developed an attachment to a TO. The Korean children were also more likely to have slept with their mothers, were breastfed longer, and had more direct maternal infant care, than their US counterparts.

The hypothesis of this study was that children who had a high amount of maternal contact would not be as likely to develop an attachment to a traditional TO. High maternal contact was defined in this study as; breastfeeding, feeding on the babies' cue, sleeping with the mother, and being held or nursed during the transition to sleep. These four behaviors were combined based on a review of the existing literature to create a new variable called "high contact mother." Lower contact mothers were defined as any mother who did not practice all of the four behaviors as defined above. In this study 211 (76.7%) of the mothers indicated they did all four of these higher contact behaviors. Significantly more children in the lower contact group were found to use traditional TOs than did children in the high contact group. Plus there was a higher frequency of children in the high contact group using the breast as a TO compared to the lower contact children $\chi^2(3, \underline{N} = 275) = 34.9333$; $\underline{p}<.001$.

Analysis of variance revealed significant differences between the mean weaning age of the child and the type of TO used, F (3, 199) = 12.09, $p < .001$. Children who had traditional TOs weaned at an earlier age than children with no TO and children who used the mother's body as a TO weaned at an earlier age than those who used the breast as a TO (see Figure 4).

The mean age of developing an attachment to the thumb was reported to be 4.3 months (SD = 7.4); to a toy, 24.2 months (SD =25.45); to a blanket, 8.35 months (SD = 7.4); and to a pacifier, 3.0 months (SD = 6.88). More of the children

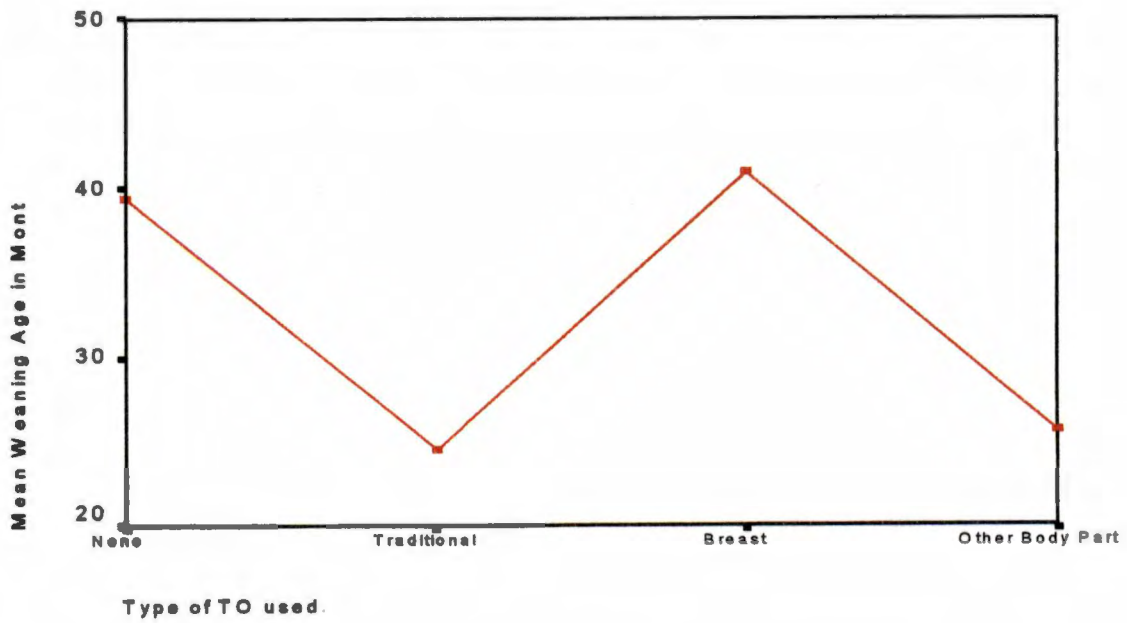


Figure 4. Mean Weaning Age and Type of TO Use

(18.54%) were attached to their thumb or pacifier than were attached to a blanket or toy (13.81%). This is different than Lehman et al. (1992), where 48% of the sample were attached to soft objects and 15% to pacifiers. Another study by Mahalski, Silva and Spears (1983) found one third of their sample was attached to a soft object. Within this study there were no gender differences by type of TO.

This study supported the hypothesis that children who have higher maternal contact (breastfeed, nurse on cue, cosleep, and are nursed or held during the transition to sleep) are less likely to develop an attachment to a traditional TO as are children who do not have the higher maternal contact. This supports previous findings that showed children sleeping alone and not being held or nursed while they go to sleep are much more likely to use a TO than are children sleeping with their mothers and being held during the wake-sleep transition (Gaddini & Gaddini, 1979; Hong & Townes, 1976; Litt, 1981; Lozoff et al., 1984; Wolf & Lozoff, 1988).

An attachment to the mother's body (i.e. hair twirling, ear holding, or holding the breast) was important for 24 children in this study. Eibl-Eibesfeldt (1983) found that in Nonwestern societies babies often manipulate the free breast while nursing. He hypothesized that this is to keep the free breast occupied and thus unavailable to other children. It is unknown then if these behaviors are performed for the same underlying reasons that children choose traditional TOs. However, there are some intrinsic similarities to a traditional TO (blanket, teddy etc.) in that the child adopts these attachments and they involve rubbing, caressing, and manipulating something (a maternal body part). Winnicott (1953) and Gaddini and Gaddini (1970) did not define

these types of attachments as TOs because they are not symbolic of the mother; they are actually her. This study's finding that children who have traditional TOs and mom's body part as a TO are weaned at similarly earlier ages supports the idea that these two are similar in function and meaning for the child.

The use of the breast as a TO was reported by a larger group of mothers (40%) in this study than have been reported in previous studies. This may be related to the high importance that breastfeeding plays in the parenting style of AP mothers; or perhaps allowing the child to have more access to the breast through cue and extended feeding allows for a deeper attachment to the breast as a source of comfort. Older infants in Nonwestern cultures were found to be very possessive and show quite violent responses when the mother offered her breast to another child (Eibl-Eibesfeldt, 1983). It would be interesting to discover if Western infants who are not allowed free access to the breast would be as attached or angry at the idea of sharing their food source. Perhaps if the breast is viewed by the child simply as a provider of food and not as a deeper source of comfort, there is not as deep an attachment as was reported by the mothers in this sample or has previously been seen in some Nonwestern cultures.

Interview

Fifteen mothers randomly selected from the mothers living in the United States, who identified themselves as attachment parents, and who consented were selected to be interviewed. The sample was generally representative of the questionnaire respondents. All were breastfeeding and of the 11 mothers who gave a

weaning age (4 were still nursing and were unable to say when weaning would occur), the children weaned at 47.18 months with a range of 34 to 66 months. This is longer than the mean weaning age of the main sample (35.8 months). This may be because one of the criteria for interview inclusion was that the mothers were practicing AP and were very familiar with it. All the mothers breastfed exclusively for at least five months with the mean age of starting solid food being 9.4 months. Five of the children did not receive solid foods until after 12 months of age. This is much later than previous findings in which children from White, middle/upper socio-economic status, well-educated families started solids around the age of 3.8 months (Skinner at al., 1997). It is also later than the four to six month range that many popular Western baby care books and doctors recommend.

Only two of the mothers worked outside of the home on a full-time basis and one mother half-time. At age one, half of the children were said to show no distress during separation when left with their fathers and by the child's current age (at time of interview), all but one child were said to be very comfortable left with the father. Similar reactions were reported when the child was left with other family members or close friends.

Twelve AP mothers viewed their husbands/partners as very supportive, three somewhat supportive, and all but four mothers said their own parents and in-laws are very or somewhat supportive of this parenting style. Twelve stated that they were supported by their community and friends because they have deliberately sought out and acquired friends who also practice or are supportive of AP practices. Much of this

support came from membership in LLL. Eleven of the mothers were members of LLL with four being active leaders. Of the four mothers who were not members, all but one had been part of LLL previously.

Fourteen of the children coslept with the mother (93%) with one child starting the night in its own bed but finishing with the mother. This is similar to the large sample in which 88% coslept or the child started the night in their own room but finished with the mother during the first six months. Nine of the families planned to cosleep before the child was born and of the five that started out planning to use a crib or bassinet, all the children had changed to cosleeping by the age of six weeks. This is different from existing research which found that few families began cosleeping during the first year of life (Hanks & Rebelsky, 1977; Schacter, et al., 1989). Ball, Hooker, & Kelly (1999) found none of their British sample of first-time parents planned to cosleep before the birth and only 35% of the experienced parents acknowledged they would or might cosleep.

The mothers in this small sample were supported by their spouses in their cosleeping decision, with eleven of the fathers being very supportive and only one not supportive of cosleeping. At the time of the interview, eight of the children had moved into their own rooms with a mean age of leaving the parental bed being 2.6 years. This may help to dispel the fear that some parents have that once a child is allowed into the parental bed they may never get the child back out. The AP belief is that children will sleep alone when they are emotionally and physically ready to and this age will differ for all children.

The AP mothers were asked how having their child sleeping in the same bed affected their marriage. Eleven reported no effects with none stating it had a negative effect. Two mothers said it improved the spousal relationship. Six mothers believed cosleeping made the family emotionally closer and eight reported sexual relations to be the same or improved due to the necessity of "creativity." Six of the mothers believed that having a baby was what placed a strain on the relationship and that cosleeping itself was not a negative aspect.

Eight mothers reported their babies woke often during the night and four mothers did not know how often their child awoke because they, themselves, did not really wake up or stir long enough to be aware of it. When asked whether a high nighttime waking rate bothered them, ten said not at all, and three said yes it did bother them, but not enough to change their parenting style to one in which the child slept alone in another room. Three mothers said "I got plenty of sleep" and this was related positively back to the question concerning marital relations. They stated that because both parents felt more rested there was less tension between them, thus the relationship was improved.

Only two of the children used a traditional TO (13%) which is similar to the main sample. One child used a bear which he became attached to on his own at age four. The other child used a pacifier which the mother gave to him because of his "voracious" suck and for use during car trips. Of the children who did not have TOs, ten of the mothers did not encourage their child to use them and nine mothers said they felt good because their child did not have an attachment to an object. And

although the questions surrounding the use of TOs were a relatively short part of the interview and questionnaire, the mothers were surprisingly vocal about their concerns surrounding TO use and made statements that included: "An object is a symptom of a pathological adaptation for kids who aren't attached to parents," "Babies don't need objects; they need mothers, " "These things encourage materialism at an early age," "AP makes kids more self assured and content so they don't have the need for a crutch," and "I didn't want her to be attached to a material object, I wanted her to be attached to people and have relationships."

Some other parenting practices that AP families believe in were identified in the interview. These include circumcision, vaccination, education choices, and where the mother gives birth. The interview sample consisted of mothers of seven boys and of these, six were not circumcised. Only two of the fifteen children were fully vaccinated and five had received no vaccinations. The other eight children were partially vaccinated with parents believing in both vaccinating at later than recommended ages or selectively choosing vaccines. Eight of the sample is currently homeschooling or plans to homeschool, one is choosing Montessori education, and the other six are in, or will go to, public school.

Of the fifteen children discussed in these interviews, eight were born in hospitals, four at home, and three in birthing centers. There was a move toward less intervention at birth with subsequent deliveries. Five of the mothers said they had other children following the one being discussed who were born at home. Three of these had the first child in a birthing center and two had the first child in hospital.

Many of these parents seem to be doing behaviors that involve much more decision making than just how long to breastfeed or where the infant should sleep. There may be a cultural phenomenon among AP families; one in which many practices previously deemed mainstream alternative are performed. These interviews raise many more questions about this group; the political views, attitudes about community action, views toward healthcare and education, etc. Questions also need to be raised as to why this group has chosen to parent and indeed perhaps live in this particular fashion. With regards to some of the major issues is there perhaps a feeling of distrust towards the government or medical establishment (suggested in the decision not to vaccinate or circumcise and to birth at home)? Is there some factor from the family of origin which leads a mother to choose this type of parenting? Four of the fifteen interview mothers talked spontaneously about dissatisfaction, sadness, and even (in one case) abuse from their own childhood. More research needs to be done to discover what leads mothers to this parenting choice and to identify whether AP practices are performed by mothers who are actually part of a larger, distinct cultural group in the US.

CHAPTER 5

INTERPRETATIONS

Readers of the magazine *Compleat Mother* who responded to the survey primarily described themselves as Attachment Parents. AP parenting behaviors identified with this sample included high occurrences of cosleeping, breastfeeding both on cue and for a longer period of time than normally seen in Western culture, using less non-maternal childcare, holding and carrying infants in slings and arms, and nursing or holding the infant during the transition to sleep. These behaviors are more closely aligned with those of parents from Nonwestern societies rather than typical Western parents. However there is a difference between AP parents and those in Nonwestern societies, and that is one of choice. AP parents have purposefully chosen to deviate from traditional Western parenting practices. The AP mothers in this sample are educated, have sought out knowledge about raising their young children, and then chosen a style of parenting that often clearly contradicts popular cultural beliefs. Mothers from traditional societies may not be practicing their parenting behaviors through a conscious choice, but from cultural scripts. In Nonwestern cultures mothers receive support from the existing culture, unlike the AP mothers who must actively seek out like-minded support networks (e.g. LLL and online lists) if support is needed.

African cultures like the !Kung and Gusii and Eastern cultures like Japan and Korea place more value on holding, comforting, and consoling infants than do parents

in the United States (Caudill & Schooler, 1973; Hong, & Townes, 1976; Konner, 1981). Parenting in Western cultures such as the United States focuses more on a pedagogic model in which children learn from birth to feel emotionally independent from their parents (Commons & Miller, 1998). This is accomplished through behaviors such as routinely separating infants and their parents both during the day and at night, and through allowing infants to cry for longer periods of time before consoling them. Commons and Miller (1998) suggested that the cultures that fit into the pedagogic model are at risk for having more post-traumatic stress disorders later in life because these cultures do not support infants during stressful and traumatic events. Additionally, infants who are not supported during their stress and have less responsive caretakers need to use greater and more arousing calls of distress and proximity seeking behaviors than do children with more responsive mothers. Thus, children whose needs are met responsively and consistently cry less and may grow up to be less dependent on the caretaker (Hunziker & Barr, 1986; Konner, 1977).

Based on these previous findings one would presume that AP children who are nursed on their cue, cosleep, and are held in arms or a sling often, may cry less than their counterparts. Although during the interview 33% of the mothers reported their babies "never" cried or cried much less because of constant holding, more research with systematic and controlled groups needs to be done. This would assess whether the duration of crying in infants of AP families is similar to other Western infants or if it more resembles those cultures where children are reported to be held more and to cry less.

However, parenting and culture are so entwined that to separate developmental factors that are biological rather than environmental is extremely difficult. Many Nonwestern cultures practice more responsive caregiving during the early months or years of life than do parents in Western cultures, yet this often does not extend into early childhood. One example of this is weaning. In various cultures that practice unrestricted nursing during the first few years of life, weaning can sometimes be sudden and seemingly harsh. If a mother becomes pregnant again many cultures have taboos against nursing during pregnancy and so the breast is immediately withheld. Mothers may send their child to live with relatives, smear the breast with a bad tasting solution, or bind their chest during this final weaning (Ainsworth, 1967; Eibl-Eibesfeldt, 1981; Raphael & Davis, 1985; Whiting, 1963).

The sudden withdrawal of the breast can be very difficult for a young child and is even more traumatic in children who have previously had unlimited access to the breast (Ainsworth, 1967). In her studies with Ganda infants, Ainsworth (1967) suggested that children who are given the breast on their cue and for comfort as well as for nutrition, the food-providing source and the attachment figure become one and the same. Weaning can then be traumatic for infants and attachment behaviors such as close proximity seeking become heightened. If the weaning takes place when the child is older (at least two or three years) weaning is not problematic as the child is resilient and confident enough in the attachment relationship. Winnicott (1953) provided a description of a child who was weaned with difficulty at seven months (perceived as late for the child's family), had no TO, and was very attached to the

mother. Winnicott suggested that the reason the child had a difficult time weaning, and indeed had mental and physical health problems through adulthood, was because of the attachment to the mother rather than a traditional TO. In this present study, AP mothers do seem to become the attachment figure as well as the food-provider, as 40% of the mothers report their child used the breast as a TO and 73% of the mothers used the breast to comfort the child as well as to feed. As this study only involves maternal self-report data, there is no way to assess whether the child is truly attached to the breast in the form of a TO as well as for nutritive sucking. However the primary method of TO data collection in most studies involves self-reports by the mother. In this study, as with previous research, there is no reason to doubt the mothers' responses. Further research with this group of AP children could provide insight and clarification into both Ainsworth's and Winnicott's findings.

Most of the AP mothers in this sample had additional contact with their young child in the evening and at night. Only 4% of the mothers expected their child to go to sleep without maternal involvement (holding, feeding, etc.) and only 11.3% of infants up to the age of 18 months slept alone in a crib. A higher frequency than expected of children who were formula fed were encouraged to go to sleep alone and sleep alone in their crib. This supports previous findings that show children who have contact with the mother while transitioning to sleep and who cosleep are more likely to be breastfed (Ball et al., 1999; Hayes, Roberts, & Stowe, 1996; Litt, 1981; Wolf & Lozoff, 1988). McKenna, Mosko, and Richard (1997) found that cosleeping infants breastfed more often and for longer periods of time which is believed to be protective

against sudden infant death syndrome. During the interview none of the mothers (n=15) could remember exactly how often their infant (up to 12 months) awoke during the night, although 53% reported often. Sixty-six percent of the mothers reported the night waking did not bother them at all because they were cosleeping and did not have to get out of bed in the middle of the night. The mothers reported just rolling over and nursing whenever the child stirred. This way neither party awoke fully and so both were more rested during the day. This is similar to findings in which British and Mayan mothers who were cosleeping reported not fully awaking to nurse the infant which kept night time disturbances to a minimum (Ball et al., 1999; Morelli et al., 1992)

Cosleeping has previously been linked to sleep problems or disorders in young children (Lozoff et al., 1984; Schacter et al., 1988). However the definitions of sleep disorders are culture-bound. For instance Benoit, Zeanah, Boucher, and Minde (1992) defined a sleep disorder if a toddler wakes more than three times in the night, is taken into the parents' bed, or requires a parental presence to go to sleep. Using these criteria many of the AP children (and children in different cultures around the world) would be considered as having a sleep disorder. Yet if the parents allow and encourage these behaviors and do not perceive them as problems, then the above definition of sleep problem/disorder cannot apply. It is important to remember that much of the "expert" advice seen in Western parenting manuals is based on culturally-bound knowledge and that the advice is not pertinent to the majority of cultures around the world and even in many cross-sections of society within the

United States. Medical practitioners and educators need to be aware of these cultural implications so that they may address their cultural bias and avoid creating the disapproving atmosphere of "closet nursers" (based on fear of repercussions from others). Long before the advent of "how-to" books on child care and the encouragement for turning to professionals for guidance, mothers have been nursing infants into the toddler or preschool years, have coslept with their infants and young children, and held and worn their infants day and night. This is not to say these behaviors may be the ideal; that is unknown. In previous history when AP practices were the norm for parents, and in some of the countries in which these behaviors are still practiced today, infants die/d in high numbers. Usually this is attributable to lack of adequate food, medicine, and sanitation, however parenting behaviors and environment cannot easily be separately distinguished.

These mothers may be guided by their instinctive ideas with regard to parenting (Granju, 1999), or they may be following a new (for Western culture) script that is unfolding within Western society. More research is needed to better understand whether these practices that are part of healthy and normal development in Nonwestern cultures will be adaptive within a Western context.

In this sample the use of traditional TOs was very low (18%) compared to other Western samples. Additional contact in the form of cosleeping, breastfeeding on cue, and holding during the transition to sleep, resulted in significantly lower incidences of traditional TO use within this sample. This finding matches much of the prior cross-cultural research. It also supports the idea that TO use is not universal and

that the use of a traditional TO may occur as an infant adaptation to parenting practices.

A high number of children in this sample were reported to use a maternal body part (8.7%) or the breast (40%) as their TO. Gaddini and Gaddini (1970) interpreted Winnicott's work and claimed that parts of the mother's body cannot be classified as TOs because these "objects," not being external to the mother's body, cannot symbolically represent a reunion after separation. However, in Winnicott's book (1964), *The Child, The Family, and The Outside World* (which was based on radio talks broadcast for mothers in England), Winnicott claimed that for some infants, the mother is retained as the object; whereas for others a separate transitional object is "...good enough and even perfect, provided the mother is there in the background" (p. 168). In this same book, Winnicott also provided a positive example of a child who soothed herself by caressing her mother's hair while sucking her own thumb. Thus, Winnicott did recognize the importance of using the mother as a TO and perhaps through his wording that a traditional or external TO can be "good enough" to represent the mother, one may speculate about a possible hierarchy of TO use. Perhaps the optimum attachment is to the breast, then to a maternal body part, and finally to an external object (traditional TO) that is separate from the mother. This in no way suggests that an attachment to a traditional TO is dysfunctional or unhealthy, rather that through individual differences and varying cultural child care practices, infants adopt a behavior that enables them to deal with stress. Infants are incredibly adaptive and quickly learn ways in which to best facilitate their needs. For

infants, the perception of hunger, the transition to sleep, and awakening during the night are very stressful times. In cultures that do not provide constant reassurance and support during these high stress moments, the infants must learn to provide self reassurance and comfort, thus necessitating the use of a traditional TO. As prior research has shown, children who go through this stress but do not develop a traditional TO may be maladaptive and develop higher levels of anxiety and psychological problems as they reach adolescence and adulthood (Bachar, Canetti, Galilee-Wiesstub, Kaplan-DeNour, & Shaleve, 1997; Provence & Ritvo, 1961).

However, in cultures in which a child is supported during stress through practices such as cue breastfeeding, cosleeping, holding during the wake/sleep transition, and increased holding and carrying, there is a decreased need to develop a method of self soothing. As Winnicott (1964) wrote in the above mentioned book, the traditional TO is good enough provided the mother is there in the background. This idea of the background is not that of a mother standing around the corner but rather the child being able to form a representation of the mother when she is not physically available. This representation is a real object, yet the symbolic importance of it lies internally with the child. However, the AP mothers and mothers in many Nonwestern countries are not "in the background." For the most part they are physically available to their infant both night and day and during those moments of higher stress. Therefore, the child has no need to develop a representation of the mother and does not have to learn ways in which to combat life stress alone. Whether this is limiting for the child with regard to future emotional development is unknown.

The findings in this study show similarly later weaning ages for the children reported to have no TO use or to use the breast as a TO. These two would seem to be similar in nature both from the weaning age and from the understanding that the child has not reached out and personally adopted an "object " to self sooth. Findings in this study also indicate similarities (through weaning age) in the use of a maternal body part as a TO and traditional TOs. Here the child has adopted the use of an "object" to self sooth. In this study pacifier use was included in the traditional TO group which does not allow for comparison of objects that were self-selected by the child.

Care needs to be taken with these findings. This was a very homogeneous sample and 77% of the mothers practiced all four of the high contact behaviors. Therefore it is difficult to generalize these findings to other groups.

In conclusion, based on findings in this study and supported by previous research, transitional objects may be hierarchical in nature. The infant who is supported and comforted during stress by the mother does not tend to use a transitional object or they use the breast. An infant who learns to self-comfort during stress may adaptively develop an attachment to a transitional object, both external such as a teddy bear or blanket, or a body part such as a thumb or piece of hair.

Future research with AP families could lead us to better understand how parenting practices affect behavioral outcomes such as TO use. It may also help identify the types of parenting practices which are most adaptive to Western culture. There is no longitudinal research as of yet with AP children and so the implications of this type of parenting style within a Western construct are as of yet unknown. One

concern may be that of over-dependence or an inability to separate from the mother during childhood. During the interview mothers reported their children separate from them easily as toddlers and preschoolers, however a stronger measurement of separation is needed to accurately assess this.

The practices of parenting may lead to some type of definition of parenting style such as AP. However there is no set degree of compliance that is required in order to self classify oneself as an AP mother. In this study most of the respondents were doing all of the identified AP practices but they may represent the more strongly committed facet of Attachment Parenting. More research needs to be done to see whether the non-respondents are similar to the respondents.

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APPENDICES

APPENDIX A

Parenting Questionnaire for MOTHERS

My name is Kate Green and I am the mother of three boys *(ages 12, 10, and 4)*. I am also a graduate student at the University of Tennessee, Knoxville. This questionnaire is part of the research I am doing in which I am looking at parenting practices. This research will benefit parents and practitioners such as doctors, nurses, and educators by providing a wider description of the parenting practices that many people are now choosing. Although fathers' responses are also valuable and may be the focus of future research, for this project I am requesting only mothers complete the questionnaire. If you have any questions or concerns feel free to contact me at the address below or at (865)579-4947 or kgreen6@utk.edu.

Please consider filling out this brief questionnaire and returning it to: **Kate Green, 115 Jessie Harris Bldg., University of Tennessee, Knoxville, TN 37996, USA.**

In what country, and/or state do you live?_____

Please tell me about your children.

- ☐ Boy/s: Ages _____
- ☐ Girl/s: Ages _____

If you have more than one child, please answer the next questions based on your youngest child over the age of 18 months.

If you have only one child please answer the questions based on that child.

Is this child a ☐ boy or ☐ girl?

Age of Child *(if under two years, please list in months)* ____

Please tell me about your child's early feeding history.

- ☐ Breastfed only
- ☐ Formula fed only
- ☐ Breastfed, supplemented with formula
- ☐ Other, *(describe)* _____

Please tell me the age *(in months)* your child weaned from the breast or bottle *(or both)* or the age you currently anticipate weaning.

- ☐ Breast--_____months
- ☐ Bottle--_____months

Please rate how likely you were to do the following during your baby's first six months:

I fed my baby:	Never	Occasionally		Always
on a schedule I created	1	2	3	4
on his/her schedule	1	2	3	4
when he/she needed comforting	1	2	3	4
when he/she was fussy or whining	1	2	3	4

Please rate how likely you were to do the following when your baby was 6-18 months:

I fed my baby:	Never	Occasionally		Always
on a schedule I created	1	2	3	4
on his/her schedule	1	2	3	4
when he/she needed comforting	1	2	3	4
when he/she was fussy or whining	1	2	3	4

During your child's first year please indicate how many hours a week your child was in the care of someone other than you: *(hours per week)*

- ☐ Child's father or other relative_____
- ☐ In-home care-provider *(Nanny or occasional baby sitter)* ____
- ☐ Family-style home day care provider_____
- ☐ Child care center _____
- ☐ Other *(describe)*_____

Before your child learned to walk, please rate how often you used the following types of carriers:

	Never	Sometimes		Often
Strollers	1	2	3	4
Hand-held plastic seat-carrier	1	2	3	4
Sling	1	2	3	4
Infant carrier on mother's chest	1	2	3	4
Parents' arms	1	2	3	4
Back Pack	1	2	3	4
Swing	1	2	3	4
Bouncey Chair	1	2	3	4
Crib/Cot	1	2	3	4
Bassinet / Cradle	1	2	3	4

Other *(specify)*_____

Please tell me what your preferred way to carry your child was before he/she learned to walk.

Does or did your child have a cuddly object or body part that is/was used by them for comfort? For all that apply list the age in months your child first started to use the object for comfort.

- ☐ None ____
- ☐ Thumb or fingers ____
- ☐ Soft toy or doll ____
- ☐ Blanket, material, or article of clothing ____
- ☐ Pacifier or dummy ____
- ☐ Part of mother's body *(describe)*: _____

If your child does/did have an attachment to something please indicate how attached they are to the main object *(the one they use the most to self-sooth)*:

No		Weak Attachment			Some Attachment		Strong Attachment		Extreme Attachment
1	2	3	4	5	6	7	8	9	10

If your child does or did have an attachment to something for self comforting, please indicate when they used the main object. Please check all that apply.

___ During naps and bedtime
___ When emotionally upset
___ When physically upset
___ In unfamiliar places
___ Around unfamiliar people
___ Other *(describe)* _____

_____

Please tell me about your child's main sleeping arrangements during the first six months:

❑ My child slept alone in a crib or bed in their own room
❑ My child slept in a crib or own bed in my bedroom
❑ My child slept in a bed with me
❑ My child started the night in their own bed but finished the night in bed with me
❑ My child slept in a bed with another family member *(please note relationship, e.g. sibling, grandparent)* _____

_____

❑ Other *(describe)* _____

_____

Please tell me about your child's main sleeping arrangements from 6 to 18 months:

❑ My child slept alone in a crib or bed in their own room
❑ My child slept in a crib or own bed in my bedroom
❑ My child slept in a bed with me
❑ My child started the night in their own bed but finished the night in bed with me
❑ My child slept in a bed with another family member *(please note relationship, e.g. sibling, grandparent)* _____

_____

❑ Other *(describe)* _____

_____

Were you the person who put your child to sleep at night most of the time during the first year? ❑ Yes ❑ No

If no, *please state who was* _____

_____

Please check the statement that was generally most typical of your bedtime routine with your child during the first year.

❑ Place them in their bed while awake and leave them to go to sleep alone
❑ Place them in their bed and stay with them until they went to sleep
❑ Hold or rock until they fell asleep and then place into bed
❑ Breast or bottle feed while holding them until they fell asleep
❑ Other *(please describe)* _____

_____

_____

How familiar are you with the idea of attachment parenting?

❑ Not familiar
❑ Somewhat familiar
❑ Very familiar

Do you believe that you practice attachment parenting with this child? ❑ Yes ❑ No

What characteristics or behaviors do you feel are part of your attachment parenting?

_____

_____

_____

Now could you please provide some information about yourself?

Describe your marital status:

❑ Married ❑ Divorced ❑ Single/separated
❑ Single/never married ❑ Living with partner
❑ Other *(describe)* _____

What level of education have you achieved?

❑ Some high school ❑ High school graduate
❑ Some college/university ❑ College/university degree
❑ Graduate or professional degree
❑ Other _____

If living in the United States please state what racial group you identify yourself with?

❑ White ❑ Black ❑ Hispanic ❑ Asian ❑ Native American
❑ Other *(describe)* _____

How would you describe yourself financially within your community?

❑ Very low or low income
❑ Low to low-medium income
❑ Medium to high-medium income
❑ High-medium to high income
❑ High to very-high income

What is your current age?_____

Thank you very much for taking the time to complete this questionnaire. I will share the findings in a future issue of Compleat Mother. Feel free to send this questionnaire back anonymously. However, I plan to do additional research about parenting practices. If you would be willing to consent to take part in either a short telephone interview *(20 minutes)* during the next few months or receive another questionnaire by mail next year, please provide your:

Name _____

Address _____

_____

Phone _____

E-Mail _____

Please note that by providing your name you give up anonymity on this questionnaire; however, all responses will be kept confidential. Your name will not appear in any publication nor be given to any other person or organization.

Appendix B
Interview Questions

Script:

Hi this is Kate Green, the person you filled out the questionnaire for in *Compleat Mother*. I really appreciate you taking the time to do that and for providing your name and number so I could contact you for further research. I would like to ask you some questions in order to provide a more in-depth picture of parenting. Could you please give me about 20-30 minutes of your time now or let me know a more convenient time when I could call back?

If yes, then continue
If no, arrange time

The University of Tennessee requires that I explain all the research procedures and how the information will be used. This is a research study that is looking at parenting practices. You filled out a questionnaire and sent me your name and telephone number giving me permission to call you for additional parenting information. Please feel free to stop the interview at anytime or tell me if you don't wish to answer any of the questions for any reason.
The information gained in this research will be used to widen both parents' and practitioners' knowledge of how parents are raising their young children. All the information you give me here will be kept confidential and your name will not be used in any publication or given to any other person. I will be the only person to have access to the information and your name and responses will be kept in a locked file cabinet at the University of Tennessee. If you have questions about this you can contact me, Kate Green, at (865) 974 5316 or kgreen6@utk.edu. You can also reach me through *Compleat Mother* magazine. If you have questions about your rights as a participant you can also contact the compliance section here at UT at (865) 974-3466. I can give you the contact information again after the interview if you would like it.

(Information in italics is for the interviewer only)

Attachment parenting

You said on your questionnaire that you practice attachment parenting.
Could you tell me what led to this or how you found out about AP?

In what ways does your husband or partner support or not support AP?

How about your extended family members, how are they supportive or not supportive?

How do people you know outside your family feel about AP?

Do you feel these people are supportive or not supportive?

Are you a member of LLL? _____

Feeding
Breast _____ *Bottle* _____ *Both* _____

Can you tell me a little more about your baby's feeding during the first year?
Look for use as comforter or if hurt etc. Was it a food source only? When did solid food start?

Tell me about weaning or how you plan to wean?
Ask about how family members dealt with extended nursing if not mentioned previously.

Holding
What are your thoughts about holding and cuddling a young infant (under say 6 months)?
Look for extra holding time or sling use.

On your questionnaire you indicated that you used _____ equipment but not_____equipment. Can you tell me about the reasons for those choices?

Sleep
You indicated that your child slept_____ Can you tell me more about that?

What are your reasons for choosing this type of sleeping arrangement?

Did you plan this before your child was born?

Is your child still sleeping in the same situation?
If child is older ask about transition to own bed

If co-sleeping _____ *yes*

As with all the questions you may choose not to answer these questions if you think they are too personal.

Is your husband/partner supportive of co-sleeping?

How did/does having your child sleep in your bed impact your marriage?

During your child's first year how would you describe his/her nighttime waking?
Look for attitude and beliefs towards nighttime waking.

How did you handle this? _____

Did it bother you?_____

Object use
*TO use yes*_____ *no*_____ *type* _____ *breast* _____

If no– On the questionnaire you stated your child does **not** have a cuddly object or use their thumb.
Did you ever encourage your child to use one?

_____

How do feel about your child not using a cuddly object?

_____

If yes -- On the questionnaire you stated your child **does** have a cuddly object. Could you go into more detail about this please?

_____

_____

Look for when they use it and how attached they are.

Would you say you encourage your child to use their object_____ ?

_____

Did you give _____ to your child or did they become attached to it on their own?

_____

If breast -- You stated your child uses you as a cuddly object. Can you explain this?

Did you ever encourage your child to use a more traditional cuddly object rather than you? _____

_____

Childcare

*Childcare use – no*_____ *yes* _____ *Hours per week* _____*where*_____

Please think back to when your child was age one. How did they react to separations from you when left with their:

Father

_____

Other family member or close friend

_____

Someone unfamiliar such as in a childcare situation

_____

How do you find your child deals with separations from you now when left with their:

Father_____

Other family member or close friend

_____

Someone unfamiliar such as in a childcare or school situation_____

Additional information

If this is a boy _____ Can you tell me about your thoughts on circumcision?

_____

Could you tell me whether you vaccinate your child or not?

_____

What are your educational choices for your child?

_____

Finally can you tell me where your child was born (hospital/home) and whether a doctor, midwife, or someone else was assisting with the delivery?

Home_____ Hospital_____ Birthing center _____Other_____

Doctor _____ Midwife_____ Other_____

Thank you so much for your time and patience. As I said before all information will be kept confidential and your name will not be used. If you have any questions please feel free to contact me at (865) 974 5316 or kgreen6@utk.edu Or you may reach me through Compleat Mother magazine.

APPENDIX C
EXTENDED LITERATURE REVIEW

The Culture of Parenting

Many creatures in the world give birth to young that require care. These care practices involve providing food, shelter, warmth, and for some creatures, physical attention such as touching and holding. Human infants require the most intense and extended amount of care of all animal species and it takes many years before children are able to provide food and shelter for themselves. Thus it is up to human parents to provide this care. Infants come into the world having the same basic needs yet the ways in which parents meet these needs differs based primarily on culture.

The Ache are a hunter and gatherer tribe of South American Indians in Paraguay. Ache women typically have an average of eight live births and for the first year of the infants' lives the mothers sleep sitting up, hunched over the infant who sleeps in their lap (Small, 1998). They do this to protect the child from any danger. Infants and small children are never left alone and are held or carried much of the time. Yet by the time they are young adolescents they are primarily independent of their parents.

Women in Western countries such as the United States and England usually spend the first year of their infants' lives encouraging the child to sleep alone in a crib in a separate room. It is believed this will encourage the child to be more independent and self-reliant; values that are emphasized in Western individualist countries

(Bornstein, Tal, & Tamis-Lemonda, 1991). Yet children in Western countries are not usually independent of their families until late adolescence or young adulthood.

These are but two differences in parenting practices and child development but they provide examples of how parents around the world have developed behaviors that are deemed the "best" way to raise their children. Over the last century anthropologists, psychologists, and other social science researchers have started to document and investigate how parents differ and what effect this has on the children. Much of the work has been spurred on by the desire to discover what the optimum care a child should receive actually is. Parents want to provide the best food, the best environment, and encourage the best cognitive, emotional and physical development. There is somewhat of a sense of competition involved. Perhaps this is related to the Darwinian notion of survival of the fittest or perhaps it is related to fears concerning dwindling world resources. Whatever the case parents, especially Western parents, often feel a great need to give their child the type of care that helps ensure it will survive and in fact excel within the culture. How this care differs amongst groups is important to recognize and study.

> The potential from research on cultural groups around the world as well as down the street lies in its challenge to our systems of assumptions and in the creative efforts of scholars to synthesize knowledge from observations of differing contexts of human development. Such challenge and synthesis is fruitful in the efforts to achieve a deeper and broader understanding of human nature and nurture. (Roggoff & Morrelli, 1989, p. 347)

Theoretical Perspectives

Ethology

Ethology is basically the study of the behavior of animals. Its roots can be traced to Charles Darwin however the more modern version of the theory is credited to Konrad Lorenz and Nikolaas Tinbergen (Thomas, 1996). Lorenz is known for his documentation of the phenomenon of imprinting, whereby the newborn animal emotionally attaches itself to the first being it sees after birth. Lorenz is frequently portrayed demonstrating this with goslings who followed him around after their birth. Ethologists try to understand why an animal behaves the way it does and search for the function of the behavior in order to learn what selection pressures have shaped their evolution (Eibl-Eibesfeldt,1975). Darwin noted in his book *The Origin of Species* that each species has its own peculiar repertoire of instinctual behavioral patterns, which are as fundamental to the species as its anatomy (Karen, 1994). Lorenz and Tinbergen identified this as "species-specific behavior" which is instinctive but not preordained. For instance, it was found that when bearded titmice were bred in captivity, the parents often threw their young out of the nest shortly after hatching. The cause was found to be an overabundance of food. The young were fed overly well very quickly and no longer gaped at their parents . In the wild, food is scarcer and only the young titmice who are sick or dead do not gape, therefore they

are removed from the nest (Eibl-Eibesfeldt, 1975). Limiting the food supply corrected this problem.

One can see how slight deviations of species-specific behaviors in birds can create massive problems in the survival of the young. As fellow animals, humans are no different. It is necessary to understand the species-specific behaviors of humans, especially those governing the development of the initial and usually primary relationship; that of the mother and child. One such behavior is identified by some as bonding. Leading researchers in this area Klaus and Kennell (1995) write "A bond can be defined as a unique relationship between two people that is specific and endures through time." They state that bonding refers to the tie from parent to infant and that attachment (see next section) refers to the tie from infant to parent.

Klaus and Kennell have been among the strongest supporters of the idea of a critical or sensitive period for human infants immediately following birth. While human infants have not been found to imprint to the degree that is found in various other species, humans do exhibit several species-specific innate behaviors just after birth. One of these is the newborn's ability to making crawling movements when placed on the mother's abdomen right after birth. In this way the infant can propel itself upwards completely independently until it reaches the nipple and latches on to nurse (Klaus & Kennell, 1995). Infants have also been found to hardly cry after birth when they maintain skin to skin contact with the mother. Plus breastfeeding is far more successful when the infant nurses in the first hour of birth (Klaus & Kennell, 1995).

One person who was greatly influenced by the work of early ethologists and these ideas of species-specific behaviors was John Bowlby. As a psychoanalyst Bowlby was interested in the infant-mother bond but believed the existing psychoanalytic views of the time were lacking. Bowlby read the ethological discoveries concerning bonding, imprinting, and the innate prewiring for relational experience and believed these must also apply to humans (Karen, 1994). Armed with this new knowledge from biological science Bowlby began his development of what is now deemed attachment theory.

Attachment Theory

Bowlby (1988) defined attachment as "any form of behaviour that results in a person attaining or maintaining proximity to some other clearly identified individual who is conceived as better able to cope with the world" (p.3). He stated that attachment behaviors are most obvious when the person is sick, frightened, or tired, and also by not having access to the attachment figure. Infant attachment behaviors include gazing, smiling, crying, sucking, and grasping.

Bowlby's basic premises, which are still the core of attachment theory are that: (a) children's attachment behaviors (such as crying upon separation from caregivers and maintaining closeness to caregivers) are genetically programmed because of their adaptive value; and (b) that the quality of attachment relationships have implications for later development (Karen, 1994). The first of these beliefs stems from an ethological perspective. Bowlby believed that attachment came from one of several species-specific behavioral systems that had evolved to promote infant

survival. Thus, the attachment system (the proximity seeking relationship between children and caregivers) is biologically adaptive because it protects children from danger, encourages children's exploration of the environment, and provides an arena in which security and trust develop (Bowlby, 1969).

The development of the attachment system (which includes the quality of the attachment relationship) is presumed to be based on internal working models. Bowlby (1988) stated that children build working models of their caregivers and themselves and these models become internal representations that serve as guides for behavior in new situations. These representations permit immediate forecasts of the caregiver's behavior but even more lasting, they are used to guide future relational expectations, self-appraisal, and behaviors toward others (Thompson, 1998). Working models thus become filters through which new experiences and relationships are processed, provide guidelines as to how to interact with others, and be it positive or negative, they provide an expectation as to how one will function within a relationship. Internal working models seem to be stable and last throughout the lifespan which may explain why researchers (Offer, 1969; Peck & Havighurst, 1960; cited in Meins, 1997) have found that attachment patterns are passed down from parent to child.

Bowlby identified four stages in the growth of the attachment system. These are (a) an initial stage of social orientation which includes signaling without discrimination (birth through 8 to 12 weeks); (b) a phase of discriminating sociability (to about 6-8 weeks); (c) the stage of proper attachment during which separation and stranger anxiety are shown and the infant's behaviors show a definite preference for

one or more specific caregivers, and (d) the development of a goal-corrected partnership (the third or fourth year) during which the child is acquiring more insight into the adult's feelings and motives which creates a more mutually regulated relationship (Thompson, 1998). It is important to remember that while the attachment system, described by Bowlby as stage C, does not become apparent until the last half of the first year; it is built on component systems that are operating earlier. From birth infants are soothed by their mother's voice and physical comfort. Just a few hours after birth infants are found to recognize their mother's smell and quickly start to prefer that to the smell of another mother. Within a few short months they often begin to cry when the mother leaves the room or smile at her face but not that of a stranger. These are all indicators that an infant is developing knowledge of the mother and thus of the attachment system. And while these early behaviors are part of the development of this system, it is not until six to eight months that a coherent system of attachment that is focused around one or a select few caregivers is formed. It is during this stage that researchers have developed methods in which to best assess attachment.

Mary Ainsworth (a student/collaborator of Bowlby's) realized that in order to see, and then to measure attachment behaviors, something would have to trigger the actions. The attachment behaviors identified by Bowlby (sucking, gazing, etc.) are known as precursor or mediating attachment behaviors. Ainsworth was interested in the strength and quality of the infants' attachment and so focused on the criterial attachment behaviors. These are behaviors that are more active and goal-correcting

such as vocalizing, following, lifting arms in greeting, etc. (Lamb, Thompson, Gardner, & Charnov, 1985).

Thus, Ainsworth created the Strange Situation in which an infant and caregiver gradually move through eight stages that incorporate dealing with a stranger, separation, and reunion. Children ages 12 to 24 months are observed in how they organize their behavior around the attachment figure (usually mothers, but fathers and other regular caregivers have also been studied) and then the quality of their behavior is categorized using one of eight patterns of behavior. Four of these patterns represent secure patterns of attachment, and four describe insecure attachment (Lamb et al., 1985) The insecure attachment patterns are further divided into insecure-avoidant and insecure-resistant. Briefly, children who respond positively to their mothers upon reunion (greeting, approaching, or being comforted by her), are described as securely attached (group B). Children who do not seek contact or avoid their mother at the reunion are defined as insecure-avoidant (group A). Children who cannot be comforted and perhaps show anger or passivity towards the mother when she returns are described as (group C) insecure-resistant (Lamb et al., 1985). This group was initially characterized by Ainsworth as "ambivalent" because they stay preoccupied with the mother during the Strange Situation, however their reunions are marked by resistance and other signs of distress and anger.

Another category, insecure-disorganized, (group D), was later added (Main & Solomon, 1986, cited in Meins, 1997). This was created to try and provide a classification for the group of children who did not fit into any of the other three

categories. In contrast to the children in other categories, these infants lack a coherent behavioral organization for dealing with the heightened stress arousal during the Strange Situation. The children all seem to be totally disorganized and confused by the mother's return. There are indications that children who fall into this D category may have a history of infant abuse or have other risk factors during the first year (Thompson, 1998).

The Strange Situation has provided more than a quarter-century of attachment research and has been one of the primary factors involved in advancing attachment theory. Proponents of the Strange Situation claim it has four main strengths. These are: (a) individual differences in infant behavior during the Strange Situation are related to prior patterns of parent/infant interaction, (b) infants seen more than once in the Strange Situation tend to behave in the same fashion each time, (c) individual differences in Strange Situation behavior predict behavioral differences in other contexts years later, and (d) using an evolutionary perspective one can see some of the Strange Situation behaviors as adaptive and others as maladaptive (Lamb et al., 1985).

Given the success of Strange Situation to measure early socioemotional development in such a reliable and valid way, the procedure has been viewed by some as the most powerful and useful measure ever available for measuring infants in this area (Lamb et al., 1985). Yet others have voiced some concerns. Depending on one measure can be problematic and, as with most construct measures, Strange Situation has faced its share of validity and reliability challenges (Lamb, 1998). For

instance a great deal of work has been done in the area of attachment and daycare for children, much of it using Strange Situation. However, one needs to take into account that this was a test developed and validated with infants who were primarily receiving full-time care from their mothers (Lamb, 1998). Strange Situation depends on creating a situation in which infants feel moderately stressed and thus are inclined to display proximity-seeking behavior to their mother (or primary attachment figure). This test may have different meanings for children who attend child care full-time and are used to being in "strange situations," as opposed to children who are cared for primarily by their mothers or one attachment figure.

Another problem with using Strange Situation is that it is difficult to learn and researchers need to go through quite in-depth training to master it (Karen, 1994). The observations also take place in a laboratory situation which has been criticized as too constrained and not representative of "true" behavior. Ainsworth herself bemoans the fact that attachment research has left its early roots which was based primarily on observational data collection in the field and has now moved more towards laboratory measurement. In an interview (Waters, Vaughn, Posada, & Kondo-Ikemura, 1995) she stated,

> I have been quite disappointed that so many attachment researchers have gone on to do research with the Strange Situation rather than looking at what happens in the home or in other natural settings – like I said before, it marks a turning away from field work, and I don't think it's wise. (p.12)

This leads us to look at the other methods that are used to assess attachment. Perhaps the next most widely used measure is the Attachment Q-Sort (Waters & Deane, 1985). The AQS covers a broad range of secure base and exploratory behavior, affective response, social referencing, and other areas of social cognition. Therefore the AQS can be seen as measuring the entire domain of attachment behavior as it is currently defined (Waters & Deane, 1985). The AQS is also more flexible than the Strange Situation because it can be applied to a greater range of ages (12 months to 5 years), given in various natural environments such as the home, is easier to set up and administrate, and has mobility (the researcher can mail the Q-sorts and have the parent complete it or travel to the infant's home).

This last benefit of the AQS, parents as evaluators, has raised various concerns. There is concern and disagreement about whether mothers versus trained observers should be used as AQS sorters. However, a study by Teti and McGourty (1996) found significant intercorrelations between mother and observer-derived security scores. They also found that as the training of the observers' increased and improved, they gradually moved more and more to concur with the mother's view. The primary issue seems to be making sure observers or mothers receive adequate preparation and training in what to look for when performing the Q-sort.

During recent years more procedures have been developed to assess attachment. Most of these are based on older children and involve focusing on a child's internal working model of attachment through the use of puppets, doll play, or story endings (Thompson, 1998). These types of assessments are designed to measure

Bowlby's fourth stage, which he characterized as the "goal corrected partnership." During this stage there develops a foundation which allows for more lasting representations and understandings of others, the self, and relationships (Thompson, 1998). In other work based more on the Strange Situation, researchers have used a one-hour separation and reunion procedure with 6-year-olds and have found that more than 80% of the children had the same attachment classifications with their mother as they did with her during infancy (Thompson, 1998).

And yet what do all these assessments mean in the long run? What is to be gained from knowing whether a young child is securely or insecurely attached to its mother? The answers to this are wide and encompass a broad spectrum of future social behavior. Some particularly telling work has shown that the quality of the infant-mother attachment at age one is foretelling of the subsequent functioning into the early school years. Children who were rated insecurely attached as infants were, at age six, less well liked by peers and teachers, perceived as more aggressive, and rated as less competent by their teachers (Cohn, 1990). Studies showed that secure attachments are predictive of emotional health and that insecure attachments are predictive of emotional instability (Grossman & Grossman, 1990; Kobak & Sceery, 1988).

Securely attached children were also found to have greater self-efficacy, to acquire language faster, and to benefit more from instructional input during play than children rated as insecure (Meins, 1997; Slade, 1987). Belsky, Steinburg, & Draper

(1991) argued that early attachment patterns might be related to the later timing of sexual maturity, pair bonding, and mature reproductive strategy.

The implications of attachment are also important into adulthood. Research has shown that how people view their own parents and upbringing is consistent with how they parent their children. Mothers who had a secure working model of their own mother were warmer and more responsive to their infants and preschoolers than were mothers who were rated as having insecure models of attachment (Cowan, Cowan, Cohn, & Pearson, 1996).

Attachment theory has its roots in various theories, which is part of its soundness. Now exciting new work is being done to link attachment theory with the Vygotskian approach. Meins (1997) claimed the Vygotskian approach might be a useful framework within which to understand the relationship between the social construct of attachment and the child's cognitive development. It seems possible this could also provide more of an explanation as to how infants develop attachment during the first few months of their life. Much of Bowlby's and Ainsworth's work has focused on the child once they are able to clearly exhibit attachment-related behavior (such as separation anxiety at about age six to eight months). One could perhaps use Vyogotsky's idea of the zone of proximal development (basically this means they are nearing the ability to do the task or behavior alone) to look at how children develop and learn attachment behaviors from birth. This could be particularly useful with Attachment Parents (AP) because the behaviors they practice include a great deal of physical contact with the caregiver. AP mothers may, in fact, do more scaffolding of

development with their infants than non-AP mothers. There is currently no research as to whether this is beneficial or not to a young child within Western culture.

The ideas and concepts of attachment theory have widespread implications for the study of children and adults. Attachment theory seems to make good sense. It clearly describes the relationships between infants and their caregivers and describes behaviors that occur every day. The theory has been useful not only because it shows empirical evidence of the origins of some of our psychological problems (Karen, 1994) but it has also helped provide care guidelines for parents and practitioners. The AP parents in this study use parenting strategies that may have evolved from the desire to attain a secure attachment with their child. In fact, Granju (1999) writes "This parenting style is called attachment parenting in recognition of both the beauty and the critical importance of a secure attachment between parent and a young child" (p.3). Attachment Parenting is also referred to as instinctive parenting and mothers are encouraged to follow their instincts and their infants' innate cues when caring for their child. Thus, ethological attachment theory provides a good lens through which to view AP families.

Ethnopediatrics

The practices of AP families are not new behaviors. These are often behaviors that are thought to have been practiced throughout history and are still a way of life for many Nonwestern cultures today. It is in fact Western parenting practices that are new to the human species. Therefore, while ethological theory helps us to understand innate species-specific behaviors that are relevant to parenting, it is also necessary to

incorporate aspects of culture. Together with attachment theory, ethnopediatrics provides a lens through which culture and biology can be integrated to provide a more wholistic view of parenting.

> Ethnopediatrics has the potential to revolutionize the way people in various cultures think about parenting by presenting comparative cross-culture information, the evolutionary history of infants, and the interaction of biology and culture at the infant stage of the life-cycle. (Small, 1998, p. xiii)

A key element of this theory is that human development is not just an automatic unfolding of biological programs. It occurs through the interactions between an individual and context. Thus, although an infant is hardwired with various needs that must be met in order to "unfold," the interaction it has with caregivers (especially the primary figure of mother) is the key as to how successfully the infant will develop physically, cognitively, and emotionally. Ethnopediatricians state that what is needed is an evolutionary and cross-cultural view of human infancy with real biological data in order to truly understand what is best for human infants (Small, 1998). "Understanding the complete care-giving 'package' is key to uncovering proximate factors in infant and child well-being; this will require considerable multi-level cross disciplinary research that is both closely attentive to local variation and tightly tied to everyday settings" (Worthman, 1995, p. 10).

Transitional Object Use

The amount of TO use differs amongst cultural and socio-economic groups in the United States as well as among countries around the world (Gaddini and Gaddini,

1979; Hong & Townes, 1976; Litt,1981; Wolf & Lozoff, 1988). This adds more credence to the belief that TO use is far from universal. When looking through various ethnographic reports of children from many cultures around the world, it was difficult to find a single picture in which an infant or young child was holding any object that could be perceived of as a TO. In fact in many countries such as China, Afghanistan, Indonesia, and in the U.S. among Native Americans, infants are bound into cradles, cradleboards, slings, or swaddled for much of the first year (Fontanel & D'Harcourt, 1998). Their hands are often not free or are limited in movement and they are not provided a blanket or toy to cuddle. In many cultures such as India, various African nations, and Mongolia, the babies are adorned with, or have their cradles or baskets adorned with, various amulets and spiritual objects that are believed to ward off evil spirits. These are the only objects that surround the child and could not be classified as a TO in the Western form of transitional object.

The same findings occur when one looks from an historical perspective at paintings and other forms of artwork depicting young children. After many hours of searching through books of historical artwork, no picture was found of an infant or young child holding a soft toy, blanket, or even sucking their thumb. The search for pictures encompassed a historical timeframe from Roman times (approximately 754 BC) and continued through the 20th century. And while in no way does this short search constitute a valid content review, it was supportive of the belief that the use of TOs is a modern development.

Breastfeeding

Hiroshi Nakajima, director-general of WHO and a neuropsychiatrist, described some of the health benefits to infants and mothers (Ivkar, 1996). For mothers, there is a diminished risk of hemorrhage after birth, protection against unwanted pregnancy for at least six months, and a reduction in ovarian cancer and anemia. With regards to infants he stated, "Breast milk serves as a vital link for nutrition and survival across the entire span of human existence. When babies are fed artificially, the most immediately apparent result is increased ... sickness and death" (p. 468). Looking at breastfeeding worldwide some researchers claim that not breastfeeding in underdeveloped countries increases the risk of infant mortality tenfold (Small, 1998). Infants in Western countries such as the United States are not exempt from problems stemming from the use of breastmilk substitutes. The U.S. National Institute of Environmental Health and Safety estimates that four out of every thousand infants in the U.S. die because they are not breastfed (Small, 1998).

A mother who breastfeeds provides her child with important physiological benefits. Breastfeeding helps protect a child's immune system and significantly reduces the amount of infectious diseases, especially lower respiratory and gastrointestinal tract infections during infancy (Wang & Wu, 1996). Colostrum, which is produced during the first few days of breastfeeding, and mature breastmilk both contain species-specific protective factors. Antibodies such as lactoferrin, lysozyme, and immunoglobulin A all help the infant fight off diseases such as

diarrheal organisms, E. coli, staphylococcus, polio virus, cholera, giardia parasite, and certain fungal infections (Baumslag & Michels, 1995).

Infants born in a Navajo community whose mothers had been through a breastfeeding promotion program were found to have a decline in pneumonia and gastroenteritis rates by 32% and 15% respectively (Wright, Bauer, Naylor, Sutcliffe, & Clark, 1998). Children were also found to be much less likely to suffer from acute appendicitis if they had been breastfed as infants for a prolonged period of time (Pisacane, de Luca, Impagliazzo, & Russo, 1995).

Breastfed children have been found to perform better cognitively than their bottle-fed peers. These same gains are found even after controlling for possible confounding issues such as socioeconomic status, mother's intelligence, mother's smoking behavior, and gender and birth order of the child (Fergusson, et al. 1982).

Breastfed children have been found to perform better on verbal-based tasks than their bottle-fed peers. Pollock (1994) found children who were exclusively breastfed scored higher on the English Picture Vocabulary Test at age 5 and at age 10 these same children scored above their cohort average on the pictorial-language test. They also scored higher on the British Ability Scales for Word Definitions (retrieval and application of knowledge), Similarities (reasoning skills), and Overall Total (overall perceptual and cognitive ability).

Breastfed children also performed significantly better than their formula-fed peers in picture intelligence and mechanical word reading at age 8 and reading attainment, non-verbal ability and mathematical attainment at age 15 (Rodgers,

1978). Horwood and Fergusson (1998) found significant relationships between the duration of breastfeeding and higher scores in measures of cognitive ability, teacher ratings of performance, standardized tests of achievement, better grades in School Certificate examinations, and lower percentages of children leaving school without qualifications. They found the scores to be highest for children who were breastfed for eight or more months.

While breastfeeding in itself seems to have an impact on developmental and cognitive gains, the length of time the child is breastfed is another consideration. Morrow-Tlucak, et al. (1988) found significant differences between children breastfed more than four months, less than four months, and bottle-fed. The children breastfed for more than four months scored the highest in the Mental Development Index of the Bayley Scales at age 1 and 2 even when maternal intelligence, maternal education, maternal training in child rearing, child's life experiences, socioeconomic status, birth weight and gestational age at birth were controlled for. Most studies indicated the longer a child is breastfed the greater the gains in development and cognition (Horwood & Fergusson, 1998;Rogan & Gladen, 1993; Taylor & Wadsworth, 1984). Johnson et al. (1996) on the other hand, found that as the duration of breastfeeding increases the magnitude of the relation decreases. Thus, there seems to be a point after which continuing breastfeeding no longer influences cognitive gains. The physical quality of breastmilk has also been tied to other areas of brain development. Lanting, Fidler, Hulsman, Touwen & Boersma (1994) found an advantageous effect of breastfeeding on neurological status at children aged 9. The

children who were fed formula during the first three weeks of life suffered twice as many minor neurological dysfunctions at age nine than did the children who had been exclusively breastfed for the first three weeks of life. Animal data, especially in rats, has shown that the quality of nutrition during early brain development may produce permanent consequences in brain size, brain cell number, and performance (Lucas, 1992). Breast milk contains long chain n-3 fatty acids that are not present in formula. These fatty acids are believed to play a vital role in cerebral development and may account for many of the differences found between breastfed and formula fed children (Lucas, 1992; Lanting et al., 1994).

As has been shown, there is a distinct difference in the physiological quality of breastmilk as compared to formula products, which presumably affects infant development. Yet, there are many factors involved in parenting that could be mediating the differences. Switzky, Vietze, & Switzky (1979) found that breastfeeding mothers were less likely to "push" the development of their children than were mothers who bottle-fed. They also found a significant negative relationship between breastfeeding and the presence of marital conflicts. Levels of conflict in the home could affect areas of development such as interpersonal relationships, play, and coping skills but no research has been done to examine these areas.

Various aspects of family life have previously been controlled for but the family structure is so complex that unraveling all the variables involved in parenting is monumental. The interaction that exists between a breastfeeding mother and her child may entail more than has been previously measured. Breastfeeding mothers

typically hold their babies in a position that enables a mother and child to have good and extended eye contact and close body contact. McKenna & Bernshaw (1995) found that infants and mothers co-regulated their levels of sleep states when sleeping next to each other. This continued close body contact affects the infants physiologically therefore any additional contact, such as during breastfeeding, must also produce effects. The close contact may also encourage mothers to talk or sing to their infants more thus helping to advance the child's cognitive development.

Breastfeeding research studies have definitively shown the many physiological benefits infants receive from breast milk including cognitive gains, lower incidence of neurological problems, and immuniological protection. Yet little is really known about the quality of the relation between the mother and child. One mother who nursed two children after formula feeding her first child said, "The difference is so great. Nursing feels so intense and wonderful. It's hard to describe" (anonymous, personal communication). This intensity of emotions felt by the mother needs to be explored in relation to the gains found in the children.

Carrying and Holding

One has only to enter the infant department of a store or pick up a magazine that caters to Western parents to get an idea of the preferred forms of infant transportation and holders. Whole aisles are devoted to strollers, plastic infant carriers, bouncy chairs, high chairs, walkers or treadmill-type exercisers, and other assorted devices designed to assist parents. There are even infant seats in which an infant can be strapped in at home, lifted up and placed in a car, then removed from

the car and placed in a stroller base. A parent never has to physically touch the child from the beginning of the outing to the return home. All these glitzy gadgets have been designed to make life easier for parents yet some of the research evidence points to disturbing findings concerning infant development with regard to equipment. The use of plastic bucket carriers may negatively affect the security of the relationship between the mother and child (Anisfeld et al.,1990). Mothers of children found to be insecurely attached were seen placing a blanket between themselves and the young child when the child was upset during Strange Situation research (Rubin, 1997). The power of touch has long been known recognized throughout the life-span but can be especially important during infancy (Brazelton, 1995; Klaus, 1995; Montagu, 1995; and Tronick, 1995).

Western parents have often worried about spoiling babies by picking them up too much. The first psychologist to warn parents of this was John B. Watson. Watson (1928) advised parents to treat children

> ...as though they were young adults... Let your behavior always be objective and kindly firm. Never hug or kiss them, never let them sit on your lap.... Shake hands with them in the morning.... In a week's time you will find how easy it is to be perfectly objective.... You will be utterly ashamed at the mawkish, sentimental way you have been handling [your child]. (p. 81-82)

Even today parents many infant care books encourage mothers to not carry or hold their baby too much. In *What to Expect the First Year* (Eisenberg et al., 1989), mothers are told that too much attention can be suffocating for the infant. They state

that infants who aren't left to lie and play by themselves will be hampered in their ability to play and learn independently later on. Yet attachment research has shown that securely attached infants are more independent in future years (Sroufe, Fox, & Pancake, 1983).

This has also been noted cross-culturally. !Kung infants spend much more time in physical contact with their caretakers. Continued observations revealed that the !Kung infants do not become "excessively" attached. In studies of two-to-five-year-olds in London and among the San, it was shown that the English children spent more time physically closer to their mothers and were more involved with their mothers than were the San children and their mothers (Konner, 1977). One possible explanation for this could be that the !Kung infants received a more appropriate amount of holding and bodily contact for human infants. Because of this they may have been more emotionally and physically satisfied which enabled them to have a wider secure base at an earlier age. Support for this also comes from laboratory studies of macaques that show an age curve of mother-infant physical contact starting at close to 100% and declining to 50% gradually during the first year (Konner, 1977). This curve is similar to that of the !Kung curve and indicates that high mother-infant physical contact is a basic pattern for higher primates.

Harry Harlow (1958) was one of the first to document the need for physical contact with his primate studies. Harlow demonstrated that contact with a terrycloth-covered surrogate for a mother was more important to the young rhesus monkey than was access to a wire surrogate mother that provided food. The monkeys carried on

with this attachment to the terrycloth "mother" and used it as a form of secure base. The monkeys raised with nothing to cling to clasped onto their own bodies. They were never able to form healthy contact with other monkeys in the form of grooming or reproduction. In addition the females who did manage to become pregnant did not take care of their offspring (Suomi, 1995).

Thus, it would seem that both primate and human infants benefit from touch through handling and carrying. What is unknown is how much touch is required for healthy development and whether Western children receive compensation for their generally minimized holding (as compared cross-culturally) through other means.

Childcare

Attachment and Childcare

One has only to witness a relatively common scene of a young child crying and clinging to its mother as she is trying to leave it with a child care provider to wonder about the effect of this emotionally draining situation. Attachment theorists have described stranger anxiety and separation anxiety as normal developmental stages (e.g. Bretherton, 1985). Around the middle of the first year children start to protest when separated from their primary attachment figure. Infants can exhibit different levels of protest ranging from slightly uncomfortable to severe physical and emotional distress (Godwin, Groves, & Horm-Wingerd, 1993). According to Bowlby (1969), separation protest represents the infant's attempt to summon the absent adult back into proximity. The development of this stage is dependent on the infant's ability to conceive of the continuing presence of people even when they are not

present (person permanence). An infant only exhibits separation distress when separated from its attachment figures.

One worry of concern to parents and practitioners is whether daily periods of separation from the main attachment figure (such as leaving children in a child care situation) might be harmful to the attachment relationship. Beginning in the mid 1980s research articles rapidly appeared, both in professional journals and popular media, warning of the dangers of early non-parental care and its affect on infant-parent attachment. For the next decade researchers "battled" it out with neither side really able to show sweeping evidence one way or another. Now the general thought is that there do seem to be differences in attachment categorizations for children in child care and those cared for at home (Clarke-Stewart, 1989). Yet what these differences mean exactly is not clearly understood. The existing child care and attachment studies have some conceptual and methodological issues that muddy the findings somewhat as will be shown.

Belsky (1989) reported that the proportion of insecure attachments was higher among middle-class children receiving out of home care than among children in home care groups. He stated that "it is clear that a strong and highly reliable association exists between extensive nonmaternal care in the first year of life and elevated risk of insecure infant-mother attachment" (p. 34). One of the criticisms Belsky and others have received is based on the conceptual concern about the almost constant use of the Strange Situation to assess the effects of child care on attachment. Depending on one measure can be problematic and, as with most construct measures,

Strange Situation has faced its share of validity and reliability challenges (Lamb et al., 1985).

This was a test that was developed and validated with infants who were primarily receiving full time care from their mothers (Lamb et al., 1985). Strange Situation depends on creating a situation in which infants feel moderately stressed and thus are inclined to display proximity-seeking behavior to their mother (or primary attachment figure). This test may have different meanings for children who attend child care full time and are used to being in "strange situations," as opposed to children who are cared for primarily by their mothers or one attachment figure.

Interestingly researchers have not found any significant difference in the attachment status of infants in child care or at-home care when using Q-sort assessment techniques (e.g. Belsky, 1988b, cited in Clarke-Stewart, 1997). Few studies have been done in this area with this technique and there is evidence that, while the findings were not significant, the results are in the same direction as those found in Strange Situation (namely that extensive nonmaternal care in the first year of life produces an elevated risk of insecure infant-mother attachment).

Another issue that is important concerns the question of how large the secure attachment difference between infants in child care and at-home care really is. Studies may show significant differences but this may or may not translate into concluding infants are actually going to be harmed if their mothers leave them with a care provider. Clarke-Stewart (1989) tabulated data from 17 studies that investigated the effects of child care on parental attachment. She found the probability that an infant

will be securely attached is only 10% less if the mother works. This is probably not a high enough percentage to overly concern many parents.

In the United States about 70% of children are classified using Ainsworth's Strange Situation as type B (securely attached). Another 20% are classified as type A (insecure-avoidant) and 10% type C (insecure-resistant). Using a 17-study meta-analysis Clarke-Stewart (1989) reported that the observed distribution of insecure infants who are in child care is 22% type As and 14% type Cs. The differences are there but whether they are large enough to create high levels of concern is debatable. Something interesting about the attachment category percentages in child care infants in the United States is that they are almost identical to those found in a cross-cultural meta-analysis. Van Ijzendoorn and Kroonenberg (1988) used 2,000 Strange Situation classifications obtained in eight different countries and found that the worldwide distribution was 21% type As and 14% type Cs. This would lead one to believe that infants who are in child care still fall within the "normal" range of attachment patterns.

Methodological Concerns in Child Care Studies

Some methodological problems that have been identified in child care and attachment studies concern the operationalization of what child care is. Although about 25% of infants have mothers who are employed full time (U.S. Census, 1994, cited in Lamb, 1998), only about 28% of them use child care centers (Lamb, 1998). The rest rely on family daycare providers, relatives, nannies, or parents working different shifts. It seems only common sense that distinguishing between care

received from a child care center and from say the child's grandmother or aunt is necessary, as while both may constitute care by someone other than the mother, the two experiences would probably be very different.

The definition of the variable full-time child care also differs in studies. Some define full-time as 20 plus hours a week (Barglow, Vaughn, & Molitor, 1987; Lamb, Sternberg, & Prodromidis, 1992, cited in Lamb, 1998) and still others define it as more than 35 hours a week (Belsky & Rovine, 1988). Here again, the experience between out-of-home care for 20 hours a week and 40 hours a week is very different. Lamb (1998) suggested that perhaps a more fruitful way of approaching this issue in the future is to view nonparental care as a continuous variable.

The research does seem to support findings of differences amongst infants who are cared for out of the home and those who receive at-home-care. The issue becomes now one of whether these differences make for lasting and negative attachment issues or whether the differences are too slight or temporary to have an effect. Out-of-home care for infants and children is not a new phenomena nor one which is going away. Understanding how best to help all children develop secure attachments needs to be the focus of future research.

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Living in Hawaii from 1992 until 1995, Kate finished her bachelor of science degree in psychology and her master of science degree in education. Her husband retired from the Air Force in 1997 and they moved to Tennessee so Kate could enter the graduate program in the University of Tennessee, Knoxville's Child and Family Studies Department. While there she held a graduate teaching assistantship and taught human development across the lifespan, infant and young child development, and early childhood education. She graduated from UT with the Doctor of Philosophy in Human Ecology in August, 2000.