The Resulting Effects of In Utero Attachment on the Personality Development of an Adopted Individual

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Abstract: A newborn separated from his mother at birth and relinquished for adoption is susceptible to a primal wounding. This construct describes the deep psychic scarring and lasting emotional impact of adoption caused by the sudden severing of the in utero bond with the biological mother. The results of the trauma are believed to be substantial and to carry major long-term developmental effects, and yet the nature of those implications remains poorly understood. The aim of this mixed method study was to address the relationship between the degree of prenatal attachment felt by the birthmother during her pregnancy, and the subsequent emotional and mental development and wellbeing of the adopted individual.

Keywords: Adoptee, adopted child, adoptive parent, attachment, birthparents, birthmother, biological mother, bonding in utero, object relations, prenatal, primal wound, relinquishment

While it may seem obvious that the experience of having been adopted in childhood has important implications for psychological well-being in adulthood, the nature of those implications remains poorly understood. The findings of contemporary researchers suggest that the experience before adoption — including the prenatal experience of the fetal-maternal relationship — can and does have a significant effect on later psychological adjustment (Brodzinsky, Schechter, & Marantz, 1992; Stott, 1973; Stott & Lukesch, 1977; Verrier, 1993).

In adoption psychology, we have begun to identify common threads in the nature of the primal wound that may account for problems in the adoptee's psychological functioning. In my clinical practice where I specialize in adoption, primarily working with adopted adults, I had

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begun to observe great diversity in the clients' psychological adjustment to their adoptive status. Despite the fact that many of them grew up in loving adoptive homes, some adoptees suffered more internal conflicts, poorer self-esteem, depression and anxiety, mistrust, and fearfulness. I began to notice that while some adoptees harbored tremendous fears about searching for their birth mothers and had a strong belief that their birthmothers¹ would reject them, others had an internal sense that the reunion would be welcomed. Most often, these internal perceptions were accurate. It seemed that the overall psychological functioning of the adoptee appeared to be tied to an internal belief system based upon an experience that they had with the birthmother. I began to wonder what relationship there was between the degree of attachment felt by the birthmother who planned to relinquish her unborn child following birth and the subsequent emotional and mental development of the adopted individual.

It is widely accepted in both traditional and contemporary psychological research that the earliest relationship does not begin at birth, and that a mother's attachment to her child starts developing during pregnancy (Alhusen, 2008; Cranley, 1981; Deutsch, 1945; DiPietro, 2010). The assumption of this study was that the psychological adjustment of the adult adoptee is significantly affected by the environment that existed in the womb. It was further assumed that a significant attachment to the birth mother had developed prior to birth. Thus, even if the child was separated from the biological mother at the earliest possible age, the residual effects of the prenatal attachment were considerable.

The study specifically addressed the following research questions: (1) What are the effects of the birthmother's feelings for her unborn child upon later mental and emotional functioning in the adopted individual? (2) How does the relationship between the level of attachment felt by the birthmother to the unborn child manifest in psychological functioning in

¹ I recognize the criticism of the term "birthmother" among adoption activists (Turski, 2002). The term has been changed many times over the years as a result of our ongoing recognition of her important role in the life of the adoptee. Currently, the terms birthmother, birth mother, and/or first mother are still used widely in the literature. The term "bio mother" has also been used, which has been criticized for diminishing the importance of the birthmother. The term "natural mother" has also been used, but adoptive parents have argued that it makes them appear like artificial parents or only legal parents. It is still a concept that is evolving. Because of the nature of this project, I find that the term birthmother is important for clarity, since the mothers are included in the study namely because they gave birth to the children, and because my focus is to acknowledge the important role of these mothers and the impact of their mothering during pregnancy.

the adult adoptee? (3) What are the effects of being unwanted in utero on the adopted individual's later mental and emotional development?

The theoretical argument of this study is that the first object relations are established in the womb, with the adoptee's experience of their prenatal environment. The attitudes and experiences of the birthmother significantly impact the unborn child in a manner that is imprinted and later carried over within the individual's development. These early object relations manifest themselves in behavioral states and psychological functioning that correspond to their *in utero* relationship with the primary maternal object and the adoptee may experience significant adjustment problems in part because of the anxiety, unpredictability and ambivalence in their prenatal environment.

The implication of this prenatal research is that it is logical to argue that the memories of those pre-birth experiences will continue to affect the individual after birth. It is this author's belief that prenatal experiences account for individual differences seen in the adopted individual's psychological functioning. It was hoped that this research would shed further light on the nature of the primal wound and its relationship to the prenatal experience for the adopted individual.

Background to the Problem

Once thought to be the solution for women who became pregnant yet who were not in a position to raise their babies, adoption became a common practice. With reference to the child, the accepted position was that he or she was better off growing up in a loving adoptive home than staying with a mother who either did not want the child or was not in a position to provide material support and/or adequate nurturing. Until recently there had been a tendency for researchers and clinicians to downplay the impact of the preconscious experience of the biological mother and the in utero experience on the unborn adoptee's later psychological functioning and adjustment. However, recent research in pre- and perinatal psychology on the discovery of the impact of separation of mother and child right after birth (Chamberlain, 1992, 1993; Verrier, 1993) has begun to shed new light on the way we think about adoption and the lifelong significance of the primary relationship.

There has been an increasing awareness of the fact that adoption has significant long-term effects on the psychological well-being of adoptees (Palacios & Brodzinsky, 2010). Mental health professionals have found that adoptees demonstrate a higher than average incidence of academic, social and psychological disturbances. Several studies have confirmed that adopted children are overrepresented in mental health settings and display higher levels of both externalizing and internalizing symptoms compared to their peers (Brodzinsky, 2011). Adoptees have also been

found to experience more learning problems (Keyes, Sharma, Elkins, Iacono, & McGue, 2008). Particularly on frequency of mental health referrals, the significance of the group differences has a large effect size (Brodzinsky, 2011). According to the U.S. State Department, U.S. families adopted more than 7,000 children in 2012 (U.S. Department of Education, 2013). About 2% of the total child population under the age of 18 are adoptees, and 11% of adolescents referred for therapy have been adopted (Brand & Brinich, 1999). Research shows that a substantial proportion of adoptees receive mental health services, with 46% of children adopted from foster care, 35% internationally adopted, and 33% adopted as infants (Vandivere, Malm, & Radel, 2009). Adoptees only made up only 2-3% of the US population in the 1980s, but they were greatly overrepresented in treatment centers and detention settings, as well as in special schools (Kaplan, Silverstein, Benward, & Melfield, 1985). Lindblad, Weitoft and Hjern (2010) mention several studies that show adoptees overrepresented among children diagnosed with attention deficit disorder (ADD). Their research in Sweden shows that international adoptees more often consumed ADHD medication compared to the majority population for both boys (5.3 vs. 1.5% for 10–15-year-olds) and girls (2.1 vs. 0.3% for 10–15year-olds).

The adoptive experience has become the focus of considerable research, with a number of empirical and theoretical studies published exploring the nature of the underlying emotional wound involved in adoption (Brodzinsky, et al, 1992; Lifton, 1994; Palacios & Brodzinsky, 2010; Pavao, 1989; Sorosky, Baran, & Pannor, 1978). Brodzinsky, Smith, and Brodzinsky (1998) have stated that adoption research must become more theory-driven, arguing that is has been too descriptive and atheoretical for too long, which limits the potentials for yielding new knowledge. They state that as the adoption research field is maturing, "empirical studies must be developed in the context of well-articulated theoretical models" (p. 113).

Furthermore, they argue that more complex questions must be raised in adoption research, particularly the impact of the prenatal history. Verrier (1993), whose background as both adoptive mother and therapist gave her a unique perspective, found that adoptees experienced lifelong difficulties with psychological adjustment regardless of whether their adoptive family system was dysfunctional or not. She suggested that the adoptee may experience significant losses and as a result, harbor within him or herself a deep and profound wound to the psyche. The source of that wound, she concluded, was due to the separation of the child from his or her biological mother, the connection to whom seems, "mystical, spiritual and everlasting" (p. xvi). She believed that the experience of being adopted involves multiple losses: loss of identity and intimacy, experiences of separation and abandonment, and feelings of being

unwanted and rejected. She posited that this set of experiences predisposes a child to a variety of dysfunctional behaviors, including depression, anxiety, and oppositional disorders.

Brodzinsky and Schecter (1990) found that the adopted child internalizes a belief that he or she is not wanted and that the adoptee's experiences of feeling unwanted and unconnected to others lay the groundwork for future intimate relationships, leading to a sense of alienation both within the family and in the broader world. As these feelings persist through childhood, the child is likely to experience chronic over-sensitivity, suspiciousness, secretiveness, mournfulness. They may be more prone to engage in acting out behavior, as well as experiencing impaired self-esteem and academic and learning problems. These behaviors represent the unrecognized manifestation of an adaptive grieving process (Brodzinsky, 1987). Because of the very nature of the wound, grieving is a prolonged process that reemerges at crucial points in the individual's life, often complicating the resolution of stage-specific developmental tasks, i.e. trust, autonomy, individuation (Erickson, 1963).

Methods

Theoretical Framework

This research study derived its theoretical insights from traditional psychoanalytic theory, contemporary object relations perspectives, attachment theory and perinatal psychology. The first academic interest in the study of the mother's relationship to her fetus was psychodynamic in nature (Deutsch, 1945). While the emphasis in this study was on object relations theory which was developed primarily with reference to the mother-infant relationship, those concepts were applied to the experience of the unborn child in the womb. The arguments are thus, that the first object relations are established in the womb, and that those object relations are (a) subsequently translated into symbolic form, and (b) have an important impact on later personality development and psychological well-being.

While the traditional psychoanalytic theorists did not write to any extent about the adoptive experience, their work has relevance for the current study concerning the nature of the prenatal experience for adoptee. As early as 1926, Freud conceptualized the birth experience as a prototype for anxiety reactions wherein the first experience of anxiety occurs when the child is physically separated from mother's body. Otto Rank (1924/1952) elaborated Freud's argument that all anxiety originates in the inherent anxiety of birth and believed that the separation of the child from mother at birth was the most painful and frightening human

experience. He contended that humans require their entire childhood to overcome the trauma and that if it was not successfully resolved in childhood, he believed that the anxiety would be manifested in the form of fears and phobias, neuroses, or psychoses.

Both classic and contemporary object relations theory provides us with a set of theoretical concepts which can significantly enhance our understanding of the maternal-fetal relationship and its effects on the child (Greenberg & Mitchell, 1983; Klein, 1935; 1952; 1957). Individuals are seen as essentially object-seeking (Fairbairn, 1954), with the prenatal situation (the womb) conceptualized as a holding environment (Winnicott, 1965) within which attachment between fetus and mother develops. Fundamentally, Winnicott argued that the unborn child experiences a sense of either predictability or unpredictability in the womb. The mother who is devoted to the needs and care of her unborn child creates a state of predictability. Klein (1957) believed that babies are born with a particular character, and that it would be logical to trace the origins of those character traits to the physiological and psychological life of the unborn child.

The traditional theory of attachment and bonding, developed by such researchers as Bowlby (1951) and Ainsworth (1973), referred primarily to the processes that occur between mother and infant after birth. Several recent studies, however, have documented the existence of high levels of maternal-fetal attachment. Verny (1981) in particular has been influential in applying the concepts of attachment theory to the relationship between a mother and her unborn child. He was among the first theorists to emphasize the role played by the mother's affects during pregnancy on the subsequent well-being of the child. Maternal attitudes and affects during pregnancy, according to Verny, play a key role in shaping the developing personality of the child. Children whose prenatal environments were characterized by love and security are more likely to develop a sense of basic trust during infancy (Erikson, 1963). In contrast, children whose prenatal environments are negative or insecure are likely to experience a diminished sense of self and characterological disorders later in life.

These insights were captured theoretically by Brodzinsky (1987), who developed a psychosocial model of adoption based on Erikson's (1963) developmental theory. Brodzinsky (1987) pointed out that during infancy the newborn's primary developmental task is to develop basic trust. However, when the child has been relinquished for adoption — and particularly if the prenatal environment was dominated by insecurity or anxiety — this developmental task may not be achieved (Brodzinsky, 1987).

In addition to the aforementioned theoretical insights, during the last three decades there has been a growing body of evidence that the unborn

child is conscious of its surroundings during the period from conception to birth (Axness, 2001; Chamberlain, 1993; Verny, 1981), and that behavioral states are shaped by the pre-birth environment (Piontelli, 1987). The unborn child is aware of his/her surroundings, is expressive, and is affected by his/her interactions with the mother and the environment (Chamberlain, 1992). It is now believed that the unborn child is a fully perceptive, cognitive, and intelligent being with his or her distinct personality and memory, an array of sophisticated motor skills (Robinson & Kleven, 2005) and mental abilities (Salisbury, Fallone, & Lester, 2005) with the ability to hear, react, and distinguish the mother's voice, the beating of her heart or the music that she may be listening to (DeCasper, Lecanuet, Busnel, Granier-Deferre, & Maugeais, 1994).

Based on his research, Verny (1981) presented the argument that the "unborn child is a feeling, remembering, aware being" and that the "nine months between conception and birth molds and shapes personality, drives and ambitions in very important ways" (p. 15). He conceptualized the womb as the first world experienced by the fetus and stressed the importance of the quality of mother-child communication in shaping the emerging personality of the infant. This communication takes shape during the pregnancy itself; the way the woman feels about her pregnancy and unborn child comprises an important component of communication. He believes that those prenatal experiences which were positive and loving provide the child with trust and security, while destructive or negative prenatal experiences may scar the psyche. It is during this period that deeply rooted character traits, including a sense of security and self-esteem, begin to take shape. Axness (2001) has introduced the term "premature relinquishment" to describe the birth mother's emotional detaching from her baby during pregnancy, which is a specific pregnancy-related stressor with significant impact on the baby.

Rottmann (1974), in a study of the psychological and emotional experiences of 141 pregnant women, identified four distinct types of maternal attitudes communicated during pregnancy that correlated with four distinct types of newborn states. Rottmann illustrated just how precisely sensitive and aware the fetus is of the mother's feelings and that the fetus' sensitivity was operative whether the mother's feelings were conscious or unconscious, and whether they are verbalized or not. Zuckerman, Bauchner, Parker, and Cabral (1990) studied the relationship between maternal depression during pregnancy and newborn neurobehavioral functioning. Results showed that, as early as three months postpartum, infants of prenatally depressed mothers were more likely to cry excessively and to be more difficult to console.

Conversely, the adopted child who is wanted by his biological mother may sense this feeling of love in the womb. Rynearson (1982) studied 20 adolescent patients who had relinquished their babies for adoption.

Women who were adolescents at the time of the pregnancy tended to engage in denial, with most refusing to seek medical confirmation of the pregnancy until late in the term. Despite this denial of the pregnancy, however, it appears that the emotional ties to their unborn child were substantial. Rynearson reported that 19 of the 20 mothers showed substantial evidence of such attachment, including developing a covert maternal identification with the fetus, deciding on a name for the baby, and experiencing an overwhelming wish for continued attachment to the baby. During pregnancy, many of the subjects had established an intense private monologue with the fetus. Particularly interesting were rescue fantasies in which these unmarried mothers fantasized that they and the newborn would be "saved" from the relinquishment.

As seen, there is a growing body of knowledge in both maternal-fetal attachment research and adoption psychology. However, to my knowledge this is the only study that has combined birth mothers' maternal-fetal attachment, and personality variables for the adoptees.

Research Design

The research questions were addressed in the context of a causal comparative research design, with subjects consisting of dyads made up of matched birthmothers and their adult adoptee offspring. Two groups were defined: dyads in which the birthmother exhibited higher levels of prenatal attachment ($\underline{\mathbf{n}}=21$) and dyads in which the birthmother exhibited lower of prenatal attachment ($\underline{\mathbf{n}}=21$). The Maternal-Fetal Attachment Scale (MFAS) (Cranley, 1981) was used to measure birthmother's levels of attachment to her unborn child. This type of design was ex post facto in nature, and provided the basis for identifying correlations among study variables; however, it cannot be used to attribute causality. That is, the data are of a historical nature, and it may be possible to draw inferences about probable cause and effect.

The MFAS consists of a 24-item self-report questionnaire. Measured components are preoccupation with thoughts about the fetus, interactions with the fetus, affective valence of feelings towards the fetus, and the degree to which women report that they modulate their behavior or diet for the fetus (DiPietro, 2010). MFA is defined as "the extent to which women engage in behaviors that represent an affiliation and interaction with their unborn child" (Cranley, 1981, p. 282). The adoptee group was then systematically examined to identify potential statistical differences on the personality variables measured by the Sixteen Factor Personality Questionnaire (16PF) (Conn & Reike, 1994).

Each of the following hypotheses was tested at the p < .05 level of significance:

Hypothesis 1: Adoptees whose birthmothers report less attachment to their unborn child will experience significantly more anxiety, as assessed by the Anxiety Global Scale of the 16PF, than adoptees whose birthmothers report more attachment to their unborn child.

Hypothesis 2: Adoptees whose birthmothers report less attachment to their unborn child will have significantly lower emotional stability, as measured by the Emotional Stability Scale of the 16PF, than adoptees whose birthmothers report more attachment to their unborn child.

Hypothesis 3: Adoptees whose birthmothers report less attachment to their unborn child will have significantly less liveliness, as measured by the Liveliness Scale of the 16PF, than adoptees whose birthmothers report more attachment to their unborn child.

Hypothesis 4: Adoptees whose birthmothers report less attachment to their unborn child will have significantly higher vigilance, as measured by the Vigilance Scale of the 16PF, than adoptees whose birthmothers report more attachment to their unborn child.

Hypothesis 5: Adoptees whose birthmothers report less attachment to their unborn child will have significantly more apprehension, as measured by the Apprehension Scale of the 16PF, than adoptees whose birthmothers report more attachment to their unborn child.

A total of 42 adoptees and their respective birthmothers participated in the study. Age of adoptees ranged from 24 to 49, with a mean age of 32.1 years. Age at time of pregnancy (for the birthmothers) ranged from 15 to 29 years of age; mean age at the time of pregnancy was 20 years old. In addition to the statistical analysis, the study relied on qualitative data provided in the form of open-ended comments provided by both birthmothers and adoptees. These responses were content analyzed and were presented thematically as a supplementary component of study results.

Results

Results of the empirical data analysis provided statistical support for two of the five study hypotheses. Hypothesis 2 stated that adoptees whose birthmothers felt less attachment to their unborn child would experience significantly less emotional stability than adoptees whose birthmothers reported more attachment to their unborn child. This proved to be the case in the statistical analysis. The emotional stability scale measures the individual's psychological adjustment; more specifically, it focuses on the regulation of emotion and emotional sensitivity. Emotional stability is defined as maturity and stability and the ability to face stress with a realistic and calm manner. Individuals who score low on the scale tend to be emotionally at loose ends, and to experience difficulty sorting out their feelings. They are also likely to experience difficulties in accurately

communicating their feelings. Emotional stability measures an individual's emotional resourcefulness, sensitivity to his or her own and other's feelings, and the tendency to be self-assured. Study findings showed that adoptees who had experienced lower levels of in utero attachment were less emotionally stable; they might thus be expected to experience more difficulty maintaining adequate control over their emotions.

Hypothesis 5 stated that adoptees whose birthmothers felt less attachment to their unborn child would experience significantly more apprehension than adoptees whose birthmothers reported more attachment to their unborn child. This hypothesis was also statistically supported. The apprehension scale measures a tendency to be self-blaming, insecure, and prone to guilt. Individuals scoring lower on the apprehension scale tend to be self-assured, untroubled, and free of guilt. High apprehension scores indicate that the individual is prone to worry and may have difficulty dealing effectively with stressful situations. High level of apprehension is also associated with excessive sensitivity, an inability to accept criticism, and lack of self-confidence. Those adoptees who had experienced lack of early attachment were prone to worry and to experience more difficulties in dealing with stress. Such adoptees may also be lacking in self-confidence and hypersensitive to criticism.

There were no differences between the two groups on Hypothesis 1, 3, and 4 which measured the theoretical constructs of anxiety, liveliness and vigilance. However, it was found that the more attached group of adoptees showed significantly higher levels of sensitivity and warmth while they scored significantly lower in the areas of dominance and perfectionism. There were no significant differences observed on the remaining 7 personality scales of the 16PF.

Additionally, there was no difference in basic demographic variables. Interestingly, the more attached group was found to have been significantly more likely to have been in therapy and more likely to have searched for their birthparents. It should be noted here that the sample was drawn primarily from individuals who were affiliated with some type of adoption search and/or counseling organization. The more attached group was found to have younger age of adoptee and younger mean age of the birthmother at the time of pregnancy. Results of multivariate analysis showed that the "Giving of Self" dimension of prenatal attachment was predictive of overall anxiety levels, with higher levels of giving of self being predictive of lower levels of anxiety while controlling for the effects of age.

In summary, then, results of the five hypothesis tests were mixed, with two being supported and three being non-significant. There were significant differences in the predicted direction on levels of emotional

stability and apprehension. However, the hypothesized differences were not observed on overall anxiety, liveliness, or vigilance.

Additional Qualitative Findings

In order to assess the emotional climate of the prenatal environment, each birthmother was asked to describe her feelings and experiences during the pregnancy. Each adoptee was asked a series of corresponding questions about their own experiences and perceptions; adoptees' responses were then linked to the birthmothers' responses. All qualitative responses were then content analyzed to identify emergent themes and persistent patterns of beliefs and perceptions about the prenatal experience. These results were presented thematically as a supplemental component of the study results.

From the responses given by both the birthmothers and their adoptees it was clear that they continued to have emotional and deeply felt responses to their shared experience of pregnancy and birth. The deeply persistent feelings of the birthmother about the prenatal experience were congruent with the prenatal memories of adult adoptees. Emerging themes were apparent in the data from both birthmothers and adoptees. Many of the birthmothers in the current sample experienced powerful feelings of shame, secrecy, anger, and fear — intense feelings that appeared to be imprinted on the developing fetus. The powerful effects of her maternal anxiety also appeared to have impacted the in utero bonding as did the mixed messages from deeply conflicted birthmothers during their pregnancies.

There was considerable evidence that adoptees internalized the shame and secrecy that their birthmothers experienced, apparent in responses such as "I have always felt like I was unimportant," and "Growing up I always felt that I must have been a huge secret," and "I always felt that I didn't have the right to be on the planet." Many of the adoptees in the study felt plagued by deeply experienced fears, "I have always had totally irrational fears that grip me and are so strong." Internalized negative messages were reflected in feeling states by adoptees: "I have a lot of self-hatred," and "I believed that she denied that I existed, even in her womb I knew that I was on my own. I didn't have feelings of unity with her," or "As a child, I never had strong feelings that she really wanted me."

Themes of emotional instability were also apparent in adoptees' responses: "I have a lot of difficulty forming bonds with people," or "Some mornings I feel a tremendous sadness. I curl up in the shower under the water. I guess I'm trying to recreate the womb." And there was also considerable evidence that the adoptees experienced high states of vigilance on a regular basis: "The fear of abandonment is so strong that I

would do whatever it took not to be abandoned again," or "I have a lack of trust of people and always feel that I am going to be let down." Adoptees who experienced more in utero bonding retained that memory: "I used to feel that she needed me and if I could find her, I could help her. I would gaze out of the window and think so hard. I hoped that she could hear me. I was calling her silently but yelling inside so she'd hear me. I always believed that she wanted me and was unable to keep me."

Discussion

Results of this study strongly suggest that birth memories are both complex and accurate. It can be argued that the individual retains memories of events prior to their own birth; those memories are stored in a primitive memory system and lay the foundation for subsequent personality development and emotional well-being. To the extent that there are deficits in early maternal attachment, including during the prenatal period, the child and later adult may suffer serious psychological consequences. The prenatal environment may be usefully conceptualized as a holding environment in which attachment between fetus and mother protects the unborn child. Conversely, acute feelings of shame and anxiety experienced by the birthmother are likely to affect the unborn child in a significant, negative way.

Communication with the unborn child has been shown to be a key component of the attachment and bonding process. Healthy communications between the mother and her fetus provide an important building block for healthy adult internal object relations. The mother who communicates her love to her unborn child creates a bond that sustains the child in utero and allows the child to attach and bond to subsequent maternal objects. In contrast, the unborn child who experiences maternal rejection in utero will carry these seeds of emotional patterns into extrauterine life; the mother who has shut down emotionally endangers the unborn's safety and well-being, and sets the stage for a lifetime of poor object relations.

The findings of this study suggest that the high levels of emotional distress experienced by a birthmother because of the lack of support from those around her creates an environment characterized by chronic and irresolvable stress. Ultimately, these high levels of environmental stress may pose a fundamental threat to the survival to the unborn and may contribute to the emergence of long-term and deep-seated anxiety, apprehension, and emotional instability. It has been argued here that the first object relations are established in the womb, and that those object relations are subsequently translated into symbolic form and have an important impact on later personality development and psychological well-being.

Clinical Implications

The findings of this study suggest that maternal attachment during the prenatal period plays an important role in shaping how the individual deals with stress later in life. Despite the fact that the adoptee and birthmother are separated at birth, the adoptee carries the prenatal experience around with him or herself in the form of deeply felt feelings and beliefs about self and others. More fundamentally, prenatal attachment would appear to play a crucial role in the individual's sense of emotional well-being.

Today it is understood that the womb environment is based on maternal attitudes and clinicians should encourage women to work through the underlying psychodynamics that are at work in the psychology of relinquishing one's baby for adoption. Birthmothers are faced with an extremely stressful situation as they seek to cope with the effects of an untimely pregnancy, which may be complicated by the lack of family and social support. Common affects can include denial, rage, hopelessness and despair. Many birthmothers become psychically numb in order to retreat from the painful reality that they face. Part of this psychic numbness involves a suppression of their feelings of attachment to their baby. For them to attach completely and freely when it is known that they will be childless after the birth, would be an impossible task. With increased understanding of those dynamics, the birthmother may be able to let go of some of the anxiety and uncertainty of her situation. Perhaps then the birthmother can see the unborn in a different light, and not as an invader of her body and disrupter of her life.

The foundation of this research lies in the theoretical and clinical insights of attachment and object relations theory where disturbances in the mother-infant relationship place an individual at risk for future adjustment problems and pathological personality functioning (Bion, 1975; Fairbairn, 1954; Klein, 1935). Deficits in early object relationships, then, are generalized from the earliest relationship with the maternal figure to other significant relationships later in the child's (and adult's) life. Brodzinsky and Schecter (1990) found that the adoptee who has internalized the belief that he or she was not wanted as a child may also feel unconnected to the adoptive families; the experience of being unwanted has a significant effect on all other interpersonal relationships. This argument is reinforced by the qualitative findings of the current study, with several of the adoptees' subjective statements implying poor relations with the adopted family and an impaired ability to maintain emotional stability in family relationships.

The clinical implications of these finding suggest that adoptive families must be made aware from the onset that the child remembers

their experience of the prenatal period and that this predisposes the child toward distrust, fearfulness and suspiciousness. Relating to the world and to the new caretakers will be a harder task for the adopted child. Early clinical interventions can be made to address issues faced by adopted newborns in the area of attachment, bonding and grief work. Adoptive parents can be counseled to recognize attachment trauma in their children and to decrease their negative reactions to these problems while increasing their understanding of how to help the child heal through their fears of future abandonment. Adoptive parents need to work through their own grief of infertility and loss so that they can have empathy for, not fear of, the sorrow that their children have deep within their psyche. The adoptive parent must learn not to turn away or minimize the pain in their adopted child, so that their child does not retreat and form a protective shield in which they keep others at bay.

The findings of this study may also be discussed in terms of Verny's and Winnicott's concepts. Verny (1981) argued that to the extent that the unborn experiences the in utero environment as warm and loving, he or she will be born with the expectations that the external world will have those same characteristics. In contrast, if the unborn experiences the womb as an anxious, hostile environment, the predisposition would be toward distrust, fearfulness, and suspiciousness. Winnicott (1965; 1987) derived his theoretical concepts in large part by observing children who were loved and wanted by their parents. Winnicott (1987) identified a positive pregnancy as being a primary predictor of stable personality development; such a pregnancy would ideally be wanted by the mother and supported by her significant others. The developmental implication is that the unborn child is dependent upon a nurturing environment, as created by the thoughts, feelings, and experiences of the mother, in order for subsequent healthy psychosocial development to occur.

For the adoptee, the normal working through of this process is hindered by the bad internal object symbolized in the rejecting, anxious, or angry birthmother, introjected in the psyche of the adoptee. To complicate matters, the fetal-maternal relationship will be projected onto the adoptive mother-child relationship. During this process, the adoptee deploys defense mechanisms such as splitting and projective identification to manage the unbearable anxiety originating in the early failures in the attachment process.

It is essential to recognize that the adoptee's psychosocial difficulties may be further magnified by the typical absence of information about his or her own in utero and birth experiences. Lifton (1994) argues that this lack of information leaves adoptees feeling vulnerable and confused about their own identity. She believed that, "inside every adoptee is an abandoned baby. It lies coiled in the core of the adopted self like a deep sorrow that can find no comfort" (1994, p. 110). One consequence is that

the adoptee may utilize the defense mechanism of splitting, leading to a dichotomy between an artificial self and hidden, submerged self. Another consequence may be that adoptees with loss and abandonment complexes are torn between merging with others to overcome their loneliness and unmet dependency needs, and an equally strong urge to assert their separateness as individuals and to avoid intimacy. It is now, through modern discovery of the profound psychological effects of growing up without the knowledge of one's identity that contemporary adoptions are beginning to allow children the full knowledge of their origins.

This study was motivated by my clinical experience of a lack of acknowledgement of the impact of the maternal-fetal attachment on adoptees' development. In my clinical work since then, I have continued to observe the need for awareness, research, and psycho-education for both adopted adults and adoptive parents who seek counseling. Despite the growing body of knowledge from pre- and perinatal psychology and the vast advances of attachment and neurological research, I still observe a significant resistance to acknowledging the impact of pre-birth attachment. It is a crucial task for clinicians in adoption psychology to cultivate a foundational awareness of the importance of the maternal-fetal attachment for all who are involved in adoption.

Recommendations for Further Research

The primary theoretical argument of this research is that the first object relations are established in the womb, with the adoptee's experience of their prenatal environment having a significant effect on later development and psychosocial well-being. It can be argued that the knowledge that one was unwanted or unplanned and relinquished for adoption colored the experience of the in utero relationship between mother and child. That is, those experiences are seen as being imprinted on the unborn's developing psyche from the very beginnings of development. Empirical research exploring the complex intrapsychic conflicts and psychological reactions experienced by women who become pregnant and relinquish their babies for adoption remains in its infancy. Studies seeking to more accurately assess the effects of in utero experiences should consider assessing the adoptee's functioning directly after birth. For example, Apgar scores provide an operational measure of the behavior of the newborn directly following birth, and might yield valuable insights into effects of the prenatal period on the newborn. Apgar scores address five levels of functioning of the newborn. With a point system the child is assessed in terms of their color (ranging from blue to pale pink), heart rate and pulse, reaction time of cry and grimace, muscle tone, and respiratory rate. Adoptees who are stressed in utero could be compared to babies who were wanted and nurtured in utero. Such scores

could then be correlated with results of psychological constructs such as those measured by the Sixteen Factor Personality Questionnaire (16 PF). This study design would be limited to adoptees who were able to obtain their original hospital records.

The construct of psychological adjustment incorporates a broad range of areas, including the individual's overall emotional stability, general satisfaction, and adaptation to life. Healthy psychological adjustment is associated with positive self-esteem, normal interpersonal relations, leadership, creativity, and occupational success.

The primary task of this study was to explore the relationship between the level of attachment experienced by birthmothers and outcomes associated with the adoptee's psychological adjustment later in life. This task was seen as clinically valuable given the increasing number of adoptees who are referred for mental health counseling and who suffer from poor psychological adjustment. The dynamics of this situation remain poorly understood, and it is hoped that this research study will contribute to our ability as professionals to provide effective counseling services to this population.

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