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Mikayla C. Holcomb
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Dissolutioned Adoption: A
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ABSTRACT

This theoretical investigation of adoption dissolution integrates psychodynamic theory and the neurodevelopmental impact of trauma into clinical practice with children. After providing an in depth review of available literature on adoption dissolution, the focus will shift to the chosen theories. The two theory chapters within this research utilize attachment theory as the core psychodynamic theory and the neurosequential model of therapeutics to provide a neurodevelopmental perspective and treatment interventions as related to dissolutioned adoptions. A discussion chapter will critique the chosen theories and integrate the research into practice by utilizing a case study, and lastly provide recommendations for individual therapy with children and child welfare policy.

THE CLINICAL IMPLICATIONS OF DISSOLUTIONED ADOPTION: A THEORETICAL INTERSECTION OF THE NEUROSEQUENTIAL MODEL OF THERAPEUTICS AND ATTACHMENT THEORY

A project based upon an independent investigation, submitted in partial fulfillment of the requirements for the degree of Master of Social Work

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CHAPTER ONE

INTRODUCTION

Dissolutioned Adoptions

Dissolutioned adoptions are a rare and devastating event for the children and adolescents involved as well as the adoptive family. Dissolutioned adoption is defined by the Child Welfare Information Gateway (2012) as "adoption in which the legal relationship between the adoptive parents and adoptive child is severed, either voluntarily or involuntarily after the adoption is legally finalized" resulting in the child's return or entry into the foster care system (p.1). Dissolution is different than disruption or termination, both of which occur before the adoption is legally finalized. For the purpose of this research, focus will be solely on dissolutioned adoptions as defined above. Fortunately, adoption laws such as the Adoption and Safe Families Act of 1997 have increased the focus on appropriate matching and training for adoptive families as a way to promote successful adoptions. Prior to the Adoption and Safe Families Act of 1997, disruption and dissolution rates were increased by 12% (Child Welfare Information Gateway, 2012, p. 7). With this increase in attention to finding stable and permanent families for children and adolescents within the foster care system, dissolutioned adoptions still occur but at lower rates overall.

Dissolutioned adoptions, as stated, are a rare occurrence. However, when dealing with matters involving child welfare, safety, and permanence, no statistic is too small to warrant

attention. Nationwide statistics show that the rate of dissolution ranges from 1-10% of children from foster care, excluding data from private adoption agencies and international adoptions (Child Welfare Information Gateway, 2012). However, Wind (2005) examined special needs adoptions in particular and found that about 10-16% of the adoptions end in disruption/dissolution (p. 46). Research indicates that extreme negative attention seeking behaviors (lying, stealing, defiance), aggressive acting out, and sexualized behaviors are among the common causes for dissolutions (Wind, 2005, Testa, 2004). The Evan B. Donaldson Adoption Institute (2004) also links the age of children and adolescents with higher rates of dissolution, stating that the greatest proportion of successful adoptions occur when children are removed from their homes before age 3 and placed with an adoptive family before age 6. When examining this research, it became evident that children with a high level of trauma based behaviors and possible developmental delays or significant mental health diagnosis are among the children most likely to experience a dissolutioned adoption.

As dissolution typically occurs under extreme circumstances, the Evan B Donaldson Adoption Institute (2004) found that most states consider this phenomenon an inevitable problem. Despite the lack of focused attention of dissolution, reported rates have been relatively stable, staying between 1-10% (Testa, 2004). However, despite child welfare data systems such as the Adoption and Foster Care Analysis and Reporting System tracking adoption statistics throughout the country, states are not required to record dissolutions. Therefore, national data on this phenomenon is difficult to find.

Research Gaps

Research on dissolutioned adoptions, is as stated, unreliable at times due to the inability to track data. Over the past few decades, research indicates a dissolution rate of about 1-10%,

differing from state to state (Testa, 2004). However, research also indicates that this rate has remained steady, neither increasing nor decreasing (Testa, 2004). It is perhaps due to this stable rate that most research has focused on more common adoption terminations, such as disruption prior to legal finalization. The available research on dissolutioned adoptions in particular tends to show the adoptive parents perspective on why the adoption failed, with minimal focus on the child's experience.

Although research begins to explain reasons why certain children experience dissolutioned adoptions, such as the age of the child, behaviors exhibited, and trauma history, there are still gaps in the literature. The Evan B. Donaldson Adoption Institute (2004) indicates a need for research to focus on the experience of the child, particularly what would make an adoption successful. Follow-up studies on dissolutioned adoptions would help identify potential patterns of where the children have gone since the removal from their adoptive families (i.e. foster homes, inpatient hospitals, psychiatric residential facilities or another adoptive home). A gap in research also exists in identifying how children experience dissolution and work through the loss and grief associated with the dissolution of the adoptive family, as existing research focuses on how the adoptive family recovers. Qualitative, quantitative and long term studies would help identify what services are needed to make adoptions successful, as well as what information adoptive families would like to receive prior to being matched with a child.

While the existing research has greatly contributed to the literature base on adoptions, more research is needed on adoption terminations and dissolutions. The existing literature has created a beginning awareness of the impact of dissolutions on children, and identified the need for further studies. Research also indicates a need for more services to be available to adoptive families as well as a potential need for service providers including child welfare workers,

psychologists, and clinical social workers to be aware of the potential impact of dissolution on the children and families they may encounter.

Dissolutioned Adoptions and Clinical Social Work

Dissolutioned adoptions are a rare and somewhat unknown aspect of adoptions. As adoption may be a life-changing event in a child or adolescent's life, dissolution of that tie to their adoptive family is just as important. The emotional components associated with adoption, and then the loss and grief over a failed adoption is significantly relevant to any clinical work with the child. As clinical social workers are committed to expanding the knowledge base for populations at risk, it is imperative that clinical social work examines the impact of dissolutioned adoptions on children and adolescents. As both adoption and dissolutioned adoptions affect children through various developmental stages, the impact of such life changes must be studied through each developmental stage. Dissolutioned adoptions must also be examined through the lens of the individual child, the adoptive family, trauma, and psychodynamic theories. The purpose of this theoretical examination of dissolutioned adoptions is to contribute to the literature base on how dissolutioned adoptions may impact a child or adolescent. This research aims to help clinical social workers identify possible areas to aim clinical interventions when working with a child experiencing this level of loss. This research will also attempt to draw attention to the need for expanded literature on the impact of dissolutioned adoptions on a child, and how clinical social workers can address this need. The intended audience for this research is current and future clinicians, including clinical social workers, counselors, psychologists, child welfare workers and policy makers, as well as current and prospective adoptive families.

Overview of Theoretical Frameworks

While examining the phenomena of dissolutioned adoption, the importance of early understanding of attachment and the neurodevelopmental impact of trauma is prevalent. The purpose of this theoretical examination is to explore dissolutioned adoptions through the lens of attachment theory and the neurosequential model of therapeutics to examine the impact of dissolutioned adoption on a child. Utilizing these theories within this investigation will allow an emphasis on early development of social and emotional functioning and brain development as well as the impact of grief and loss as related to multiple transitions through placements.

The second chapter will consist of a conceptualization of attachment and neurosequential model of therapeutics and how these theories will best serve to interpret dissolutioned adoptions. This chapter will also focus on the methodology chosen, introduce key concepts of the theories and explain the use of a case study to ground this theoretical conceptualization of dissolutioned adoptions. Chapter III will provide a detailed literature review on dissolutioned adoptions, including but not limited to the scope of the issue, population affected and adoption dissolution rates over time. Chapter IV will explore attachment theory, particularly the development of a secure base, internal working model and the impact of loss, grief and trauma on attachment. As attachment is described as a "primary, biological and absolute need in human beings", attachment theory will help provide a biopsychosocial approach to the examination of the phenomena (Berzoff, Melano-Flanagan, p. 124, 2011). Chapter V will examine dissolutioned adoptions through the neurosequential model of therapeutics, focusing on the importance of brain development through early abuse and neglect and the importance of utilizing appropriate interventions. This chapter will examine the neurodevelopmental impact of trauma, top down and bottom up approaches to trauma, and an explanation of the neurosequential model of

therapeutics. As most trauma-informed approaches for children utilize cognitive based interventions, the neurosequential model of therapeutics provides insight into the need for specific interventions to target lower, more primitive, areas of the brain to mediate the body's immediate trauma reactions. This is particularly important in children, as Landreth states that children lack of the ability to talk through traumatic experiences (as cited in Malchiodi & Crenshaw, 2013).

Chapter VI will serve as an analysis of previous chapters, synthesizing the phenomena and psychodynamic theories using a case study. This chapter will identify strengths and weaknesses of this investigation as well as offer clinical treatment recommendations. Lastly, this chapter will identify implications for clinical social work practice and policy for children and adolescents experiencing dissolutioned adoptions. Overall, the purpose of this theoretical investigation is to increase knowledge about what a dissolutioned adoption is, who it affects and how attachment theory and NMT can be used to assist a child in recovering from past trauma, grief and loss.

CHAPTER TWO

METHODOLOGY AND CONCEPTUALIZATION

This chapter will provide a methodological framework to examine dissolutioned adoptions through a lens of attachment theory and the neurosequential model of therapeutics. The chapter will begin by briefly examining the theories selected and providing rationale for the use of each theory in relation to dissolutioned adoptions. This chapter will then provide an explanation into how attachment theory and the neurosequential model of therapeutics can be utilized to reflect and analyze the phenomenon under examination. Next, this chapter will discuss the potential biases held by this writer. To end, this chapter will examine the strengths and weaknesses of the methodology and conceptualization of this research project.

Attachment Theory and the Neurosequential Model of Therapeutics

The first theory chosen for the purpose of this research is the psychodynamic theory of attachment. Developed by Ainsworth, Bowlby and Main, attachment theory is defined as an "emotional connection to someone, evidenced by proximity seeking, feelings of security in the person's presence, and protest in separation" (Stroebe & Archer, p.29, 2013). Within attachment theory, three key ideas will be examined: internal working models, secure base, and the impact of grief and loss. Each key idea will be explained in depth in further chapters. The emphasis of attachment theory is on the early development of relationships with biological parents or caregivers and the how the imprint of these relationships is reflected throughout the lifespan.

Attachment theory has been chosen to help understand the impact of early attachment to biological parents before removal and entry into the child welfare system and subsequent attachment issues and removal from adoptive parents in dissolutioned adoptions. This psychodynamic explanation will compliment the neurodevelopmental view of the neurosequential model of therapeutics as it provides a framework for understanding the unconscious relational patterns but does not provide specific interventions.

The second framework to be utilized is the neurosequential model of therapeutics (NMT) developed by Perry. NMT provides a neurodevelopmental view into the impact of trauma and neglect on early development and how this trauma can impact future behaviors. NMT, in particular, is considered a "bottom up" approach that focuses on targeting interventions to the lower, primitive areas of the brain to stabilize the most basic of bodily functions such as hyper or hypo arousal associated with trauma. As the brain is developed in a hierarchal manner, higher functioning areas of the brain cannot be accessed if lower areas of the brain are activated. NMT provides specific interventions that are targeted to help the lower areas of the brain stabilize. By integrating movement, rhythm and repetition, an individual can obtain control over their bodily reactions to trauma reminders. Research indicates that only once an individual has obtained this control of their symptomology can they begin a traditional insight oriented therapy (Ogden, Minton & Pain, 2006). NMT has been chosen as a frame of reference to examine dissolutioned adoptions to provide a neurodevelopmental view of the impact of trauma and neglect on brain development and behaviors. Children in the foster care system lack the control over their trauma symptoms, requiring more specific interventions to assist them in stabilization. Without this stabilization, children's behaviors are viewed as "out of control", putting them at risk for adoption dissolution.

As dissolutioned adoptions are a phenomenon within child welfare, there is limited research on interventions and frameworks that can assist children after this devastating event. Attachment theory provides a framework into understanding the psychosocial development of the child, emphasizing the need to examine the child's early relationships. As stated, attachment theory does not provide specific interventions to utilize, but it is critical in understanding the unconscious influences on current relationships. NMT provides a biological and neurodevelopmental view of abuse and neglect on the brain and provides specific interventions to help a child regain control and stabilize their body's reactions. Together, NMT and attachment theory provide a full biopsychosocial framework for assisting children who have experienced a dissolutioned adoption.

Method of Evaluation

The final chapter, Chapter VI, will use a variety of methods to analyze and synthesize the data within this research. To illustrate the characteristics of children experiencing dissolutioned adoptions, as demonstrated in Chapter III, a brief clinical case study will be provided. The final chapter will advocate for the combined use of attachment theory and NMT when working with children who have experienced a dissolutioned adoption and provide specific interventions and techniques as illustrated in the case study. The final chapter will end with recommendations for the child welfare system to prevent dissolutioned adoptions within the framework of attachment theory and NMT.

Bias and Assumptions

I have worked with children in the child welfare system since 2010 in a variety of settings including but not limited to safe homes, residential treatment facilities, child welfare departments, and inpatient psychiatric hospitals. During this time, I have witnessed numerous

pre-adoptive and regular foster placements fail for a variety of reasons. Some of the rationale for a failed placement inevitably included the foster parent's inability to maintain the child's behavior within the home as well as the view that the child "could not attach" to their current foster parents. During this time, I began to understand that many of the children's behaviors could be viewed in the context of early abuse and neglect, but I struggled to implement this knowledge into practice with the various children and families. I had not encountered adoptive parents seeking dissolution of their adoption at this time. During my first year MSW placement in a psychiatric hospital for children and adolescents, I was introduced to the idea of adoption dissolution and the importance of utilizing attachment theory as a frame of reference when working with children in the child welfare system.

Based on this clinical experience, my greatest bias in this thesis research is that the behaviors and views of children that I had witnessed while working with children and families within the child welfare system can be applied when understanding the phenomena of adoption dissolution. As I was explicitly searching and unable to find specific techniques and interventions to support my client, this research is biased as it is to be applied solely to the child experiencing a dissolutioned adoption with minimal focus on the adoptive family. I do not assume that this research will be a "one size fits all" approach to working with children with this specific experience, but instead provide a frame of reference for any clinicians, foster parents, and child welfare workers in understanding the behaviors and internal processes of the children they encounter. This thesis aims to increase knowledge about what a dissolutioned adoption is, who it affects and how attachment theory and NMT can be used to assist a child in recovering from past trauma, grief and loss.

Strengths and Limitations

Within this research, the greatest strength is the combined use of NMT and attachment theory to provide a biopsychosocial view of dissolutioned adoptions, with emphasis on recent neurodevelopmental research. A biopsychosocial approach is necessary to fully understand the impact of a dissolutioned adoption on a child, particularly examining brain development and early attachment relationship. The use of recent literature on brain development provides a contemporary lens to the research, as attachment theory is a core psychodynamic theory developed in the 1950's. The use of a case illustration also provides a unique lens into the characteristics of a child experiencing a dissolutioned adoption and the implementation of techniques suggested in a treatment setting.

In addition to the strengths listed above, there are limitations to the research and methodology. To start, this is a thesis project as required by graduate social work program, and the research completed was within a specific timeline. Due to this timeline, each concept could be explored further, particularly the implications and interventions discussed in Chapter VI.

Also, as a graduate student, I am also not an expert in dissolutioned adoption, attachment theory or the neurosequential model of therapeutics and this may be reflected in the possible oversimplification of the concepts to be examined. In addition, as this is a theoretical exploration of this phenomena, there will be no qualitative or quantitative data contributed to the field of research, instead an in depth exploration of the already existing literature is provided. A final limitation of this research includes the lack of empirical research on dissolutioned adoptions and limited case illustrations available. This results in difficulty generalizing this research to a wider population within the child welfare system.

In the next chapter, an in depth exploration of dissolutioned adoptions will be provided.

The chapter will begin with a summary of statistics and laws. The chapter will then examine the many characteristics of children and families that experience dissolutioned adoptions utilizing an extensive literature review.

CHAPTER THREE

DISSOLUTIONED ADOPTIONS

Dissolutioned adoptions are a devastating aspect of adoptions. Dissolutioned adoptions affect children throughout the United States regardless of race, gender and age. Although statistics nationwide are relatively low, this phenomenon requires focused attention as it directly affects child welfare practice and policy. This chapter begins by summarizing some of the statistics of dissolutioned adoptions nationwide as well as some of the laws that have been put into place to increase adoption permanence. This chapter will then begin to dissect the many aspects of dissolutioned adoptions, including but not limited to the influence of age, gender, behavior, history of past abuse and neglect, as well as adoptive parent characteristics. The following discussion will include an extensive literature review on dissolutioned adoptions.

Smith & Howard (1991) stated "disruption will always occur, but through research we can strive to diminish its occurrence by isolating some of the factors that place children at risk (p.249).

Definition of Terms

The definition of terms is of utmost importance as there is an overall lack of common definitions for dissolutioned adoptions within the literature (Evan B. Donaldson Adoption Institute, 2004). As stated earlier, dissolutioned adoptions are defined as "adoption in which the legal relationship between the adoptive parents and adoptive child is severed, either voluntarily or involuntarily after the adoption is legally finalized. This results in the child's return or entry

into foster care or placement with new adoptive parents" (Child Welfare Information Gateway, p. 1, 2012). Kinship adoption is also a term that is related to dissolutioned adoptions and is defined as adoptions by biological families (Wind, 2005). Some of the research used within the literature has referred to adoption dissolution as defined above as "adoption disruption" despite referring to adoptions failing after legal finalization. For purposes of the following literature review, adoptions failing after legal finalization will be referred to as adoption dissolution.

Statistics on Dissolutioned Adoptions

Unfortunately, data on dissolutioned adoptions is difficult to track. The data that is available is mainly from public, domestic adoptions. However, Semanchin Jones & LaLiberte (2010) found minimal differences between international and domestic adoption dissolution. The statistics vary, stating that dissolutioned adoptions range from 1-16 percent (Groze, 1996; Barth, Berry, Yoshikami, Goodfield, Carson, 1988; Wind, 2005). Statistics also show that dissolution often occurs within one to eighteen months after final legalization (Pinderhughes, 1998; Evan B. Donaldson Adoption Institute, 2004). Barth, et al. (1988) stated that prior to the 1980's, adoption dissolution rates had risen from .4% to 1.3% until finally leveling off in 1980 to 1.2% after the implementation of the Adoption Assistance and Child Welfare Act of 1980. Although child welfare agencies track data in a nationwide system called the Adoption and Foster Care Analysis and Reporting System (AFCARS), there is no nationwide or state requirement to follow adoption dissolutions and the re-entry into foster care (Testa, 2004).

Difficulties in Tracking Dissolutioned Adoption Statistics

As stated, states are not required to track data involving adoption dissolutions. The Evan B. Donaldson Adoption Institute (2004) completed a study in which they surveyed 46 states and received data from 21 states, 20% of which provided dissolution data. This study also found that

the states that did collect data on dissolutions did not necessarily use it to better their adoption practices (Evan B. Donaldson Adoption Institute, 2004). The Evan B. Donaldson Adoption Institute (2004) also found that potential reasons for the lack of accurate data include a perception that dissolution rates are low and therefore not necessary to track, inadequate data management systems, failure of child welfare staff to complete data tracking, and the difficulty to track children that have crossed interstate or inter-county lines, or children who have new last names and social security numbers after adoption. Due to the lack of a national data tracking system for children experiencing dissolutioned adoptions, there may continue to be a perception that rates are too low or too inevitable to require immediate attention.

Adoption Laws

There are two laws in particular that are instrumental in decreasing the rates of adoption dissolution. The most recent law is the Adoption and Safe Families Act of 1997 (AFSA). Before the AFSA was implemented, there was a 12% higher rate of adoption disruption in the United States (Child Welfare Information Gateway, 2012). The AFSA has a focus on permanency and reasonable efforts to promote permanency in a timeframe of 18-22 months; however, due to this rush to permanency there is, at times, more of an emphasis on adoption than maintenance of the child in their new adoptive home (McDonald, Propp, & Murphy, 2001; Reilly, Platz, 2003). Coakley & Berrick describe this policy push for permanency as an unintentional consequence of national policies that try to find permanency for children who "desperately need it" (p. 102). An earlier policy, the Adoption Assistance and Child Welfare Act of 1980 (AACWA), contributed to significantly lower dissolution and disruption rates in the early 1980's. The AACWA has dropped the number of children in foster care from 500,000 to 300,000 since its implementation (Barth, et al., 1988).

Age at Time of Adoption

Research indicates that older child adoption is highly associated with adoption dissolution for a multitude of reasons. The Evan B. Donaldson Adoption Institute (2004) suggest that older children may have spent more time in care, have stronger attachments to their biological parents, have had multiple placements, or a need for autonomy as they reach adolescence. It was also found that the older the child was at the time of adoption, the higher the risk was for dissolution (Festinger, 2002; Semanchin Jones, LaLiberte 2010). Berry & Barth (1990) found a 47% disruption rate for children who were adopted at age 12 or older, as well as that "rates continue to rise smoothly with age" (p. 211). The failure of older child adoption is directly associated with the age of the child when placed into foster care and offered an adoptive placement (Westhues & Cohen, 1990).

Interestingly, children adopted between the ages of 0-2 were less likely to experience an dissolution than children adopted between the ages of 2-6 years old (Coakley & Berrick, 2008) Coakley & Berrick (2008) also found that the mean age of children in disrupted placements was 9.29 years old (p. 107). Despite the higher adoption success rates, children adopted at a younger age may show more internalizing behaviors as well as self-blame for the precipitants that led to their removal and adoption (Pinderhughes, 1998; Rycus, Freundlich, Hughes, Keefer, Oakes, 2006). While younger children may exhibit greater internalized behaviors, older children may demonstrate more externalized behaviors. The externalized behaviors may be due to the increased amount of pre-adoptive experiences that influence the child's sense of self and integration into their new adoptive placement (Pinderhughes, 1998).

Length of Time in Care Prior to Adoption

In addition to the age of the children being a predictor for adoption dissolution, the length of time spent in care prior to adoption is also a contributing factor. In a report published by the Evan B. Donaldson Adoption Institute (2004), it was found that the length of time in placement could be a predictor in two different ways. For children in care for less than 2 or over 4 years there is a lower dissolution rate than for children in care for 3-4 years, which has the highest rates for disruption/ dissolution (p. 14). Westhues & Cohen (1990) found that children who have experienced a greater length of time in care experience higher rates of disruption and dissolution but also that children who have had multiple case workers while going through the adoption process (home studies, preparing the child for adoption, supervising the placement) is also correlated with higher rates of disruption. One last aspect involved in a greater length of time in care includes the increased time for behavioral problems to manifest prior to an adoptive placement. Pinderhughes (1998) found that behavioral issues increased in adoptive families three years after legalization, however, if a child is exhibiting behavioral issues in a long term foster care setting this may decrease their chances for obtaining a successful adoptive placement.

Gender & Race

Although research on the impact of race and gender in relation to adoption dissolution is limited, there are some findings that are worth noting. For example, the Child Welfare Information Gateway (2012) has found an increased dissolution rate for "male or non-Hispanic children, and children with special needs" (p.7). It was also found that transracial and international adoptions are considered to be stable or perhaps more stable than "same-race or domestic" adoptions (Semanchin Jones & LaLiberte, 2010). Finally, in regards to racial differences, Pinderhughes (2010) found that African American children were often adopted at a

younger age, typically showed less developmental disability and fewer externalized behavioral issues than Caucasian children adopted at the same developmental stage.

Sibling Groups

Children placed within a biological sibling group can be associated with an increased risk of dissolution in some literature but not all. For example, Barth (1986) states that sibling placements are not more likely to disrupt than children placed by themselves. The Evan B.

Donaldson Adoption Institute examined multiple studies that both support and refute the sibling group as a contributor to adoption dissolution. One study in particular found that sibling placements for children under 8 years old had increased risk of dissolution, but for sibling groups over the age of 8 the rates decreased (Evan B. Donaldson Adoption Institute, 2004). In addition, the Evan B. Donaldson Adoption Institute (2004) found that some studies showed increased behavioral problems in sibling groups, a potential increase in dissolution for children adopted alone, as well as literature showing no correlation between dissolution rates and sibling group adoption. Therefore, more research in this area is needed to be able to confidently place a correlation between sibling group placement and adoption dissolution rates.

Behavior and Special Needs

When examining dissolutioned adoptions through the lens of children's behaviors and needs, there are specific patterns or trends that arise. In particular, externalizing behaviors such as aggressive behaviors either towards the self or others, destruction of property, or lying are major risk factors for dissolutioned adoptions (Evan B. Donaldson Adoption Institute, 2004; Semanchin Jones & LaLiberte, 2010). Children with special needs are also at a higher risk for dissolution. Coakley & Berrick (2008) define special needs as "including children with

emotional, cognitive and behavioral issues...also including abuse histories and children who have been prenatally exposed to substance abuse" (p. 107).

In addition to the externalized behaviors listed above, sexualized behaviors are closely linked to adoption dissolution (Semanchin Jones & LaLiberte, 2010). Smith & Howard (1994) defined sexual behaviors as behaviors including but not limited to inappropriate sexual attention seeking, masturbation (either excessive or public), and sex play with other children. Smith & Howard (1994) found that behaviors including "even mild sexual behaviors precipitated strong feelings of discomfort" in adoptive parents (p. 496). It is unclear if adoptive parents were given information regarding sexualized behaviors prior to the adoption finalization and if the information had an impact on adoption expectations.

Rycus et al (2006) found 60-80% of children in the foster care system have biological families that were affected by substance abuse, including prenatal drug exposure for some children; these findings are also evident in international adoptions. Prenatal drug exposure as well as exposure to substance abusing parents may lead to behavioral issues in the adoptive children. In addition, children removed from their parents experience traumatic separations from loved ones and their environments; children often need to grieve the loss of their biological family which may also result in externalized or internalized negative attention seeking behaviors (Rycus et al. 2006). Many adoptive parents and adoption workers do not know how to adequately discuss adoption issues with children for fear of re-traumatizing the child, and the child may continue to internalize negative feelings (Rycus, 2006).

History of Sexual and Physical Abuse and Neglect

Closely related to the child's behaviors is the child's abuse or neglect history as an indicator for dissolutions. The Evan B. Donaldson Adoption Institute (2004) found that children

who had been sexually abused experienced more moves within foster care, often had greater acting out or externalized behaviors, as well as inconsistent commitment from adoptive families (Nalvany, Ryan, Howard, Smith, (2008). Childhood sexual abuse, in particular, is linked with "anxiety, depressive symptomology, anger and aggression, post traumatic stress, substance abuse, sexual acting out, self injurious or self destructive behavior" (Nalvany et al, p. 1085, 2008). As the above behaviors are also closely linked to dissolution, childhood sexual abuse may be a devastatingly important factor in identifying children at risk for dissolutioned adoptions.

Despite the high correlation between sexual abuse and dissolutions, however, Smith & Howard (1994) did not find the same correlation between physical abuse and dissolutions.

It is also important to note that many children's histories remain unknown. There may not be reports of prenatal drug exposure and early childhood abuse and neglect. It must also be noted that children adopted internationally may have experienced institutionalized neglect as well as physical and sexual abuse (Groze & Ryan, 2002). Quantitative data is not readily available to demonstrate the impact of institutionalized neglect on children adopted internationally.

Attachment to Biological Family

Another aspect of adoption dissolution is the child's attachment to their biological family, particularly their mother. Smith & Howard (1991) found that children who were assessed to have a "strong attachment to their birth mother" were most likely to disrupt from their adoptive placements (Evan B. Donaldson Adoption Institute, p. 16, 2004). The research also indicates a pattern of responses from foster and adoptive parents saying that the adopted child struggled to "let go" of their biological family and therefore could not attach to them (Evan B. Donaldson Adoption Institute, p. 16, 2004). This finding was echoed by Coakley & Berrick (2008) who

stated that "children clung to the fantasy of ideal birth parents" and struggling to integrate into their adoptive families (p. 107).

Kinship Care

Within some publications, kinship adoptions are considered to be two and half times less likely to dissolve or disrupt than a non-kinship placement (Evan B. Donaldson Adoption Institute, 2004). However, within this same publication, there is evidence supporting dissolution rates consistent with non kinship families for potential reasons such as kin relatives struggling to keep appropriate boundaries with birth parents as well as unresolved generational substance use, mental health issues, poverty and abuse (Evan B. Donaldson Adoption Institute, 2004). Despite the statistics showing contradictory patterns, kinship care is an important aspect of permanency that is being advocated for through the Adoption and Safe Families Act of 1997.

Adoptive Parent Characteristics

Research for dissolutioned adoptions is often focused on the adoptive parent's perspective on why the adoption has failed. Therefore, there is a generous amount of information that supports providing more services and education to families interested in adoption. Wind (2005) found that adoptive parents often indicate that more information about the child prior to adoption, more training and services offered to the family prior to adoption as well as families maintaining an open adoption were indicative of a successful placement. This finding was echoed by the Evan B Donaldson Adoption Institute (2004), furthering this idea by stating that adoptive parents often struggled with having realistic expectations for their adopted child, perhaps due to the lack of proper developmental information.

Interestingly, there is evidence supporting adoptive parent characteristics as an indicator for failed adoptions. There is research stating that there is a higher dissolution rate for single

parents, parents with a trauma history, as well as families with limited support systems (either formal or informal supports) (Evan B. Donaldson Adoption Institute, 2004). Research also indicates that adoptive parents with higher levels of education and income are linked to lower levels of satisfaction with parenting and adoption (Reilly & Platz, 2003; Semanchin Jones & LaLiberte, 2010). It is unclear the reasons for this trend in the literature.

The role of the father is also considered a protective factor if the adoptive father is involved and a risk factor if the adoptive father is disengaged from the adoptive process.

Westhues & Cohen (1990) found that adoptive children would often attach to the adoptive fathers first, typically within the first 18 months when examining special needs adoptions. Due to this first attachment to the father, the adoptive mother may feel inadequate and unable to properly respond to the special needs child. Westhues & Cohen (1990) state that the role of the adoptive father is critical in not only supporting the adopted child but the mother as well during the initial stages of the adoption to promote success. Barth (1986) also stated that flexibility and patience for the child is linked to successful placements.

Adoption Worker and Agency Characteristics

Adoption agency and worker characteristics are an important aspect of adoption dissolution to examine as it is directly affected by child welfare policies. Many researchers found that agency factors such as worker turnover and lack of training were directly connected to adoptive parent's unrealistic expectations for the newly adopted child (Evan B. Donaldson Adoption Institute, 2004; Festinger, 2002; Semanchin Jones & LaLiberte, 2010); Rycus, et. al, 2006). Some researchers advise that adoption is an aspect of the field of child welfare that requires specialized training (Rycus et al, 2006). This is not only an important aspect of working towards permanence for children but also for maintaining ethical standards for clinical practice.

The importance of both formal and informal supports was emphasized as protective factors against dissolutioned adoptions. Informal supports include, but are not limited to, adoptive families support prior to the adoption, informal support groups for adoptive parents, and supportive employing agencies to allow for vacation time and possible changes in schedules to accommodate a child. Formal supports include agency support, access to adoption workers, access to counseling (individual, marital, and family), in-home behavioral support if needed, as well as safety plans for inappropriate or unsafe behaviors exhibited by the child. Families indicated a need for non-clinical services such as educational and social support in particular as families felt at times that clinical support staff "pathologize their problems" (Semanchin Jones & LaLiberte, p. 11, 2010). Families also emphasized a need for full disclosure of the child's records prior to the adoption, including "social, medical, and genetic history", as these important details are not given at times (Semanchin Jones & LaLiberte, p. 11, 2010).

Dissolutioned Adoptions as a Phenomenon in Child Welfare

In summary, dissolutioned adoptions are difficult to understand but through research there are key indicators to help identify risk factors for dissolution. The available literature has demonstrated the above risk factors as critical in both understanding the reasons for dissolution as well as provided insight into possible policy and practice changes to help prevent dissolutions from occurring. In this chapter, I have described the risk factors for dissolutioned adoptions by examining statistics and policies as well as the individual characteristics of the adopted child, adoptive parents, and adoptive agency and workers. In the following two chapters, I will provide a detailed introduction to the two theories that will be used to examine the phenomenon of dissolutioned adoptions in the final chapter using case material to provide concrete examples for integrating theory into practice.

CHAPTER FOUR

ATTACHMENT THEORY

This chapter on attachment theory will provide a brief history and overview of the theory including but not limited to key concepts and features. This chapter will also provide an overview of empirical studies that both support and contradict attachment theory. As attachment theory is a large and encompassing theory to cover, the focus will be mainly on the concepts of a secure base, internal working models and the impact of grief and loss on attachment in childhood. To conclude this chapter, a brief overview of attachment as related to dissolutioned adoptions will be provided examining the clinical implications and limitations.

History and Development of Attachment Theory

Attachment theory was developed as a joint collaboration between John Bowlby and Mary Ainsworth. Although this theory began as a theory of development, in recent years it has a become widely accepted as a psychodynamic theory due to it's focus on the importance of internal working models as influential in development throughout one's lifespan (Berzoff & Melano-Flanagan, 2011). It is important to note that attachment theory is not a theory offering interventions but instead a framework to understand the unconscious process influencing one's relational patterns. Interestingly, much of Bowlby's first writings are influenced by ecological theories to explain the attachment behaviors between mother and child as related to protection from predators.

John Bowlby, a Cambridge University graduate, studied under Melanie Klein in the 1940's after volunteering at a school for "maladjusted children" (Berzoff & Melano-Flanagan, p. 187, 2011; Bretherton, 1992). While studying under Klein, Bowlby became deeply concerned with the lack of parental involvement in the treatment of children as well as Klein's emphasis on child fantasy rather than the reality of the child's life circumstances (Berzoff & Melano-Flanagan, 2011). Bowlby at this time, agreed with Donald W. Winnicott in the concept of a "good enough mother" to encourage positive child development and strongly emphasized the importance of family involvement in the treatment of children; in fact Bowlby is known for one of the first published works on family therapy (Stroebe & Archer, p. 29, 2013; Bretherton, 1992). Bowlby developed this theory to understand the biological impact and purpose of proximity seeking behaviors and the implications later in life for children who may have been, neglected, abused or abandoned by their attachment figure.

Bowlby was interested in the ecological aspect of mother-child attachment, influenced by Charles Darwin, then later Sigmund Freud and Alexander Shand. In regards to Darwin, Bowlby was particularly intrigued by the theories of emotional expression with grief and loss, using these theories to argue that attachment and proximity seeking behaviors from infant to mother is a form of evolutional protection of infants from predators (Stroebe & Archer, 2013). Bowlby also studied ecological works including the attachment behaviors of ducks and monkeys to further explain the biological aspects of attachment (Berzoff & Melano-Flanagan, 2011). In addition to the works of Darwin, Freud and Shand's ideas on mourning and sorrow influenced Bowlby's development of theory as well. Bowlby utilized these ideas to understand the reaction of infants to the loss or separation from caregivers (Stroebe & Archer, 2013). Among others influential

figures not listed here, Bowlby was taking pieces from various theories in attempts to explain the phenomena of attachment he was observing.

Mary Ainsworth is also a key contributor in this theory. While studying under Bowlby in the 1950's she studied mother/child interactions with her husband in Uganda (Berzoff & Melano-Flanagan, 2011; Bretherton, 1992). It is in Uganda that Ainsworth began to recognize the connection between a mother's sensitivity to her child's needs and the child's attachment behaviors, noting secure or insecure attachments in children (Berzoff & Melano-Flanagan, 2011; Bretherton, 1992). Mary Ainsworth is credited with the creation of the Strange Situation, which defines and differentiates different attachment styles in infants as noted upon separation and reunification with their mothers (Berzoff & Melano-Flanagan, 2011). In this Strange Situation, infant's react in different manners at the separation and then reunion with their mothers; Ainsworth noted that an infant's distressed reaction to this separation is considered a developmental milestone (Berzoff & Melano-Flanagan, 2011). To provide a brief summary, Ainsworth defined three distinct attachment styles: avoidant (infants not reacting upon separation and not responding to mother's return, directly related to a parent's unavailability to their child), ambivalent (upset upon separation and unable to calm upon return as related to chaotic and inconsistent caregiver responses), secure (upset reaction upon separation and calming with mother's presence) (Berzoff & Melano-Flanagan, 2011).

Also important to note are Mary Main, a student of Mary Ainsworth that developed an Adult Attachment Interview to assess adult attachment styles utilizing ideas from Mary Ainsworth's infant attachment styles (Berzoff & Melano-Flanagan, 2011). In addition, James and Joyce Robertson and their film "John, Nine Days in a Residential Nursery" painfully illustrated the traumatic effects of a nine-day separation of a child from attachment figures (Berzoff &

Melano-Flanagan, 2011; Bretherton, 1992). Each contributor listed, as well as many more, assisted in providing the groundwork for key concepts of attachment theory such as internal working models, secure base, and the impact of grief and loss.

Overview of Attachment

Attachment theory is defined as "emotional connection to someone, evidenced by proximity seeking, feelings of security in the person's presence, and protest on separation" (Stroebe & Archer, p. 29, 2013). Attachment theory, as stated earlier, was first created as a theory of development to explain a biological need for infants to maintain safety and physiological homeostasis (Bowlby, 1988). An infant can do so by maintaining closeness to their primary caregiver, allowing their own bodies to self regulate based on their mother's bodies, for example, their heart rate and blood pressure. This "physiological synchrony" with an attachment figure sets the groundwork for a child's emotional regulation later in life (Allen, p. 45, 2001). In fact, research shows opioid use (narcotic drugs) can mimic the biological experience of attachment, demonstrating the powerful biological need that people have for this experience (Allen, 2001). It is under this framework that attachment theory was developed to understand the impact of trauma on affect regulation.

It is suggested that early attachment to a primary caregiver is the "foundation for distress regulation" (Allen, 2001). These early attachments also influence the development of attachment styles as defined by Mary Ainsworth, avoidant, secure and ambivalent (Berzoff & Melano-Flanagan, 2010; Stroebe & Archer, 2013). For example, a child may develop an avoidant attachment if their primary caregiver is emotionally unavailable when the child is in distress.

Bowlby (1979) touches on patterns of "pathogenic parenting" such as rejection,

unresponsiveness, threats to abandon, or guilt inducing behaviors upon the child resulting in insecure attachments due to the constant threats of losing an attachment figure (p. 137).

Overall, attachment theory has three main points which are as follows: attachment is a biological need that is necessary to regulate the central nervous system and later encourage emotional regulation, attachment is deeply related to a child's development and relationship with primary caregivers, and that attachment styles and development should be held in mind when discussing regression/ fixation behaviors (Bowlby, 1988). As a brief overview of attachment theory is for the most part impossible, the focus on three main concepts will provide a background understanding as to why attachment theory is important in understanding adoption dissolution, particularly ideas of internal working models, secure base, and the impact of grief and loss.

Internal Working Models

Internal working models (IWM) are defined as a mental representation of attachment figures, including their experiences of being support, accepted and loved (Allen, 2001). The IWM's are developed over repeated interactions with primary attachment figures in which there is a consistent response and predictability. If a child is responded to in a loving, patient and consistent manner the child's IWM will reflect their own self-image of being worthy of love and patience; these children will approach new relationships based on this IWM. In contrary, if a child's experience is that of abuse and neglect, the IWM will reflect a chaotic and dangerous representation of people in the world. IWM's allow a child to approach a new situation or relationship with a set of "preconceptions, behavioral biases, and interpretive tendencies" based on past interactions with attachment figures (Tucker & MacKenzie, p. 2210, 2012). This early model helps a child adapt to situations without much conscious thought. In essence, IWM's are

essential to survival in a chaotic and unsafe environment as they allow a child to instinctively and quickly react in a fight or flight manner.

Bowlby (1988) suggests that IWM's are developed based on the communication processes occurring between mother (/father) and child. This does not only include verbal communication occurring between the dyad but nonverbal communication such as eye contact, body language and overall responsiveness to the child's needs. Over time, this IWM developed early in childhood is to adapt as the child ages and parents treatment towards the child changes (increased responsibility, independence, etc.) (Bowlby, 1988). A major aspect of IWM is the ability to change over time with major changes to parenting skills and styles, the insertion of a caring "other" (teacher, family member) into the child's life or through psychotherapy (Berzoff & Melano-Flanagan, p. 197, 2010; Bowlby, 1988).

A parent's ability to imagine their child's experience in anxiety provoking situations and empathize is directly associated with the parent's attunement to their child (Berzoff & Melano-Flanagan, 2010). It is important to note, that while there is an emphasis on the parent's responsibility to be empathetically attuned to their children, that IWM's are transmitted generationally. As IWM's drive a person's relation with others, it would also drive their developing relationship with their child; for example if a mother had stable caregivers and developed an IWM of a supportive and self reliant self, this mother would encourage her young child's development of autonomy and exploration while providing a secure base for the child to return to (Berzoff & Melano-Flanagan, 2010; Bretherton, 1992). While examining attachment theory, parents play a crucial role in fostering healthy development but it is important to keep ideas of the intergenerational transmission of IWM's and attachment styles, as each mother and father was once a child too.

Bowlby states that children are unable to view positive aspects of themselves if it is not first recognized by their primary attachment figures, emphasizing the importance of attachment on a child's personality development (Bowlby, 1988). This emphasis on a primary attachment figure's perception of a child has a profound impact on a child's development of an IWM and attachment styles. Berzoff & Melano Flanagan (2010) found a connection between borderline personality disorder and early attachment problems; this sentiment is echoed in Stroebe & Archer (2013) by stating "terrible damage (which) may be done to a child's personality by deprivation" in the context of attachment trauma (p. 33-34). It is understandable that a child's personality development would be deeply influenced by an attachment figure's deprivation of caretaking, negative perception of the child or pathogenic parenting as defined above.

Secure Base

Another aspect of attachment theory that requires specific focus is the idea of a secure base. Bowlby (1988) defined a secure base as an attachment figure that allows a child to be "welcomed when he gets there, nourished physically and emotionally, comforted when distressed, (and) reassured if frightened (p. 11). As with IWM's, the development of a secure base requires an empathetically attuned parent that allows the development of autonomy and exploration while still providing love and guidance. In short, a parent's "intuitive understanding and respect for their child's attachment behaviors" allows for the development of a secure base (Bowlby, p. 12, 1988).

It is easily imagined that with a secure base from which to explore from, a person can gain confidence in their own abilities and talents, develop a cohesive sense of self and positive relationships with others in the world. Bowlby (1979) stated people are "happiest and able to deploy their talents to best advantage when they are confident that, standing behind them, there

are one or more trusted persons that will come to their aid should difficulties arise" (p. 103). With this early attachment figure providing safety and refuge in times of crisis, a person is constantly supported and accepted. But, as found with the development of IWM's, a person must have a self-image worthy of support and acceptance.

In early childhood, the development of a secure base is a slow process. An infant may separate from their mother for only moments without having to return to her presence for comfort. It is found that by the middle of the third year, a child may extend their distance from their mother to a half day, in adolescents separation may be weeks to months at a time if a secure base is present (Bowlby, 1988; Bowlby, 1979). In adults, the pattern of a secure base and attachment styles is replicated in relationships with significant others. As demonstrated above, the idea of a secure base is very similar to the development of IWM's, relying heavily on the ability of parents to respond empathetically to their child's needs in a consistent manner.

Impact of Greif and Loss

The development of a secure base and healthy internal working models are influenced directly by the availability of a primary attachment figure. Without this availability, the potential impact on a child's development of an attachment can range from the development to a disorganized attachment to feelings of despair and mourning over the loss. There was a time when psychoanalysts did not believe that children could mourn their losses as adults do. Bowlby (1979) quickly rebutted this idea by stating that children not only mourn in ways similar to adults, but they mourn for longer periods of time. This mourning process was very clearly demonstrated in the video of "John, Nine Days in a Residential Nursery" depicting a two year old child separated from his parents.

There are thought to be three specific stages associated with loss in children. These phases are protest (in which a child will cry and demand his mother potentially lasting a few days), despair (a child will become quieter, preoccupied with his mother's return, slowly losing his hopefulness) and finally the phase of detachment (if the mother is to return, the child will be uninterested in her, seemingly not recognizing her, demonstrate destructive tantrums and overt behaviors) (Bowlby, 1979; Bretherton, 1992; Stroebe, 2013). There is added emphasis on the phase of detachment if the separation from an attachment figure is more than 6 months. Bowlby (1979) warns that a child may become permanently stuck in the detached phase, unable to return to a healthy attachment despite having a previously secure relationship (Stroebe, 2013).

Not only is there a risk for attachment issues with prolonged separations, but also there is also significant risk associated with frequent changes in caregiving. Bowlby (1979) emphasizes the lengthy process for children to mourn and understand the finality of the loss of a primary attachment figure, stating that this process will be ongoing until a child obtains a new stable figure that they can become attached to. Bretherton (1992) continues this idea by stating that the constant change of caregiver, such as staff in an orphanage or frequent foster care changes, do not allow a child to form a deep attachment with a primary figure. This unavailability of an attachment figure maintain the mourning process as the child's "attachment behaviors are activated" but unable to be soothed (p. 763). Unresolved grief in early childhood may lead to depression, anxiety, and suicidal behaviors later in life (Bowlby, 1979).

Also relevant to the impact of grief and loss through attachment theory are the use of defenses such as splitting, avoidance, and ideas of "fright without solution" (Berzoff & Melano-Flanagan, p. 196, 2010). In cases of loss, it is possible that part of a child may not believe that the loss in final, splitting their ego to hold both the belief that the loved one is lost and that the

loved ones may return (Bowlby, 1979). This splitting, although largely unconscious, creates a break in their personality development and is associated with psychiatric illness. Children may also develop avoidance or detachment behaviors, often as a result of rejected attempts of proximity seeking behaviors (Allen, 2001). Through these repeated rejections, the biological attachment systems in a child may shut down in order to avoid the frustration and arousal caused by rejections from an attachment figure (Allen, 2001). However, both splitting and detachment are caused by the unavailability of caregivers. The idea of fright without solution is caused by frightening behavior of the caregiver, causing the child, particularly infants, to fear their only source of safety (Allen, 2001; Berzoff & Melano-Flanagan, 2010). This type of behavior from an attachment figure is linked with dissociation and disorganized attachment.

The impact of grief and loss for a young child may cause devastating and lasting effects on attachment styles later in life. Behaviors such as splitting, dissociation, and detachment are prevalent in children who have experienced early losses without the availability of a replacement attachment figure. However, with the early replacement of caregivers by a stable and loving person, the prognosis for a child's attachment development is very good.

Empirical Studies in Attachment Theory

Empirical studies in attachment theory are a major contribution to the recent literature. As attachment theory was developed in the context of trauma, there is abundant research on attachment styles, including the addition of a disorganized attachment. A disorganized attachment is defined as "contradictory and confusing, with alternations among proximity seeking, avoidance, and resistance" upon reunification with caregivers (Allen, p. 51, 2001). Allen (2001) goes on to define behaviors common with disorganized attachments such as bizarre movements, apprehension to approach caregivers, and freezing. Disorganized attachment is

developed in two ways: through serious abuse and neglect or when a parent is fearful of their own child and portrays this fear in their caregiving (Berzoff & Melano-Flanagan, 2010).

Disorganized attachment is a focus of recent literature and continues to be examined further, particularly in relation to Reactive Attachment Disorder.

Empirical studies on attachment theory emphasize the connection between physical abuse, sexual abuse and neglect and attachment problems (Allen, 2001; Chisholm, Carter, Ames, Morrison, 1995). Studies also demonstrate the links between fright without solution and early childhood trauma to the development of disorganized attachments (Berzoff & Melano-Flanagan, 2010). In addition to the numerous studies linking trauma and attachment problems, there is also emerging research examining the impact of attachment styles on personality development (Berzoff & Melano-Flanagan, 2010). Hardy (2007) also demonstrates the link between attachment styles and biological affect regulation. It is also important to note that despite the abundant research on attachment theory, there is little evidence demonstrating the differences in attachment development between genders (Berzoff & Melano-Flanagan, 2010). Also, there is a gap in research in large-scale studies demonstrating the differences in attachment development through various cultures (Berzoff & Melano-Flanagan, 2010).

Attachment and Dissolutioned Adoptions

After reviewing the above information on adoption dissolution, attachment theory provides a lens to understand a child's potential development of a secure base and internal working models while experiencing changing of caregivers through the foster care system, orphanages, or failed adoptive homes. As many children in the adoptive system have also experienced abuse and neglect in their early years resulting in their removal from their biological

family, attachment theory provides a lens to understand how these early relationships may be affecting their ability to maintain an adoptive home.

The potential for instability in caregiving that results from removal form biological caregivers further complicates the development of internal working models. Tucker (2012) hypothesized that the frequent changes in caregiving common within the foster care system lowers the probabilities that a child may adapt to a caring, stable, adoptive home as their IWM reflects that of chaos and instability. In addition to the IWM's potentially reflecting a dangerous world, a child may not have developed a secure base in the context of early abuse and neglect, and therefore may not be able to utilize the basic biological self-regulation learned through the development of a secure base.

It is not difficult to imagine that if a child has no secure base and IWM that reflect early experiences of abuse and neglect that this child may be difficult to maintain in a home. Tucker (2012) explains that children experiencing multiple caregivers will internalize this experience and resist the possible attachments to others for fear of rejection. And as reviewed above, the behaviors associated with attachment problems range from depression to aggressive acting out behaviors. Attachment theory is a critical lens to view adoption, and particularly dissolutioned adoptions. When examining the impact of a failed adoption on a child, attachment theory can be utilized to examine the internal processes of the child, including the internalization of an IWM that says the child is unlovable. Through the idea of a secure base, attachment theory helps to explain the lack of self-regulation prominent in children who experience adoption dissolution. Finally, the concept of grief and loss on attachment can provide insight into the child's loss of both their biological family and then adoptive family. In short, attachment theory provides a

biopsychosocial lens to understand the clinical implications for children and adolescents who have experienced this level of loss through a dissolutioned adoption.

CHAPTER FIVE

NEUROSEQUENTIAL MODEL OF THERAPEUTICS

This chapter will begin by examining the neurobiology of the brain and the impact of trauma on brain development. Next, this chapter will provide evidence for the use of a "bottom up" (based in movement, rhythm and repetition) approach as opposed to a "top down" (cognitively based). The Neurosequential Model of Therapeutics (NMT) developed by Dr. Bruce Perry will be introduced as a method of assessment for working with maltreated children from a bottom up perspective and briefly review empirical studies on NMT. Within the NMT, interventions will be suggested to target various areas of the brain in sequential order of brain development. This chapter will end with a brief explanation of NMT as it relates to dissolutioned adoptions.

Neurodevelopmental Impact of Trauma

The importance of examining brain development in children is critical in understanding the impact of early trauma. Within the first three to four years of life, the human brain develops to approximately 90% of its full adult size, making the impact of early developmental trauma even more detrimental (Perry & Pollard, 2004). The need for a supportive, predictable, and safe environment filled with adults that respond to the child's needs is key in optimizing the development of a child's brain, but it is important to recognize the incredible malleability of the brain throughout the life span (Perry & Pollard, 1998; Perry & Pollard, 2004). While the brain

exhibits malleable qualities, a child cannot experience childhood trauma unscathed; the impact of such trauma requires specific interventions to help recover (Perry & Pollard, 1998). The manners in which trauma reminders are stored within the body also make a significant difference on how the child may experience the trauma throughout their life.

Solomon & Siegel (2003) discusses the impact of trauma on the left and right hemispheres of the brain, in particular the impaired growth of the corpus callosum that connects the hemispheres that typically develops in early childhood. When children experience early childhood abuse and neglect, the development of this connection is impaired. The right hemisphere of the brain is primarily for processing nonverbal cues (such as facial expressions, tone of voice and gestures), regulation of the nervous system, social cognition, retrieval of autobiographical memories, as well as self-soothing (Solomon & Siegel, 2003). Solomon & Siegel (2003) states that the left hemisphere of the brain is focused on linear, logical and linguistic thinking. The connection of the left and right hemispheres allows for an individual to create a logical, autobiographical story of their lives while maintaining regulation of the nervous system and utilizing self-soothing techniques if needed. When the corpus callosum, or connection between the hemispheres, is impaired, an individual will not be able to self regulate and construct a logical and linear trauma narrative.

In addition to the corpus callosum being impaired or under developed in the face of childhood trauma, the overall brain size may be reduced. One of the many issues associated with smaller brain size is the secretion of excessive stress hormones in traumatized children that are considered to be "neurotoxic", or toxic to the nerves and tissue, that over time limits the child's ability to "integrate mental processes and soothe emotional lability" (Solomon & Siegel, p. 17, 2003). Over time, these neurotoxic responses caused an alteration in the overall brain

development. For example, Perry states if the chemical responses to threat or trauma continue long enough in either a hyper-aroused or dissociative state, "molecular, structural and functional" changes will endure (as cited in Schetky & Benedek, 2002). Perry also states that in the dissociative state, the homeostatic state of the body will reflect that of withdrawal, avoidance, numbing, and helplessness due to the prolonged deactivation of the central nervous system (CNS) (as cited in Schetky & Benedek, 2002). In contrast, a child exhibiting a hyper-aroused state in the face of trauma may exhibit in increase in neurotoxins, basal temperature, startle response and sleep problems in addition to hyperactivity due to the extended activation of the CNS and adrenalin hormones secreted under threat (Schetky & Benedek, 2002). In both of these states, information processing is impaired and individuals may not be able to perceive the difference between threatening and non-threatening situations (Ogden, Minton & Pain, 2006).

In addition to the long-term neurodevelopmental changes above, the brain also enacts a "pruning" process to remove cells and unused neurons. As children develop and experience new and repeated circumstances, the brain makes neuronal connections in a use dependent fashion.

Siegel (as cited in Shapiro, 2002) describes this process as either the strengthening of new connections as they are repeated over time or the pruning of unused connections as the neurons die. Siegel (as cited in Shapiro, 2002) emphasizes this importance of this process in the adolescent years as the brain prepares for a lower synaptic density associated with adulthood. As the first four years of life are critical in the development of a child's brain, this pruning process is essential in understanding the importance of repetition of positive experiences to optimize development or how negative or chaotic experiences can expedite this pruning process.

Ogden, Minton & Pain (2006) define a phenomenon known as alexithymia as the inability to identify bodily sensations, emotions, and muscle activation. Ogden et al. also states

that due to alexithymia, children and adults will not be able to verbalize their emotions and utilize their emotions to guide their reactions. Van der Kolk (as cited in Shapiro, 2002) describes the behaviors of individuals in hyper-aroused states as being irrational particularly due to the lack of linguistic capabilities within the subcortical areas of the brain. Van der Kolk (as cited in Shapiro, 2002) discusses a study that demonstrates how when individuals re-experience their trauma, the Broca's area in the brain is deactivated and the limbic system is activated causing the individuals to lack language to describe the experience and lose the capacity to understand what is going on in the present time and space. This may be a confusing experience for traumatized individuals as their emotional state is activated but an individual may not recognize this activation and there may be no identifiable reason for this activation.

Bottom Up v. Top Down Interventions

In addition to the neurobiological impact of trauma affecting the individual, there is emerging literature demonstrating the lack of effectiveness of cognitive based trauma focused treatments due to the minimal attention to how trauma affects the physical body. Cognitive based treatments, such as Trauma Focused Cognitive Behavioral Treatment (TFCBT) focuses on constructing a trauma narrative to then confront and change possible cognitive distortions within the narrative. TFCBT is just one example of top-down therapies for working with trauma, focusing on cognitions and emotions. Landreth (as cited in Malchiodi & Crenshaw, 2013) notes the lack of cognitive capacities in children to talk through traumatic experiences. In bottom up approaches, the treatment focuses on more primitive areas of the brain first, focusing on gaining control of the body and common trauma reactions prior to addressing cognitions.

Van der Kolk (as cited in Shapiro, 2002) states that high level functioning required in top down processing can only occur if the lower areas of the brain are functioning properly. One

cannot track or identify their internal sensations when the fight/flight/ freeze responses are activated. Ogden, Minton & Pain (2006) also discuss this idea by stating that both cognitive behavioral therapy and psychodynamic therapy are insight oriented, but research has shown that insight is not enough to resolve trauma symptoms. Ogden et al (2006) continues this argument by stating that only once an individual begins to integrate their bodily reactions to trauma can they regain control of their symptomology, obtain a physical sense of protection and safety, and then begin any insight-oriented treatment. As withdrawal and avoidance are clusters within the PTSD diagnosis, bottom up approaches allow individuals to regain control of lower, activated areas of the brain before moving forward in the treatment process without explicitly discussing their trauma.

Fisher & Ogden (2009) found that when discussing traumatic events, the nonverbal symptoms of re-telling the story could be overwhelming. These same symptoms of hyper or hypo-arousal can also be accessed in daily life without the individual having insight into potential triggers. When an individual is activated, they are considered to be outside of the "window of tolerance" in which trauma processing can occur (Ogden & Minton, 2006). Ogden & Minton (2000) identify that just as infants are dominated by the sensorimotor stage of Piaget's stages of development, traumatized adults and older children are also controlled by tactile and kinesthetic experiences when outside this window of tolerance. Siegel (as cited in Ogden & Minton, 2006) identifies that when outside the window of tolerance, the prefrontal area of the brain (higher levels of thinking and information processing) are shut down, leaving the brain relying heavily on the sensorimotor processing of the lower areas of the brain. This process is referred to as "bottom up hijacking" in which all external stimuli is perceived as threatening and

the body reacts accordingly (fight/flight/freeze). A bottom up approach allows a reduction of bodily symptoms to assist an individual in obtaining self-regulation skills.

Neuroimaging scans demonstrate the bottom up hijacking in activated states by showing a decrease in blood flow to the frontal lobe and increased subcortical areas (Malchiodi & Crenshaw, 2013). Children, in particular, typically (approximately two thirds) show physical symptoms of trauma such as "deregulation in the brainstem and diencephalon functions, cardiac activity, blood pressure and anxiety" (Malchiodi & Crenshaw, p. 183, 2013). In addition, children exhibiting these trauma symptoms only reach periods of asymptomatic status 33% of the time, as opposed to adult's asymptomatic status 75% of the time after receiving treatment (Malchiodi & Crenshaw, p. 183, 2013). James (1989) found early on in the research of childhood trauma that movement, exercise, and play are the most effective ways for a child to process traumatic experiences as the child is often disconnected from bodily sensations and unable to physically relax. The Neurosequential Model of Therapeutics reflects this research and aims to assist children in calming areas of the brain.

Neurosequential Model of Therapeutics

Dr. Bruce Perry, MD, PhD is both a clinician and a researcher in the field of child psychiatry dedicated to improving outcomes for traumatized children. Perry developed the Neurosequential Model of Therapeutics to work with traumatized children to integrate key neurodevelopmental research and traumatology into treatment with children and families. Perry has integrated the past 30 years of trauma research into this approach to be utilized with children and families in preschools, outpatient clinics, child welfare protection agencies, and residential treatment centers with positive results from preliminary research (Perry, 2009). This approach

was specifically developed to address the neurodevelopmental impact of trauma and provide a lens to integrate this new emerging research into practice with children.

As NMT is a relatively new framework for the treatment of trauma in children, there is a need for more research to support this framework as an evidenced based practice (EBP). As of date, NMT contains elements of EBP such as multiple sites participating in NMT certification, positive results published by independent groups, and a manualized certification and training process (Perry, 2013b). Perry's ChildTrauma Academy is working to develop empirical research to demonstrate the effectiveness of NMT in a variety of settings, including plans for randomized controlled trials (Perry, 2013b).

The Neurosequential Model of Therapeutics (NMT) is defined as an approach to "clinical problem solving" meant to complement other treatments and theories commonly utilized with children (MacKinnon, 2012). NMT provides "an integrated understanding of the sequencing of neurodevelopment embedded in the experiences of a child, and supports biologically informed practices, programs, and policies" (Perry, p.1, 2013b). NMT asks clinicians to reconstruct the experiences of the child, focusing specifically on how "genetic, epigenetic, intrauterine, early attachment experiences and developmental adverse experiences" have affected the child's development to date (MacKinnon, p. 211, 2012). Two key assumptions of NMT are that interventions are most effective when replicating the sequential manner of the brain and that interventions must provide repetition to not only activate the targeted area of the brain but also to influence changes (Barfield, Dobson, Malchiodi & Crenshaw, 2013).

NMT has six key principles; the first three principles of NMT will be examined in more depth due to their explicit focus on brain development. The first principle is that the brain is organized in a hierarchal manner, sending information from the bottom up (Perry, 2006). Perry

states that incoming sensory experiences such as light, sound, and smell, first "stops" at the brainstem and diencephalon. Perry emphasizes the unconscious nature of the brainstem and diencephalon as the main functions of these areas include body temperature, heart rate, blood pressure, sleep, appetite, and arousal (2006). As the brain sends messages from the bottom up, if the brainstem and diencephalon reflect patterns of chaos and threat after having repeated negative experiences, this message of insecurity and lack of safety will be sent to higher levels of the brain to be interpreted, activating various stress hormones along the way (Perry, 2006). Each time a child responds in this reactive manner to external stimuli, the maladaptive neuronal connections are strengthening. As the maladaptive connections are strengthening and the brainstem and diencephalon are driving the child's behavior, typical verbal therapeutic interventions are less likely to be effective in lowering the child's activated state.

The second key principle within NMT is "neurons and neural systems are designed to change in a 'use dependent' fashion" (Perry, 2006). In short, Perry (2006) describes that state of persisting fear and chaos within a child's life developing after prolonged exposure to traumatic experiences. Specifically, this persisting fear state now becomes a trait of the child, causing "maladaptive emotional, behavioral, and cognitive problems" to replace the development of healthy adaptive responses (Perry, 2006). Examples of the new maladaptive responses to threat include hyper-vigilance, anxiety, sleep issues, and other commonly observed trauma symptoms (Perry, 2006). To re-wire the neuronal connections from maladaptive to adaptive responses is completed through repetition, particularly targeting the brainstem; Perry suggests interventions such as drumming, dance, and music to activate the brainstem and encourage repetitive movements and sound (Perry, 2006).

The third principle of NMT is that the brain develops sequentially (Perry, 2006). Perry (2006) emphasizes the importance of recognizing that all input and stress responses go through the brainstem and diencephalon first, therefore, these systems of the brain must be the first focus of treatment. The fourth principle focuses on the rapid brain development early in life, the fifth principle emphasizes that all neuronal systems within the brain can be changed but some may take longer periods of time, and the final principle brings attention to how the brain was originally developed for a different world (Perry, 2006). By utilizing these principles when tracking the early development of a traumatized child, one can identify the developmental goals that may have been missed and the brain areas that need specific therapeutic interventions.

Interventions within the NMT focus mainly on the brainstem and diencephalon and include dancing, drumming, yoga, breathing, animal grooming and interactions, jumping on trampolines, swinging on swing sets, massage, and other rhythmic sensations that encourage repetition (MacKinnon, 2012). These interventions are meant to replicate the sensations experienced in utero of a mother's heartbeat, as this sensation is closely linked to feelings of security and comfort; this is considered one of the most powerful associations held by humans (MacKinnon, 2012). As the brainstem and diencephalon are attributed to unconscious functions, the limbic area regulates emotion, memory, social behavior and learning, while the neo-cortex focuses on self awareness, executive functioning and higher levels of thinking (Ogden, Pain, Fisher & 2006). Examples of interventions for higher areas of the brain include the traditional insight oriented treatments and creative play therapies, allowing NMT to naturally progress into other therapy interventions after the brainstem and diencephalon are regulated.

NMT and **Dissolutioned Adoptions**

As stated earlier, NMT provides a framework to helping children mediate the brainstem and diencephalon's functions. Until these areas of the brain are restored to healthy functioning levels, cognitive or insight oriented trauma treatments cannot be completed effectively. NMT, although a relatively new concept, has been showing positive results in a variety of settings. When examining this framework in relation to dissolutioned adoptions, there are many implications for both treatment and policy.

Policy implications include the importance of creating a supportive environment for children, particularly between birth and four years old as the brain grows up to 90% of adult size (Perry, 2005). Perry (2005) suggests that through education on brain development in early childhood, investment in early childhood development programs (Head Start, Birth to Three, etc.), implementation of policies to address intergenerational cycles of abuse and poverty and more resources for parents to access education and support, there may be an opportunity to create positive outcomes for children across the country.

Important to note that within NMT, there is concern about psychotropic medications affecting the reward sensors within the brain. Gaskill & Perry describe limbic rewards as relational (sharing with a friend), diencephalon rewards as appetite driven (eating rich foods), and the brainstem rewards as decreasing physical distress (swimming on a very hot day) (as cited in Malchiodi & Crenshaw, 2013). MacKinnon (2012) draws attention to animal research demonstrating the potential for psycho-stimulants and psychotropic medication to change the neuronal reward systems, causing concerns particularly for the limbic regions. This is a concern as trauma may alter a child's attachment to others and treatment should focus on reforming this attachment, however, if the child's brain does not receive reward sensors for human contact, this

may create difficulties in reconnecting with others. For children in the foster care system, psychotropic medication is prescribed three to eight more times than children out of the system with the same symptomology (MacKinnon, 2012). This disproportionate rate of prescribed medications indicates a need for trauma informed policies and practices in the child welfare system and associated child psychiatry practices.

When examining NMT and practice with children experiencing dissolutioned adoptions, a framework has now been given to understand the common behaviors of traumatized children such as developmental delays, eating problems, sleeping issues, aggression and attachment issues (Perry, 2013a). The need for appropriate targeting of interventions is clearly indicated within NMT, giving clinicians a starting point when working with children with complex trauma. NMT also emphasizes the importance of repetition when working with traumatized children and the plasticity of children's brain. More importantly, NMT provides hope in assisting children overcome their early traumatic experiences and resume healthy functioning.

CHAPTER SIX

DISCUSSION AND RECOMMENDATIONS

Overview of Previous Chapters

This purpose of this theoretical thesis is to explore how theories of attachment and the Neurosequential Model of Therapeutics can be combined to best serve children and adolescents experiencing dissolutioned adoptions. Chapter I provided a brief introduction to the ideas proposed while Chapter II described the use of a case study and the methodology to be used to examine each theory/framework. Chapter III provided an in depth exploration of dissolutioned adoptions, a concept within child welfare policies and practice that requires attention but does not have substantial research surrounding it. As dissolutioned adoptions statistically affects approximately 1-10% of children nationwide, it is not a topic of focus for clinical practice (Testa, 2004). However, no matter the statistics, any issue affecting child welfare, safety and permanence requires attention to address and prevent the problem. As there is limited research on dissolutioned adoptions, there is also limited research on how to assist children who have experienced this level of loss once the adoption has failed.

Chapter IV examined attachment theory, as developed by Bowlby, Ainsworth and Main as a potential theory to utilize when working with children who have experienced dissolutioned adoptions. Attachment theory was originally developed as a theory of child development, only recently becoming accepted as a psychodynamic theory (Berzoff & Melano-Flanagan, 2011).

Chapter IV was specifically focused on three main concepts of attachment theory, the ideas of internal working models, secure base, and the impact of grief and loss. Internal working models within attachment theory are viewed as the mental representation of attachment figures and the experiences of being loved, supported and accepted (Allen, 2001). A secure base is defined as an attachment figure that a child can return to when feeling frightened or distressed in which they can be "nourished physically and emotionally" (Bowlby, p. 11, 1988). Both internal working models and a secure base are unconsciously carried throughout the lifespan. Finally, the impact of grief and loss through an attachment theory lens provided insight into how children experience loss.

Chapter V explored the framework of the Neurosequential Model of Therapeutics (NMT) developed by Dr. Bruce Perry. This chapter began with a discussion of the neurodevelopmental impact of trauma, with particular focus on the impact of trauma during early childhood. After examining the impact of trauma on the brain, this chapter then went on to compare "bottom-up" techniques versus "top down" (cognitively based) interventions for children who have experienced trauma. Bottom up interventions in particular focus on the brainstem and limbic areas of the brain and utilize rhythm, repetition and movement to help stabilize the lower areas of the brain. NMT provides specific techniques and research to use as a tool to complement other theories and treatments (MacKinnon, 2012). NMT was described in detail as a "clinical problem solving" tool for clinicians to use when working with traumatized children (MacKinnon, 2012).

The current chapter, Chapter VI, will provide a synthesis of attachment theory and NMT through the use of a case illustration. This case illustration is a composition of details of various children I have worked with in the past. This case illustration will be viewed first in the lens of attachment theory and then through a lens of NMT. A synthesis of the two perspectives will then

be given. To end, this chapter will examine the strengths and weaknesses of this theoretical investigation and give recommendations for both clinical practice and child welfare policy.

Case Illustration: Vin

I worked with Vin in an inpatient psychiatric unit for children in two separate hospitalizations. Vin was admitted to the unit after exhibiting out of control behaviors at home including but not limited to threatening to harm self and others, kicking, spitting, and tantrums for over 4 hours. His adoptive parents were concerned with the safety of both Vin and the other children within the home at the time of admission. However, these behaviors were not new behaviors shown by Vin either at home, school or in public places.

Vin was a 7-year-old male adopted from the Dominican Republic at age 5 by his current adoptive parents. Vin and two siblings were placed in the orphanage when Vin was approximately age 2 according to adoptive records after his mother was diagnosed with an illness and unable to care for them. Also found in his adoptive records were indications that from age 2-5, Vin was physically and sexually abused by older children within the orphanage as well as emotionally and physically neglected by staff due to the number of children served. Prior to his adoption, Vin experienced the earthquake of 2010 as the orphanage was in close proximity to the Haitian border. During the earthquake, multiple children died, particularly infants, and the orphanage was raided for supplies. Vin's adoptive parents indicated the after the earthquake, the adoption process was much easier due to the financial pressure's on the country at the time.

A married, white, heterosexual couple from New England with one adopted child from India had adopted Vin and two of Vin's biological siblings. Vin's adoptive mother was a college professor and him adoptive father was a general contractor. The family was financially stable, in the upper middle class, and had flexible schedules so one parent was always with the children.

Vin presented as a petite, thin child with a slight Dominican accent when he spoke. In sessions with Vin, he was playful and energetic at times, other times presenting more soft spoken and shameful (particularly after an incident requiring restraint or seclusion). Vin did not make eye contact when speaking, had difficulty sharing with peers on the unit, and difficulty following staff's directions. It was difficult at times to determine what would upset Vin. This was Vin's first interaction with the mental health system. Vin's siblings did not display the same intensity of behaviors.

Vin was diagnosed with Post Traumatic Stress Disorder by the unit psychiatrist and completed medication trials without positive results. Vin's behaviors on the unit included screaming, hitting, kicking, spitting, throwing items, scratching himself, biting himself, hitting his head against the walls, threatening others, and stating he wants to die. As stated, all these behaviors are reflective of the behaviors shown at home and school on a daily basis. Vin also dissociated on a semi regular basis, often rocking and moaning for hours. During these hours, he was unresponsive to external stimuli. Staff on the unit struggled at times to maintain his behaviors, particularly when in common areas of the unit with other children. Vin rarely spoke of returning home and of his adoptive parents or biological siblings.

I worked as Vin's primary therapist during both admissions to the unit. During Vin's first admission, only his adoptive father attended family sessions and was involved in discharge planning as he stated that Vin's adoptive mother was home with the other children. After Vin's first discharge, he was returned to the unit within 48 hours. Based on the recommendation of my supervisor, family and discharge planning sessions now required adoptive mother's presence as well. In sessions with parents, they did not wish to see Vin; they also did not visit Vin throughout his weeks of admission. The focus of the sessions was on the inability to maintain Vin despite

various programs recommended. When coordinating discharge plans for Vin, there was a noted hesitation in the adoptive mother, resulting in my asking how the family felt about Vin returning home. Adoptive mother had informed me that thinking about Vin returning home made her "physically ill". Adoptive parents endorsed low motivation to make efforts in assisting Vin transition home through the recommended discharge plans.

After multiple discussions with Vin's parents and the child welfare system becoming involved, a decision was made to send Vin to a residential treatment facility for a period of time. Vin's adoptive mother made clear statements that she felt she was on a "vacation" without Vin and couldn't consider him returning home. Vin's adoptive father made more efforts to stay connected with Vin. Both parents indicated marital and financial strain caused by Vin's behaviors within the home and the lack of resources to successfully maintain him. Eventually, Vin was discharged from the inpatient unit to the residential facility and I no longer had contact with Vin or his family. All discussions led me to believe that parents would enter Vin into the child welfare system, and the child welfare worker assigned to the family was working with the parents on the legal implications of this decision.

Attachment Theory and Vin

When looking at Vin through attachment theory, there are three main concepts to examine. Each of the concepts to be explored are simply a theoretical hypothesis, as Vin's early experiences both inside and outside of the orphanage are largely unknown. By looking at the potential development of his internal working model and secure base, one can hypothesize Vin's perception of himself and others. Attachment theory also provides a lens to examine how Vin may have experienced the multiple losses throughout his life. As attachment is defined as a "physiological synchrony" with an adult figure that is replicated throughout later relationships

throughout one's life, it is imperative to examine how early attachments are influencing current behaviors (Allen, p.45, 2001).

Internal working models (IWM), in particular, are developed based on relationships with first caregivers. If a child's first caregivers responded with love, patience, and kindness their internal working model will reflect an image of self-love and self worth. IWM's are developed not only through a parent's attunement to a child's needs, but also through non-verbal communication (eye contact, etc.) (Bowlby, 1988). When looking at Vin's possible development of an internal working model, much of his early developmental history is unknown. What is known, however, is that his mother brought him to an orphanage at age 2, and she was sick with Tuberculosis (TB) at the time. Based on the possibility that Vin's mother was sick with TB throughout much of Vin's early childhood, she may not have been able to be attuned to her son's needs. Vin's IWM may have been further damaged by the constant changing in caregivers within the orphanage and lack of attunement, eye contact, and appropriate physical touch. Similar to the development of IWM is the development of a secure base.

When looking at the possible development of Vin's secure base through attachment theory, there are similarities to the development of his IWM, however, and it is thought that the development of a secure base takes more time. A secure base is developed through a "parents intuitive understanding and respect for their child's attachment behaviors" (Bowlby, p.12, 1988). Attachment behaviors including crying, reach for a caregiver, suckling, in addition to other attention seeking behaviors as a way to seek physical and emotional comfort form a parent when distressed (Bowlby, 1988). It is thought that by the third year a child can separate from their primary caregiver for approximately half a day without distress, not able to leave a caregiver for extended periods of time until adolescence (Bowlby, 1988: Bowlby, 1979). When looking at

Vin, he entered the orphanage at age 2, when theoretically he was unable to manage this separation without significant distress. As Vin was in the orphanage from 2-5, and his mother was possibly ill throughout his earlier years, Vin's secure base may not reflect a place of comfort and support from which to explore. Without this secure base, Vin would have difficulty developing confidence, sense of self and positive relationships with others.

Without the availability of a caregiver to encourage the healthy development of an internal working model and secure base, a child may develop a disorganized attachment style. It is thought that when a child is separated from a primary caregiver for periods over six months, that significant attachment concerns can develop after entering the phase of detachment within Bowlby's stages of grief (Bowlby, 1979). When examining Vin, his detachment from his mother extended periods of years within the orphanage, which puts him at risk for becoming permanently stuck in the detachment phase of grief, which Bowlby stated may prevent him from being able to return to a healthy attachment style (1979). The grief process as defined by Bowlby has no specific time range, but rather extends until a child can form a new relationship with another caregiver (1979). As Vin was in an orphanage for years, this grief process continued until at least the time of adoption, and may have continued despite the adoption process due to the adoptive parent's waning commitment to him.

Also directly related to the impact of grief and loss for Vin is the dissociative behaviors exhibited on the unit. Bowlby (1979) describes the splitting of a child's ego when they cannot accept the finality of the loss experienced, leading to an increased likelihood of developing psychiatric illnesses. This is important when examining Vin as he rarely showed appropriate proximity seeking behaviors, most likely associated with failed attempts throughout his childhood. He was also detached from staff, peers and his adoptive family, often avoidant of

physical touch and eye contact perhaps a result of his attachment system shutting down to avoid the frustration and rejection caused by caregiver's unavailability (Allen, 2001). Vin's unresolved grief and loss may have resulted in depression, anxiety, and suicidal behaviors seen upon admission to the inpatient unit as well (Bowlby, 1979).

The impact of Vin's early losses throughout his childhood and lack of available caregivers are directly associated with the behaviors exhibited within his adoptive home. Vin's lack of attachment behaviors caused his adoptive mother to feel that Vin could never "attach" to her as his mother, creating frustration and feelings of failure. Vin's adoptive family struggled to understand the impact of early attachment and trauma on Vin's development. Vin had developed a disorganized attachment style to protect himself from the multiple losses experienced and failed attempts of seeking comfort from others. Vin's internal working model likely reflected a chaotic and dangerous environment with no secure base to return to when distressed. Vin's biological system then reflects a constant state of threat, developed to help Vin survive in an environment defined by abuse and neglect.

Neurosequential Model of Therapeutics and Vin

When examining Vin and his behaviors through a lens of NMT, there is a major emphasis on caregiver's response to his behaviors to intervene and assist him in crisis. There is also emphasis on the neurodevelopmental impact of trauma experienced by Vin and how the trauma has influenced his current behaviors. As stated earlier, Vin's behaviors include jumping out of cars, threatening himself and others, sexualized behaviors towards adults and children, hoarding food and toys, kicking, spitting, hitting, banging his head, as well as dissociative episodes of rocking and screaming.

When looking at Vin's possible brain development within the context of trauma, Vin's current behaviors help support the hypothesis that his brain was significantly impacted at an early age. Based on Solomon & Siegel's (2003) description of the development of the corpus callosum, it can be assumed that based on the significant abuse and neglect experienced at such a young age, that the corpus callosum had not fully developed to link the left and right brain. Without this connection, Vin cannot create an autobiographical narrative of his experiences while implementing self-soothing techniques. As Perry & Pollard (2004) stated that the brain develops to 90% of it's current size by age four, Vin had already experienced major abuse and neglect by this age. With a smaller brain size, Vin may have an increase in "neurotoxic" stress hormones that may influence his ongoing hyper-aroused state (i.e. increased body temperature, adrenaline secretions and activation of the central nervous system) (Schetky & Benedek, 2002). Also important to note is that due to the extended period of abuse and neglect throughout early childhood, Vin's brain may have "pruned" unused cells and neurons in an expedited manner due to the repeated exposure to chaos and threat.

When using NMT as a clinical problem-solving tool, the focus of interventions falls primarily onto the primitive areas of the brain, the brainstem and diencephalon. As Vin's behaviors indicate that he is outside of the window of tolerance for trauma treatment, there must be explicit attention given to stabilizing the lower areas of the brain first. As many of Vin's behaviors can be categorized as negative attention seeking behaviors, NMT would suggest the use of healing touch or message to begin a pattern of non sexualized touch, swinging on a swing to help with self regulation, or perhaps occupational therapy activities to begin sensory integration for Vin (Perry as cited in Ford & Courtois, 2013). These activities are essential to regulating the brainstem through movement, rhythm and repetition in simple, everyday

interventions. NMT also emphasizes the use of respite for children similar to Vin, to allow parents to rest, ensuring that they can respond in an appropriate manner when needed.

Vin displays freeze, flight and fright behaviors, all of which require different interventions. For example, as Vin often displays freeze behaviors such as dissociative behaviors including rocking and moaning, NMT would suggest the most appropriate intervention would be soft singing or humming and slow, soft touch (2006). When Vin is exhibiting flight behaviors including jumping out of cars and running away, the most useful interventions to use as the crisis is escalating is a display of confidence by caregivers, quiet tones of voice, and calming presence (Perry, 2006). Lastly, the fight behaviors shown by Vin such as hitting, kicking, threatening and spitting, he may need separation from others, time alone or appropriate and safe physical restraint by a supportive adult (Perry, 2006). When discussing potential interventions to use with Vin to staff and caregivers, psychoeducation about the cause of these behaviors is key. The most important piece for all adults working with Vin to understand is that all the behaviors above are caused by fear and a lack of appropriate adult responses throughout his life, therefore the use of self to provide a calming presence is of utmost importance.

Synthesis of NMT and Attachment Theory

The synthesis of NMT and attachment theory allows for a full biopsychosocial approach to working with Vin. Attachment theory does not provide any specific interventions for working with children and families, but rather a frame of reference. On the contrary, NMT provides a clinical problem-solving tool with a variety of interventions rooted in brain development and the impact of abuse and neglect. Together, these two theories/ frameworks provide a clinical approach to working with children experiencing dissolutioned adoption and can be widely applied within the child welfare system due to the flexibility within the frameworks.

By using attachment theory to understand how Vin experiences the loss of his biological parents, and then how the development of his secure base and internal working models influences his current relationships with others, it is clear that although Vin has been adopted into a new family, the impact of his early experiences prevail. The emphasis on the unconscious processing of these early relationships is key, as Vin's parents often expressed that Vin was "not attaching" to them "on purpose". Attachment theory allows for psychoeducation to focus on the unconscious aspects of his behaviors and constant pattern of needing his parents then rejecting them. This education would be beneficial for any caregiver working with Vin in the future, as he experiences the dissolution from his adoptive parents. However, attachment theory does not provide adoptive parents or adults working with Vin interventions to use that would help Vin in crisis.

NMT not only provides specific interventions but also a neurodevelopmental framework to understand how the brain has been impacted by abuse and neglect, particularly in early childhood. When this information is combined with the components of attachment theory, psychoeducation can focus not only on possible unconscious processing of past relationships, but also on the secretion of hormones and underdevelopment in the brain as a result of trauma. The emphasis on psychoeducation with the two frameworks chosen is key, as the behaviors shown by children experiencing a dissolutioned adoption are often extreme and require significant attention, empathy and patience.

The techniques listed above were incredibly helpful when working with Vin on the inpatient unit, and attachment theory allowed staff to understand how Vin may experiences the potential dissolutioned adoption. NMT has shown success in stabilizing the lower areas of the brain and allowing children to process earlier traumatic experiences. Although the brain is

incredibly malleable, utilizing both attachment theory and NMT requires time and patience. With interventions provided by NMT to assist caregivers in the immediate crisis as well as work towards brain stabilization, the synthesis of NMT and attachment theory allows for a biopsychosocial approach to provide psychoeducation and interventions. This combination of approaches is aimed to educate, empower and support those working with children who have experienced a dissolutioned adoption.

Strengths and Weaknesses

This theoretical examination has both strengths and weaknesses when applying the research completed to a larger population. Strengths of the research would include the attempt to fill in the gaps of literature focusing on children experiencing dissolutioned adoptions, as most literature is focused solely on the adoptive family's experience. Another strength of this examination is the biopsychosocial application of the chosen frameworks. Attachment theory and NMT provides a biological examination of brain development, a psychological focus of unconscious functioning as well as a social lens to examine how early relationships affect the present. In addition to the biopsychosocial focus, both attachment theory and NMT allow for the unique experience of each child to taken into account when providing treatment to children experiencing a dissolutioned adoption.

The weaknesses of this examination would be the inability to generalize this research due to the use of a case study and lack of qualitative or quantitative research. This research does not provide new data to the literature base on dissolutioned adoptions, but rather a new perspective to clinical interventions for children who have experienced dissolutioned adoptions. Also, although NMT and attachment theory allows for each child's unique experience to be considered, it does not provide evidenced based interventions to assist children and research on

NMT is still expanding. Finally, this research only utilizes two theories/ frameworks and does not integrate information from other perspectives that many be equally as beneficial to children experiencing a dissolutioned adoption.

Recommendations for Practice and Policy

After examining dissolutioned adoptions through attachment theory and NMT, there are specific recommendations for family therapy, individual therapy, and child welfare practice and policy. Although the explicit focus of this research is to expand research on dissolutioned adoptions and provide clinical interventions for working with the children after this phenomenon, this research can also be used to create preventative interventions and policies.

When using this research for family therapy, the emphasis is on preventative work before a dissolutioned adoption. This research provides some of the characteristics associated with high risk for dissolutioned adoptions, such as adopted siblings groups, history of abuse and neglect, race and gender, and length of time in foster care prior to adoption. There are also specific characteristics associated with adoptive parents, including education and marital status and income levels. A clinician may utilize the above interventions using NMT and attachment theory to intervene and provide support to an adoptive family prior to dissolution. There is a possibility that the interventions and psychoeducation could empower the adoptive parents and assist them in providing the empathetic care their adoptive child requires.

When utilizing this research for individual therapy with a child after a dissolutioned adoption, the use of NMT to provide specific interventions to help a child stabilize the primitive areas of the brain is the start of treatment. AS NMT provides a problem solving technique, a clinician can create a brain map to identify potential areas of the brain that need to be developed based on the child's history of abuse, neglect, prenatal drug exposure, etc. Attachment theory can

help the clinician understand the child's potential difficulty maintaining healthy relationships with others based on their early history as well. When utilizing NMT and attachment theory, there is an emphasis on the impact of early experiences on current behavior and level of functioning.

Although individual and family therapy is beneficial in both repairing relationships after dissolution and possibly preventing adoption dissolution, perhaps the most influential arena to utilize this research would be child welfare policy. Recommendations for child welfare policy include implementing a national tracking system to follow statistics of adoption dissolution. A national tracking system, such as the AFCARS, would allow child policy makers have concrete statistics on adoption dissolution. With this data, more attention can be given to this phenomenon and more research can be conducted on the characteristics of children, adoption agencies and adoptive parents that are at risk for adoption dissolution.

Another recommendation for policy would be specific training for all adoptive parents on NMT and attachment theory, specifically the impact of early experiences on brain development and future relationships. NMT provides simple, every day routines and interventions that would benefit any child. Giving adoptive parents this tool prior to adoption can provide more confidence and education for parents to empathetically respond to children in their home. This training would be widely beneficial for adoptive agency workers and child welfare workers as well. In addition to the training, adoptive families should have access to resources that would assist them in managing a child with the behaviors associated with dissolution. Possible resources may include counseling services, in home psychiatric services, respite care, and access to adoption agency workers after the adoption is finalized.

Training for adoptive workers should focus on permanency and attachment. Agencies must recognize the impact of high worker turnovers and lack of training on children displaying behaviors associated with dissolution. When a child enters or re-enters the child welfare system, it is likely that the first person encountered would be the child welfare worker. It would be greatly beneficial if this worker was educated in attachment theory and NMT and stayed with the child throughout their time in the welfare system. A stable, consistent and patient child welfare worker could provide a therapeutic experience from the beginning of the dissolution process. A child welfare worker educated in NMT and attachment theory would also be a beneficial resource for the adoptive family and a possible advocate for assisting the child gain resources at home, school and within the community.

Conclusion

Adoption dissolution is an area of child welfare that is relatively unknown and not addressed. Despite having relatively small statistics, any issue involving child welfare, permanence and safety demands immediate attention to maintain the best interest of the children involved. It is crucial to understand the impact of adoption dissolution through the eyes of a child to create policies that can protect children from this phenomenon. By using attachment theory and NMT to examine the impact of early abuse and neglect on the child's biopsychosocial development, clinicians, adoptive parents, child welfare workers and policy makers can begin to draw attention to the devastating impact of adoption dissolution. Despite the negative consequences of this phenomenon, there is hope. Through attachment theory and NMT, interventions can focus on rebuilding the underdeveloped areas of the brain and rebuilding essential relationships slowly, as a child's brain is incredibly malleable (Perry & Pollard, 1998).

In order to prevent adoption dissolution, it is essential to increase awareness of adoption dissolution and the impact it has on children within the child welfare system.

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