

Nature versus Nurture: A Study of Adopted and Biological Children and their Behavioral  
Patterns

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### Abstract

Nurses encounter many different populations of people every day and they must know how to treat them. Adopted children are a population that nurses encounter and there are disagreements concerning whether they are at an increased risk for developing behavioral problems as compared to biological children. It is also debated whether genetics or environment plays a more prominent role in childhood development. Most studies conclude that adopted children are at an increased risk for more behavioral problems due to the unique struggles and challenges they must overcome with genetics playing a bigger role than environment. Nurses can use this information to treat adopted children and their families more efficiently.

## Nature versus Nurture: A Study of Adopted and Biological Children and their Behavioral Patterns

Individuals are constantly trying to figure out what factors influence a person and their behavior. They wonder whether genes influence people, or whether it is more the environment and the way people are raised. This debate has been going on in the world for decades and there has never been a clear definitive answer. In fact, there probably never will be a clear definitive answer. The reason is that this is an opinion question and there are facts to back up both sides of the argument. A more interesting question is whether this debate has any effect on adopted children at all. Adopted children live in multiple environments and are certainly not raised in the same way they would have been if they had never been adopted. Multiple studies have been done to say that adopted children are more likely to develop behavioral problems compared to biological children. Is this really the case? Or is there no correlation at all? Nurses and other health care professionals need to know answers to these questions so they can better understand how to handle adopted children. Searching deeper into the characteristics of adopted and biological children may shed some new light to health care professionals and the public on the reality behind adoptees.

### **Adoption**

#### **Definition of Adoption**

First, it is important to gain a better understanding about the meaning of adoption. Adoption is a legal process that creates a new relationship between a parent and a child. The adoptive parents legally become the parents of the adoptee and are granted all the rights that biological parents are bestowed (Adoption, 2010).

**Characteristics of an Adoptee**

Children waiting to be adopted have distinct characteristics that make them eligible for adoption. These children can be from any race, ethnicity or background and from many countries around the world. The children can range in age from a couple weeks old to adolescents. Usually, children waiting to be adopted are from a home where there is a physical, emotional, or other type of problem. The problem can include abuse, death of parents, and irresponsible parents (Adoption, 2010).

**Steps of the Adoption Process**

The adoption process is not a process that should be taken lightly and the adoptive parents need to consider all the aspects involved in order to adopt a child. There are mandatory legal criteria in the state and country the parents want to adopt as well as preferred criteria mandated by the agency that the potential adoptive parents are using to facilitate the adoption. These criteria are not always inclusive and differ from agency to agency but are a major aspect of which adoptive parents need to be aware. Additionally there are the criteria the birthparents are looking for as well. The birthparents are the ones who are placing their child in a different family so they get an opinion in different aspects they are considering as well. Lastly, there are some limitations placed on the adoptive parents that potential parents need to consider when deciding they want to adopt a child. Some of these include marital status, length of marriage, age, health issues, disabilities, use of tobacco, drugs, and alcohol, fertility status, financial stability, housing, and other children present in the home (Adoption, 2010).

The adoption process is not easy and takes time, planning, and patience. First, people need to educate themselves and family members on the process and develop a

plan of action. In this plan the adoptive family needs to determine the type of adoption, how the finances will be handled, and an adoption agency. Then prospective parents fill out an adoption agency request form and wait for a child specifically for them. When a child is found, there are more steps that are taken between the parents and the adoptive agency before the adoption proceedings are made in front of a judge. An important step of the proceedings is that before the adoptive parents can obtain parental rights of the child the judge must determine that the biological parents have voluntarily given up their rights or the court has terminated those rights. Once that has been established the judge reviews any pertinent information and the judge will either approve or disapprove the petition to adopt. If the petition is approved, the adoption is finalized and an Adoption decree is issued (Adoption, 2010).

### **Statistics about Adoption**

There are many statistics to consider on the concept of adoption. There are many children waiting to be adopted and many people willing to adopt. In 1992, there were 127,441 children in the United States waiting to be adopted and the numbers increase from there. It is important to realize how high the numbers are and that many children are waiting to be adopted. Many people are willing to adopt but few fulfill the desire. This is shown from the fact that in the past 9.9 million women considered adoption whereas only 31% of those women went through with the adoption and only 16% of those women looked into the steps of adoption. One needs to realize that it is a step to consider adoption but only those who follow through are successful in helping those children who are waiting to be adopted (Adoption, 2010).

## **Nursing and Adoption**

### **Nursing Job Description**

A nurse encounters many different types of patients. A nurse has to be able to understand the perspectives of people from different ages, backgrounds, ethnicities, and lifestyles. By understanding where people come from, a nurse can know how to treat them better. The job of a nurse is to help those who are in need and help them get better. However, treating a patient is not only helping their physical needs, it is also caring for their emotional, spiritual, and mental needs. It is important to understand a patient's background, lifestyle, and where they came from in order to treat patients more efficiently. Nursing is a wholesome profession where every aspect is built on the next one. This allows nurses to treat their patients better daily (U.S. Bureau of Labor Statistics, 2009).

### **Adoption in Relation to Nursing**

The findings throughout this thesis could guide the nursing practice for generations to come. If nurses gain insight on where adopted children come from and the differences between them and biological children, they can better understand how to help adopted patients. Being more relatable to one's patient allows a nurse to provide better care for the patient and therefore have more positive outcomes. Nurses have to know all about cultures and how cultures view aspects of life differently. This mindset can be used for adopted children because they share differences as well.

Adopted children and adolescents are a part of the population and they get treated by nurses just as often as biological children. Understanding the health needs of the adoptive family is more important as adopted children are hospitalized and seen more

frequently than biological children. Adopted children are more likely to have chronic medical conditions, one or more overnight hospitalizations and one or more inpatient operations (Smit, Delpier, Tarantino, & Anderson, 2006). This information provided by the authors makes this topic even more important to the nursing field.

Nurses can play a vital role in the lives of adopted children and their families. Adopted children and their families have their own stories, and the children must deal with their unique history and thoughts and feelings about the adoption process. What most adopted children hear about adoption can have a powerful influence in their lives and therefore health care professionals, including nurses can impact these children. Nurses need to support the adopted children and families and can do so in a variety of ways. First, they need to use appropriate language that reflects acceptance and does not use the term adoption since it is not necessary. This works the same with biological children in that there is no reason to use terms such as *real* or *natural*. Second, nurses need to understand there will be missing information in the adopted child's health history and nurses should provide reassurance that the child can be effectively cared for even without all the information. By nurses showing sensitivity and respect to the fact that the child was adopted, most families will cooperate better if they feel as if health care professionals value their family. Nurses can also provide empathy in helping determine the need for intervention when parents find it difficult to determine the reasoning behind the child's struggles. Lastly, nurses can provide support to the child to let them know they are comfortable with adoption and help them feel accepted. All of these aspects combined can help adopted children and their families overcome any challenges they may encounter in the future (Singer & Krebs, 2008).



It is also true that adopted children and their families encounter many probing questions that can make them feel vulnerable. Questions such as “Is this your real mother?” to “Where did you get your blonde hair?” can cause extreme frustration, hurt or problems within an adopted family. The questions are never meant to be harmful, but they can be uncomfortable to handle and could harm a child’s self-esteem. This allowed the “W.I.S.E. UP!” program to be developed to empower adopted children with choices to respond to questions that are posed about adoption. This tool allows children to make four choices when faced with an uncomfortable or difficult question including: W – walk away or ignore what you hear; I – it’s private. I do not have to share the information with everyone; S – share something about your story but you choose what it is; or E – educate others about adoption in general. This tool can allow adopted children and their families to turn a challenging moment into a success. This can be beneficial and nurses can provide this help. Nurses know that adoptive families face many challenges but they may have never heard of the “W.I.S.E. Up! program. Nurses can inform the families about their options to develop a trustworthy patient-nurse relationship and to help adoptive families conquer some challenges they may face (Singer, 2010).

Since there is controversy as to whether adopted children may be at increased risk for behavioral and adjustment problems compared to biological children it is important for nurses to understand this research (Stams, Juffer, Van IJzendoorn, & Hoksbergen, 2001).

### **Purpose of Research**

The purpose of this literature is to determine whether adopted children are more likely to develop behavioral problems based solely on the fact that they were adopted.

Do other life experiences influence behavioral problems, or are genetics involved? There will never be a clear answer to whether nature or nurture is more influential in individuals, but that question impacts adopted children and the chances of developing behavioral problems. Previous studies will be reviewed and analyzed to determine whether behavioral problems are more prone in adopted children and whether nature or nurture impacts adopted children and their behavioral patterns.

### **Integrated Literature Review**

#### **Previous Research Studies that Acknowledge Behavioral Problems in Adoptees**

There are many research studies that have been done in the past discussing that adopted children are in fact more prone to developing behavioral problems. One study found that adopted children are more aggressive and delinquent compared to biological children. They also found that boys were more aggressive and delinquent compared to girls. Aggressive behavior can be both physical and verbal acts. Delinquency can include conduct problems such as lying, cheating, and stealing. In this study the researchers examined pairs of unrelated adoptive siblings and pairs of biologically related siblings and had their parents and teachers rate them to determine their aggressive behavior in adolescence. The parents and teachers were both asked to complete a Child Behavior Checklist that had them rate the children's aggressive and delinquency acts. After the results were obtained the researchers concluded that adoptive children are more aggressive and delinquent compared to biological children based on parent and teacher ratings. In fact, the researchers found that if one was a boy and an adoptive child the likelihood of delinquent behavior increased exponentially (Deater-Deckard & Plomin, 1999).

Another research study found that the age when a child was adopted affects behavioral problems as well. Researchers took 211 adults who were adopted as children and had their parents provide information about their childhood, specifically adolescent years. The adoptees were placed into three different groups. One group was for baby adoptions, which was for children who were placed before the age of six months. Another group referred to as *good start/late adoptions* was for children who were adopted later in life but enjoyed satisfactory care as babies. The last group referred to as *poor start/late adoptions* was for children who were adopted later in life and experienced adverse care as babies. The parents of the adopted children were then interviewed in great depth about their adopted children. They were encouraged to talk about their child's known pre and post placement experiences, their behavior, characteristics, school performance and achievements. The researchers were hoping to gather as much information about the adopted children as possible in order to receive the most accurate information for their study. In this study, the researchers found behavioral areas that affected adopted children as they were growing up. First, the parents identified behaviors that brought the child into conflict with their parents which included self-mutilation, eating problems, excessive lying, truancy, expulsion, running away from home, alcohol problems, theft, police involved offences, and domestic violence. All of these problems were behavioral problems that occurred with adopted children and caused major ramifications. Next, parents identified learning problems at school including poor concentration and poor academic success. Lastly, parents identified insecure behaviors including anxiety and how that affected the child's life. It was found that those placed after the age of six months are at an increased risk of showing behavior, anxiety, and

psychiatric problems during adolescence. However, compared to non-adopted children, children that are adopted as babies do reveal higher levels of externalizing disorders in adolescence such as attention-deficit-hyperactivity disorders and substance abuse behaviors. They also tend to be unhappier, have anxious behavior and problems with peer relationships. The *poor start/late adoptions* experienced the greatest number of behavioral problems while *the good start/late adoptions* experienced the lowest number of behavioral problems compared to the other two groups (Howe, 1997).

There are many discrepancies however whether or not adopted children are at greater risk for behavioral problems because there have only been studies done with small samples. Another study decided to take a different approach and surveyed thousands of adopted and biological children. The children were asked to complete a questionnaire and then some children were followed up with an at-home interview. The researchers looked at many different areas to compile their results including school grades, participation in academic extracurricular activities, participation in nonacademic extracurricular activities, school troubles, skipping school, substance abuse, self-esteem, emotional distress, future hope, health problems, physical problems, sickness, and other problems. After examining all the different areas, the researchers found that adopted children are at a greater risk for problems with substance use, academics, psychological well-being, physical health, fighting, and lying to parents. This is interesting because adopted children are at a higher risk for positive outcomes like physical health and school achievement but also at a higher risk for negative outcomes such as substance abuse and lying. Despite the positives the results show that adopted adolescents do in fact have

more school, psychological and other problems than non-adopted individuals (Miller, Fan, Christensen, Grotevant, & Van Dulmen, 2000).

Sometimes adoption relates to high-risk children or those that struggle with special needs. According to Smith, Howard, & Monroe (2000), these adoptions require special attention since other studies have shown that adopted children are at a greater risk for behavioral problems. This research study sought to explore the emotional issues that relate to the adjustment problems in those *at-risk* adoptions. The researchers assessed 292 adopted children whose families were at risk and the families had sought support or help. Most of these children were *special needs*, which is defined differently across the country. For this study, the term *special needs* was given to these children who may have difficulty securing permanent homes due to race, ethnicity, older age, sibling group status, or special mental, physical, or behavioral disabilities. The families had social workers or adoption preservation workers working with the families assessing the families and the child using different behavioral forms and questionnaires. The researchers found that half or more of the adoptees exhibited characteristics of conduct disorders including behaviors such as, lying and manipulation, defiance, verbal aggression, violation of family norms, peer problems, tantrums, physical aggression, destruction of property, stealing, hyperactivity, curfew violations, running away, rejecting affection, and withdrawal. Some of these families expressed interest in dissolution of adoption because the problems were so severe. The researchers found that separation/attachment conflicts were the most commonly identified emotional issues related to adopted children in this study. This is related to the severity of the behavioral problem that the child is experiencing. The researchers also found that adopted children

struggle with other negative emotions that can relate to their behavioral problems such as loss, abandonment, fear, grief, identity issues and depression. This research study affirms that adopted children do struggle with behavioral problems but was limited in the fact that it only focused on those families having problems. However, they were able to show that these behavioral problems are only outwards signs of emotional problems that have not yet been resolved including fear of becoming attached, unresolved grief, a poor sense of identity, and depression. The researchers believe that if the underlying emotional issues are worked through as a family the outward behavioral problems can be diminished (Smith et al., 2000).

Another research study focused on the adopted families as a whole and how communication can help lessen the behavioral problems that may be occurring. Smit et al. (2006), decided to focus on the hospital setting and how adopted children and their families fair in the medical setting as compared with biological children and their families. Previous research found that adoptees make up a higher proportion of children in psychological distress and make up about 5% of those children referred to outpatient mental health clinics and 10-15% of children in psychiatric treatment centers. One of the reasons for the increased referral of adopted children is the psychological impact of adoption on the children. This is because adopted children are more vulnerable to various emotional, behavioral and academic problems than their non-adopted peers and are especially vulnerable to fears of separation which is a main fear that occurs during hospitalization. This is so important to address since it is known that adopted children are more likely than biological children to have more hospitalizations. The purpose of this study was to compare hospitalizations involving adopted and biological children and

their families and determine if there is a significant difference in stressors and distress experienced during their stay. The researchers gathered adoptive and biological families that had a child hospitalized for at least 24 hours at a large midwestern children's hospital to be included in the study. The sample was a convenience sample (those who willingly agreed to participate in the study) and the parents were asked to fill out a questionnaire that evaluated different stressors during their stay at the hospital. Then they were asked to evaluate their children's behavior during the stay in a different questionnaire. The adopted families were asked to complete a separate questionnaire rating their opinions about adoption and if they think that had an impact on their hospitalization experience. The researchers found that adoptive parents perceived the stress from their child's demanding behavior as greater than biological parents. They also found that adoptive parents tended to perceive their children as more distressed during hospitalization than biological parents; the differences were not statistically significant. It was also found that adoptive parents had four major areas of concern in relation to hospitalization, which includes lack of medical history, confusion about names and identity, the importance of communication, and attachment concerns. The researchers found that with the help from the nursing staff, the hospitalization experience can be less stressful for adoptive families. The increased level of the child's distress may be due to the child's fears of separation and abandonment, which can be calmed with the awareness of the information. With proper staff sensitivity and acknowledgement of the child's distress, strategies can be implemented to diminish the child's distress. Sometimes the adoptive parents felt as if they were not talked to enough and that caused lots of stress. The researchers found that the staff should be attentive to providing information and providing opportunities to

answer questions when working with adoptive parents. Most importantly the researchers realized the importance of having all health care providers examine their own attitudes towards adoption and being certain to show respect for adoptive families and being aware and sensitive to the unique needs that are presented during a hospitalization experience (Smit et al., 2006).

Another study took a different approach to this issue and acknowledged that adopted children are at greater risk for more behavioral problems than biological children but offered some solutions to help adopted parents deal with these problems. Phillips (2007) looked at many different studies and found that the major problem is that adoptive parents cannot find information on how to cope with their children's behavioral problems. The two main problems that parents had trouble getting help for were conduct disorders and/or attachment difficulties. Some researchers found that after questioning adoptive parents regarding education in one study, adopted children had greater educational needs than children in general and over half of the children experienced difficulties and problems with learning, concentration, and organization. These researchers emphasized the need for awareness and understanding in the schools in dealing with adoption and attachment issues. The researchers have many theories as to why adopted children have more behavioral and other problems in the school setting such as being exposed to parental substance misuse or the many home and school changes once in the system. They used the Attachment Theory framework in order to understand adopted children and how to help adoptive parents deal with problems that may arise throughout the years. The researchers found that the attachment issues related to early trauma, loss, or separation can affect their school behavior exponentially. Some of the



behaviors that can occur because of early attachment issues with adopted children include but are not limited to: poor concentration, talking all the time, ignoring instructions, disruptive behavior, trying to create chaos and mayhem, lying, stealing, secret lives, and suddenly deteriorating behavior. A solution is then proposed to help limit these resulting behaviors by making schools and adoptive parents aware of these issues in order to improve the adopted child's life. This study was different from some of the other studies in that instead of just acknowledging that adopted children are at a greater risk for behavioral problems compared to biological children, they offered solutions for how to help. They want parents and the school system to have pamphlets and brochures to help them deal with these situations to limit the behavioral problems (Phillips, 2007).

From these studies it seems as if adopted children are at a greater risk for behavioral problems compared to biological children. However, it is important to note that one study did point out that despite all the negative research about adopted children a caution should be stated. They stated that an implication from all these findings is that adoption should not be discouraged and adoption is not bad for children. Adoption is good for children compared to the alternatives including foster care or remaining with the biological parents who are unable or unwilling to care for them. So in hindsight, adoption is a positive solution to difficult circumstances. Since there are numerous articles reflecting on how adopted children are more likely to have behavioral problems Miller et al. (2000), suggested trying to improve that outcome. They say that maybe acknowledging that adoptees have more problems than non-adoptees is the first step to a brighter future. The researchers feel that if adoptive parents are more fully informed about the elevated problems then they may be more prepared to handle them. They also

suggest that the adoption policy and practices be revised to help provide adoptive families with more long-term support in order to help handle these issues (Miller et al., 2000).

From all these studies people can conclude that it seems that adoptees are at a greater risk for behavioral problems. These studies affirm this hypothesis and supply evidence that compared to biological children, adopted children seem to have more adjustment and behavioral problems throughout their lifetime. If one only examined these articles, then there would be no proof to deny these findings, but one needs to look at the whole picture and see if there is research to deny behavioral problems found in adopted children.

### **Previous Research Studies that Deny Behavioral Problems in Adoptees**

There is another side to the adoptive argument, and there are also many research studies that deny that adoptees are at a greater risk for behavioral problems compared to biological children. One study found that adopted children are not at a greater risk for negative outcomes. Borders, Black, & Pasley (1998) said that adopted children are just as likely to have normal social interactions and behaviors as biological children. These researchers took adopted and biological groups (children and families) and developed questions to help study the parents' well-being, their attitudes towards family life, parenting behaviors and values, and perceptions of their child's behaviors. The researchers found that there was no difference regarding the parents' levels of depression, parents' levels of overall happiness, or the sense of overall health between the parents of adopted and biological children. There were also no differences found between them in regard to traditional attitudes toward family life. The findings also indicated there was no

difference in the reported frequency of any of the parents discipline behaviors and the responses of the parents of both adopted and biological children. It is important to note that this was a contrast study compared to the other literature available yet they found adopted children were not at risk and there were no significant differences between their behaviors and those of biological children. Adopted children and their parents are typical children and parents. Researchers need to begin to view adoption as a normal way of life and begin to focus on the normal developmental issues that arise in all types of families. Instead of always focusing on the negative it would be more beneficial to identify and focus on the healthy aspects of adoptive families (Borders et al., 1998).

Another study looked at family structure to see if that impacted behavioral problems, and they found that it makes no difference on adopted or biological children. They decided that this would be good to research as previous studies have shown that when there are biological children in an adoptive family there may be increased adjustment problems. They studied 130 adopted children and classified them into five different family structures: only children, children with younger adopted siblings only, children with younger biological siblings only, children with older adopted siblings only, and children with older biological siblings only. The children's psychological and academic achievements were measured using different questionnaires. After all the results were analyzed from parents, teachers, and children, only one significant difference was noted. This was that *only* adopted children and first adopted children may be at increased risk for behavior problems. This difference does support other research but researchers should be cautious because of the data and that it could have occurred by

chance. Adoption order and the presence of biological children in an adoptive family have little effect on the adjustment of the family (Brodzinsky & Brodzinsky, 1992).

Some researchers took a somewhat different approach and wanted to see how children do in adoption arrangements that differ in relation to the knowledge and communication between members of the child's family of birth and adoptive family. They linked the adopted child into two family systems (child's birth family and child's adoptive family) into a kinship type network. The purpose was to predict a range of outcomes in middle childhood from knowledge of preadoption risk factors and current adoptive family processes. The researchers gathered 190 adoptive families (mother, father, and child) and birth mothers. These children were placed during infancy and were in middle childhood during the time of the study and the families varied in degrees of openness from confidential to fully disclosed contact. The participants were interviewed and completed questionnaires. They found that there was no link between preadoption risk (family history, prenatal or preadoptive placement) and socioemotional development during middle childhood for adopted children. They also looked at collaboration in relationships related to adoption openness and how collaboration is not confused with level of openness yet collaboration must be considered along with other factors that affect the child's socioemotional development (Grotevant, Ross, Marchel, & McRoy, 1999).

Some studies examined a part of a child's life to see if this aspect has any affect on behavioral development. One study examined the *No stage* in both adoptive and biological families in relation to parenting styles and the behavior of the children to see if adopted children have more behavioral problems in comparison to biological children. These researchers wanted to investigate whether a foundation for the adjustment

problems that some adopted children may encounter lies in Erikson's second stage of development: autonomy versus shame and doubt. This stage has been quite difficult for both children and parents. This *No stage* was examined closely to see if that stage relates to the literature about negative outcomes of adopted children. Due to the fact that emotional and behavioral problems of children are strongly associated with parenting practices they chose to investigate these specific practices and see what happens to these families. The researchers looked at parental attributions, parenting styles and practices as well as parental reports of children's behavioral problems. They wanted to see if there was a difference in all these areas according to biological or adoptive status. The families (both biological and adoptive) were given questionnaires to examine each of the different areas. According to the results, biological parents reported that their children had more problems on the Child Behavioral Checklist. It was also found that both groups used an authoritative style of parenting and both groups of parents made favorable attributions. This authoritative style of parenting means that the parents were patient, warm, responsive, sensitive, and attentive to their child's needs while still maintaining firm control over their child's behavior and explaining their rules. It was also found that the sources of bad behavior found in the study were attributed more to the situation the child was in rather than the actual child. One major difference between the two groups was that adoptive parents would seem more upset or angry about a child's negative behavior than biological parents; the reason is still unclear to the researchers. However, no differences were found between the parents as adoptive parents perceived fewer problems with their children than biological children, which makes this study rare in that sense. So, these researchers only examined a certain stage of life but were able to determine that

the *No stage* is not of significance when examining adopted children's behavioral problems (Solomon & Poirier, 2006).

Another study decided to investigate early aspects of adopted children's adjustment by looking at maternal sensitivity, infant attachment and infant temperament. These researchers believed that higher maternal sensitive responsiveness and secure child-mother attachment relationships would contribute to favorable adjustment of adopted children and vice versa. Researchers found that maternal sensitive responsiveness, infant attachment security, attachment disorganization, and temperament helped foreshadow the adopted child's adjustment in middle childhood. Both attachment disorganization and temperament showed lower adjustment raters later in life. Their hypothesis was correct that early mother-infant relationship predicts socioemotional and cognitive adjustment in middle childhood despite the fact that the children may be adopted (Stams, Juffer, Van IJzendoorn, 2002).

Another study investigated an adopted child's adjustment pattern in families with both adopted and biological children. Adopted families have not been researched extensively which is why it is difficult to find documentation on their trends as compared to the biological family structure. These researchers wanted to see how families adjust in all areas when an adopted child is placed in a family with only biological children, with only adoptive children, or with both. Questionnaires were used to examine areas in relation to the study. Some focused on areas of personal security like self-reliance, and feeling of belonging whereas others measured social security like family, school, and community relations. Their findings confirm previous data that adopted children have lower reported personal adjustment than biological children, yet the differences were so

small that it is unclear whether it is significant. This demonstrates that the idea of an adoptive setting providing a serious hindrance to the overall adjustment of the adopted child cannot be justified (Ternay, Wilborn, & Day, 1985).

One last study in this area examined the mother infant socioemotional interactions between adopted and biological children. This seems to play a major role in children's behavioral and adjustment status due to the fact that the mother infant interaction in the beginning of life can be significant later. These researchers had examined previous studies showing a differing of opinions from adopted children being more prone to behavioral problems like aggression, and hyperactivity. They also reviewed other studies saying adoption provides benefits to those children, and being adopted does not mean that the child will have difficulties. The social behaviors of mothers and their first infants in families by adoption and by birth showed no differences of socioemotional behavior between the two groups. The study included 74 women who were observed (37 who had adopted and 37 who had given birth). The participants were recorded by video for mother infant interactions and asked to fill out a questionnaire to provide more information about them. Different infant and mother behaviors were observed. Infant behaviors included non-distress vocalization, which occurred the most, followed by alert expression, looking at mother, smiling, distress vocalization and negative expression. Mother behaviors included speech to child, which occurred the most, followed by direct attention, pat/caress, and social play. Between these two groups there were positive and negative correlations that were noted evenly across the board. Overall, results show that behavior responses between the infants and their mothers were similar in many respects between adoptive and nonadoptive families. However, some differences were noted.

Birth infants were in an alert state more often than adopted infants and smiled more. Yet, when looking at the data as a whole it shows that infant functioning is similar between the two groups. It was also noted that adoptive mothers provided more nourishment and patted/caressed their babies significantly more than birth mothers. Adoptive mothers may affectionately touch their babies more often because they perceive their babies as especially precious. The fact that adoptive mothers feed their infants more was somewhat surprising but feeding the infant is a critical test to show the competence of the mother in her parenting role. The data may suggest that the socioemotional response is more coherent for birth than for adoptive mothers mainly due to the fact that they may have spent more time together. This was the first time a study such as this has been done, but it is important to note that overall behavioral responses were equal and it does not appear as if adopted children's socioemotional behavior responses differ from those of biological children (Suwalsky, Hendricks, & Bornstein, 2008).

Sometimes research takes a unique approach and examines ways to help remedy the problem instead of just stating that there is one. One study helped develop some ways to counsel adoptive families in order to improve their quality of life. Families with problems are more interesting than families who are normal or ordinary. Dysfunction always captures the public's interest and the adoption process has not been spared the scrutiny. Often, only the negative adoptions make the media or are studied because they are interesting and few people like to hear about the adoptions that have gone well. Some would argue that there is so much research acknowledging that adopted children are at an increased risk for more behavioral problems because that is more interesting and provides more entertainment than adoptions that have gone smoothly. It is true that the adopted



child's experience is different compared to if their biological parents would have raised them. Some strategies to help those impacted by adoption: the adoptive parents, the adopted child, and the adoptive family. Adoptive parents are usually unique in the fact that they place an important emphasis on the child's environment to pass on necessary skills and values because they do not have a biological influence. The adoptive parents need to gain a sense of entitlement, accept differences and not reject the birth parents in order to have a smoother family life. The adopted child often struggles with the pressure to be perfect, fantasies of family origin, grief, and loss. The family needs to be made aware of these struggles in order to encourage family bonding. The adoptive family can promote a better lifestyle when they have family building, fairness, and maintain open communication. The environment of this family is defined by how they confront the differences created by their adoption status. Adoptive families may need help, but children are not necessarily at a greater risk for behavioral problems because they are adopted. Every child and family encounters problems but how those problems are solved is what makes the difference (Saiz, 2001).

When one examines the research articles that deny more behavioral problems in adopted children it appears that adopted children are not at a greater risk for developing behavioral problems compared to biological children. Researchers have gathered information from both arguments and have to determine who has the best argument and if there are other factors to consider.

### **Nature or Nurture: What has a bigger influence?**

Other studies examined both adopted and biological children to determine whether genes or the environment, or both contributed to the child's behavioral pattern.

One study determined genetic and environmental influences on adult life outcomes. They surveyed people that were a part of the Texas Adoption Project, which began over 30 years ago with families that had adopted a child from a church site for unwed mothers. They were followed throughout the years to determine how the adopted children fared throughout life to see if adoption influenced the child's life for better or for worse. Studies have been done in the past to determine whether genetic or environmental differences play a larger role in a person's adult life but not as much in the adoption population. These researchers developed questionnaires to determine the child's life outcome. They wanted to see if their outcomes differ for individuals based on whether they were adopted or a natural birth and whether the outcomes were more similar in the family who shared genes or just shared a family life. Questionnaires were given to the original participants in the Texas Adoption Project and their families and were put together to assess several aspects of life adjustment. They included items about academic achievement, occupational status, marriage, closeness to parents during school years, adjustment in school, and personal problems. Then they were asked a series of questions about their personality status. The researchers first looked at how adopted children turned out compared to biological children in respect to all these categories. There were differences noted but they were not large. Biological children were rated as being better students in high school, received more education, and had jobs with greater responsibility. Adopted children were rated as having more problems, such as more often being anxious or depressed, and in more trouble with the law. Adopted children also displayed less social activity and were less independent, mature, and agreeable. The researchers also found that biologically related individuals tend to be more alike than

non-biologically related individuals suggesting how big a role genes play in overall life outcomes. The primary factor is genes, since adoptees do have less satisfactory outcomes than biological children due to the fact that they come into these new families with a genetic disadvantage. This genetic disadvantage ends up affecting them for years to come (Loehlin, Horn, & Ernst, 2007).

Another study related to the previous one in that it also summarized the research of the families involved in the Texas Adoption Project. People have argued that environment plays a much bigger role than genes and can be shown in certain populations because good parents gave the children good environments. Adopted children are natural subjects because they are unrelated to their adoptive parents. So often it is wondered whether adopted and biological children growing up in the same family resemble each other because of their environment or if the genes they inherited play a bigger role. They found that genes contribute more in the development of intelligence and personality than the family environment. The Texas Adoption Project found that growing up in the same family makes people less like each other as each person develops his/her own personalities to make themselves unique. People are sometimes intrigued that environment does not play a big role and when it does it is more the unique experiences a child has on their own compared to the shared family environment they live in. Despite assumptions, genes may play a bigger role in behavioral patterns than environment does according to the results from the Texas Adoption Project (Jackson, 2010).

According to one study, adopted children were more likely to develop behavioral problems later in life and to become antisocial. This is congruent with what was stated earlier about adopted children and their development of more behavioral problems.

However, the researchers found that the biological parents influenced the adopted children's antisocial behavior rather than the adoptive parents especially in regards to biological parents and psychiatric disorders that may have been the main contributing factor. This would promote a genetic influence on children rather than an environmental influence (Ge, Conger, Cadoret, & Neiderhiser, 1996).

However, there are even newer studies discussing how genes and the environment both are influential in what happens to a child in the womb. This is different than just focusing on a person as an adult. This allows researchers to focus more on fetal life instead. Additionally, there are always different answers to the question about what influences individuals the most: one's DNA (genes), or one's experiences in life (environment). But no one ever considers the life of a fetus and how that impacts one's life. Researchers name this fetal origins. It includes factors like the kind and quality of nutrition one received in the womb, the pollutants, drugs and infections one were exposed to during gestation, and mother's health level, stress level and state of mind while she was pregnant. All these factors shape a person as a baby, a child, and as an adult. Pregnant women are always hearing that what they do for the next nine months will affect their child and their pregnancy, but rarely is the concept of fetal origins discussed and that what happens during pregnancy influences this child for the duration of their lifetime. For example, some studies have shown that the more weight a woman gains during pregnancy, the higher is the risk that her child will be overweight. Healthy weight along with other choices such as air quality can impact the fetus's life now and later. Different aspects that can influence the fetus during gestation but more importantly

continue to shape the person are all included in this newly founded fetal origin research that is beginning to answer unknown questions (Paul, 2010).

Most people agree that nature and nurture both are important and that without either one a person could not develop to his/her fullest potential. Yet, most of these studies affirm that genes are of greater influence when it comes to comparing adopted versus biological children. This allows one to think about the possibility of genes contributing more to adopted children's behavioral and adjustment problems as compared to the environment being more influential.

### **Summary of Literature Review**

In conclusion, all of this literature has been compiled to determine whether adopted children are at a greater risk for behavioral problems. It is also being used to help researchers determine whether genetics or the environment has a greater influence on the behaviors of adopted children. From the information presented, it seems as if adopted children are more likely to develop behavioral problems and that genetics and the environment are both influential but genes are more prominent. There is support for adopted children having more behavioral problems and for adopted children not having more behavioral problems. Yet, despite the differing of opinions there is more support to conclude that adopted children are likely to develop behavioral problems. However, when one thinks of this information it makes sense because adopted children and their families do have to go through lots emotionally to endure the challenges they face. It was interesting that genes seemed to play a bigger role in this than the environment even though they both were included. Valuable information was collected to see that genetics plays a more prominent role when it comes to adopted children and their behavioral

problems rather than their environment. It would be interesting to develop an opposing argument to find and achieve even more research that supports that adopted children are not at a greater risk for developing behavioral problems. Despite all the questions and differing opinions, this research can provide insight to this topic and help nurses better understand adopted children. This research can help nurses and other health care professionals gain insight about why adopted children act the way they do and if they do have more behavioral problems. Gaining knowledge of this information will allow nurses the chance to make a difference in adopted children's lives and also understand a better way to treat them in the healthcare setting. Hopefully, one now has a better understanding of adopted children and how they have a greater risk of developing behavioral problems.

### **Conclusion**

Despite what many research studies have shown, it is determined that adopted children are at a greater risk for developing behavioral problems. However, not enough research has been done to support that adopted children are not at a greater risk for developing behavioral problems. Rarely, does one hear about a positive adoption story and how well it is going, but instead one hears about the negative side of adoption and what it does to children. It is important to consider the other factors that affect adopted children and their behavioral patterns and think about how many adopted children do come from good homes and do not develop an increased number of behavioral problems. However, both genes and environment have a role in why adopted children behave as they do, with genes being more dominant. This allows researchers to understand that one

can only do so much to their environment without genetics interfering because they play a role as well.

This research can help nurses and other health care professionals gain insight about why adopted children act the way they do and may eliminate myths and misconceptions due to the source of opinions. Despite the fact that adopted children seem to be at an increased risk for more behavioral and adjustment problems they are similar to biological children and need to be treated as such. This gives everyone a fair chance of developing equally with few behavioral problems. Nurses reading this summary of information can be aware that an adopted child may present more difficulties in the health care setting. By becoming aware, they can be prepared for the differences and know better how to relate and treat the adopted children and their family. In the end, the most important aspect is that everyone is treated equally and fairly and that the adopted children do not feel discriminated against only because they were adopted.

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