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Exploring Sibling Relationships Among Youth in Foster Care

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EXPLORING SIBLING RELATIONSHIPS AMONG YOUTH IN FOSTER CARE

By

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ABSTRACT

Empirical knowledge about sibling relationships of youth in foster care is scant. The purpose of this study was to explore sibling relationships of youth in foster care and begin to build a stronger understanding of the potential protective role these relationships can have for youth in an uncertain circumstance. Symbolic interaction was used as the theoretical lens for this mixed methods study. The sample consisted of children who are currently living in foster care and attended a five-day sibling enhancement camp, called Camp To Belong. The results indicated that sibling relationships could be a protective factor for youth in foster care. In a qualitative exploration of the meaning of sibling relationships of youth in foster care, youth reported that their sibling has a positive and protective role. Furthermore, youth reports of greater sibling warmth significantly predicted higher scores of individual resilience, a trait that is associated with overcoming adversity. Another aim of this study was to explore developmental differences of sibling relationships for those in foster care. The results of this study indicated that there were no significant differences between youth in middle childhood and adolescents in how they perceived their sibling relationship quality in terms of sibling warmth and sibling conflict. Lastly, youth in middle childhood and adolescence had a significant decrease in sibling conflict as a result of their participation in Camp To Belong. The results of this study have implications for research, clinical practice, and policy that are discussed.

CHAPTER ONE

INTRODUCTION

"The sibling bond has been recognized historically for the stability and support it can provide throughout the individual's lifespan" (Ryan, 2002, p. 79).

Childhood and adolescence are critical times for individual development. As of 2012, the majority (79.05%) of children and adolescents in the United States lived in a household with at least one sibling (United States Census Bureau; America's Families and Living Arrangements, 2012). While sibling relationships are common, a scant amount of research exists on this important familial relationship (McHale, Updegraff, & Whiteman, 2012). In a review of literature on sibling relationships, scholars reported that in a psychological and sociological abstract search over the past two decades, there were only 741 citations for sibling relationships or relations in comparison to 8,685 for marital relations and 33,990 for parenting. Even though there is less research on siblings compared to other family relationships, the understanding of sibling relationships and the impact such relationships can have on individual development within the general population has been growing over the past few decades (Bullock & Dishion, 2002; Gass, Jenkins, & Dunn, 2007; Tucker, Updegraff, McHale, & Crouter). Despite this growth, there is still criticism that it is an important area of family life that has been under studied (Conger & Kramer, 2010; Kim, McHale, Osgood, & Crouter, 2006; Kramer & Bank, 2005).

Among the criticism of a relative lack of empirical knowledge about sibling relationships, is the lack of understanding of sibling relationships in different contexts. In fact, the majority of what is known about sibling relationships is based on research involving samples of primarily white, middle class, two-parent families (McGuire & Shanahan, 2010). One such diverse context that needs further investigation is sibling relationships of those in foster care (Gardner, 1996). Several scholars have indicated that very little is known about sibling relationships and the impact it has on the individual development of those in foster care (Albert & King, 2008; Banks & Kahn, 1997; Hegar, 1988; Staff & Fein, 1992; Thorpe & Swart, 1992; Ward, 1984; Wulczyn & Zimmerman, 2005). Research is needed to promote our understanding of this important and under studied familial relationship in the foster care context. This study aims to address this gap

by exploring sibling relationships of children and adolescents in the foster care system. Specifically, the purposes of this study were to explore the "meaning" of a sibling while in foster care, sibling relationship quality, and to assess the association between relationship quality and individual resilience pre- and post-intervention.

1.1 Background of the Problem

Currently over 400,000 children and adolescents are living in foster care in the United States (AFCARS, 2012). The mean age is 9.3 with an age range of less than one year to 20 years of age (AFCARS). The average length of time a child spends in foster care is 23.9 months, with ranges from less than a month to more than five years (AFCARS). National data on the number of children with siblings in the foster care is not systematically tracked (Herrick & Piccus, 2005); however, in one study investigating sibling placements of those in the state of New York between 1985-2000, two thirds of all the children that entered foster care had at least one sibling (Wulczyn & Zimmerman, 2005). It is important to note that even though there were a third who were not identified as belonging to a sibling group, it did not mean that these children did not have a sibling; it just means that the children did not have a sibling who also entered foster care at the same time. For instance, in their total sample, only 43% of sibling groups entered foster care on the same day, others entered within the next 30 days, 6 months, or longer (Wulczyn & Zimmerman, 2005).

For reasons such as entering foster care at different times, having a large number of siblings in a sibling group, varying needs of individual's in the sibling set, and many additional considerations, siblings may be placed in different foster care placements (Shlonsky, Bellamy, Elkins, & Ashar, 2005; Smith, 1998; Whelan, 2003). Studies examining sibling placement vary in their estimates of those who are separated from their sibling. Wulczyn and Zimmerman (2005) indicated that only 10% of siblings in New York were separated from their sibling within the first 6 months after placement, but the number rose to 20% for those in foster care for 48 months. Leathers (2005) interviewed 197 adolescents in the Chicago area and 82% of the participants reported that they had been separated from their sibling at least one time since they were in foster care. In a small qualitative study examining the foster care experience of 14 children, the authors stated that 75% of the sample were currently separated, but participants revealed that most of them had times when they were not placed with their sibling (Sigrid, Monn, Palinkas, & Leslie, 2008).

The limited literature focused on sibling relationships of youth in foster care is heavily focused on whether or not siblings placed together promotes or deters from placement stability. Leathers (2005) examined sibling separation on placement outcome variables such as placement disruption, permanency, and family integration, a variable that is often associated with placement stability. She found that siblings who were placed with the same number of siblings throughout their time in foster care were less likely to experience a disruption in their placement compared to those who had an inconsistent history of being placed with their sibling or not, or never being placed with their sibling. Unfortunately, children and adolescents who were placed alone or had a history of sibling placements were less likely than those with the same number of siblings to have been adopted. Lastly, when examining family integration, children and adolescents who were placed with a consistent number of siblings were more integrated into their current placement than those with other sibling placement experiences (Leathers, 2005). Similarly, Hegar and Rosenthal (2011) examined the influence of sibling placement defined as split (not living with any siblings), splintered (living with at least one sibling), or together (all the child's siblings were placed with them) on such outcomes as family relationships, as well as internalizing and externalizing behaviors, and school performance. Their findings indicated that when comparing the closeness to caregivers of those who were splintered or split, those in splintered placements had greater odds of responding that they felt close to their caregivers and liked their caregivers than those in split sibling placements. This finding supports Leathers' findings and confirms assertions that siblings placed together help to maintain a sense of continuity and sense of belonging (Herrick & Piccus, 2005) that might be lost if not placed with a sibling. Further, when examining additional outcomes related to children's development, sibling placement did not significantly predict a child or adolescent's internalizing or externalizing behaviors; however, there was a significant interaction between these placement types and sibling placement. Children and adolescents in kinship care who were in the splintered and together groups had better behavior than those in non-kinship (traditional) foster homes. Finally, the authors also found that school performance was best for those who were placed with all their siblings, followed by those in splintered arrangements, and lastly the split sibling groups (Hegar & Rosenthal, 2011). The narrow focus on sibling placements in relation to sibling relationships of those in foster care, however, is a limitation of this area of research.

When describing sibling relationships in the general population, Bank and Kahn (1982) asserted that sibling bonds are expected to grow more intense when there is plenty of contact between each other and when children are deprived of a dependable parental care. Children and adolescents in foster care have arguably been deprived of dependable parental care and may lack sufficient contact to maintain sibling relationships. Drapeau et al. (2000) and Gardener (1996) demonstrated that the amount of contact is important to sibling relationship quality among both youth in foster care and the general population. Ignoring sibling relationship quality in a population that is at an increased risk of experiencing separation from a sibling, a potential protective factor in relation to important outcomes such as placement stability, family integration, mental health, and academic outcomes is an oversight in the research that requires attention.

Examining potential protective factors is imperative because there is often a deficit lens applied to the study of youth in foster care. The foster care literature is plagued with studies demonstrating the negative outcomes that former foster youth endure. Such negative outcomes can include pregnancy (Dworsky & Courtney, 2010; Love et al., 2005), educational shortfalls due to a myriad of different reasons like placement changes, maltreatment, mental health concerns (Courtney et al., 2007; Greeson, Usher, & Grinstein-Weiss, 2010; Pecora et al., 2003), reliance on public assistance (Greeson et al., 2010; Pecora et al., 2003), homelessness (Massinga & Pecora, 2004; Pecora et al., 2003), and incarceration (Courtney & Dworsky, 2006; Massinga & Pecora, 2004). Further, the rates of mental health diagnoses within the foster care population are 3-10 times greater than those who have similar economic backgrounds and are receiving Medicaid (Harmon et al., 2000). In fact, in a study looking at mental health outcomes of youth who have exited foster care, Anticil and colleagues (2007) found that foster care placement was the biggest predictor of mental health diagnoses. Given these stark outcomes more needs to be done to examine potential protective factors.

In a study of 479 foster youth who aged out of the system, optimization analysis was conducted to see the odds of if things went right, how would it influence the youth (White, O'Brien, Pecora, English, Williams, & Phillips, 2009). Their study indicated that when major aspects of the youth's life were positive, such as having preparation for leaving the foster care system, having a foster family and other nurturing supports, having positive educational experiences and services, access to therapeutic services and support, awareness of resources

available to them when leaving care, and participating in activities with their foster parent, reduced the probability of that child having depression by half. In a similar study, Salazar, Keller, and Courtney (2011) reported that social support was a mediator and moderator between maltreatment and depression in youth who are aging out. The implications of these findings, particularly the theme of social support as related to outcomes warrants greater investigation. Specifically, specifying social support as that of sibling relationships, a relationship that is conceptualized to be stronger in the face of adversity (Dunn, 1997), has the potential to identify an underutilized resource among the foster care population in terms of policy and practice. A significant relationship between positive sibling relationships and higher levels of individual resilience could provide another avenue to improve outcomes of youth in foster care.

Recognizing the need to promote sibling relationships among children and adolescents in foster care, an organization called Camp To Belong was started. Camp To Belong provides a 5-day camp with intentional sibling programming aimed at enhancing sibling relationships for youth in foster care who have been separated from their brothers and sisters (camptobelong.org). Feedback collected from the children and adolescents who participated in the camp experience provide indications that the camp is fulfilling its aim; however, no formal studies have been conducted on Camp To Belong and the extent to which participating in this "intervention" is associated with increased sibling relationship quality.

1.2 Purpose of the Study

The overall goal of the present study was to explore sibling relationship quality – and the influence sibling relationship quality has on individual resilience. In order to accomplish this goal an exploratory study was conducted in order to investigate an intervention designed to enhance sibling relationships from the children and adolescent's perspective. Markman and Rhodes (2012) implore researches interested in creating a systematic program of research to pilot the targeted intervention using a "pre-post, no control group design, to see whether there are effects over time and whether it is acceptable to the population of interest" (p. 189). It is after a positive effect of the intervention is demonstrated that future quasi-experimental and randomized control trials can occur to ensure that it is efficacious and can then be tested for effectiveness in dissemination (Markman & Rhodes). It is with this intent and rationale that this study was conceptualized. The following research questions addressed in this study were:

1. What does a "brother" or "sister" mean to youth in foster care?

2. Are there developmental differences between middle childhood and adolescence when it comes to how youth in foster care perceive their sibling relationship quality?

3. To what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children participating in a five-day sibling enhancement intervention? Further, does it vary by developmental stage?

4. Does sibling relationship quality have an association with youth's report of individual resilience, and does that vary based on developmental stage?

Given the relative paucity of information regarding siblings and sibling relationship quality of children and adolescents in foster care, research-informed hypotheses could not be generated. Therefore, the research questions in the current study were exploratory in nature. Results have the potential to contribute to a foundational understanding of sibling relationships of youth in foster care.

1.3 Definition of Terms

All definitions were determined after reading relevant research on each topic.

1. Middle childhood: For the purposes of this study, participants were identified as belonging to middle childhood if they were between the ages of 5-12 (Collins, Madsen, & Susman-Stillman, 2002; Vortruba-Drzal, 2006). Votruba-Drzal describes this age span as an important time in one's individual development as children begin schooling and interact with others outside of their family.

2. Adolescents: Defining adolescence is challenging as some consider adolescence to extend into one's early 20's (Dorn, Dahl, Woodward, & Biro, 2006). Generally stated, adolescence is the time between childhood and taking on adult responsibilities and roles (Dorn et al., 2006). For this study, the age span between childhood and adult responsibilities was between ages 13 and 18.

3. Foster Care: For the purposes of this study foster care refers to any out-of-home placement that a child may be placed in as the result of a substantiated report of child abuse or neglect by their biological parent. Such out of home placements may include traditional foster homes in which a child resides with someone with whom they do not have a prior relationship, kinship foster care in which the child resides with a relative, as well as group or residential treatment

facilities that are often used for children who have exhausted all other placement options and live with other youth in foster care.

4. Resilience: For the purposes of this study, resilience was defined as one's ability to flourish in the midst of adversity and stress (Campbell-Sills, Forde, & Stein, 2009; Connor & Davidson, 2003) most likely caused by their placement in foster care, and demonstrate successful outcomes (Cicchetti & Garmezy, 1993). The purpose of this study was not to measure such outcomes, but to measure whether or not spending time with one's sibling increases the level of resilience one reports.

CHAPTER TWO

REVIEW OF THE LITERATURE

2.1 Theoretical Perspective

An underlying tenet of symbolic interaction, a social theory, is that social interactions with others help to form human conduct (Blumer, 1969). It is from these interactions that we ascribe meaning to things and interpret that meaning in our lives. Symbolic interaction was used as a guiding framework to explore and understand sibling relationships of those in foster care.

2.1.1 Symbolic Interaction

Symbolic interaction functions under three premises: first, "human beings act toward things on the basis of the meaning that the things have for them" (p. 2), second, "the meaning of such things is derived from, or arises out of, social interactions that one has with one's fellows" (p. 2), and lastly, "the meaning of a thing for a person grows out of the ways in which other persons act toward the person with regard to the thing" (p. 4, Blumer, 1969). Blumer criticized proponents of symbolic interaction who forget to consider an individual's process of interpretation in which an individual ascribes meaning to something. He stated that an individual does not just take on the meaning from someone else, but rather works with the information that has been shared through some social interaction to come up with his or her own interpretation of meaning. Blumer, a student of George Herbert Mead, asserted that Mead differentiated between two types of interactions: "the conversation of gestures" and "the use of significant symbols" (p. 8, Blumer); however he referred to them as non-symbolic and symbolic interaction, respectively. Blumer explained that in non-symbolic interactions an individual can respond to some social interaction directly without interpretation, whereas a symbolic interaction involves some interpretation of the interaction that is occurring and consequently the meaning. Blumer asserted that an object is a product of symbolic interaction and an object can be classified into one of three categories: physical, social, or abstract.

An object does not have a preset meaning, and the meaning of the same object can change based on each individual's interpretation (Blumer, 1969). The meaning an individual attributes to an object can be influenced by the meanings that others with whom the individual interacts ascribes meaning. In this way objects are social; however, an individual still creates his or her own interpretation. One's interpretation and meaning of an object guides the way in which

that individual sees the object, the way that individual talks about it, acts upon it and so forth. For the purposes of this study the object to explore was sibling relationships within the context of foster care, which would be considered a social object.

Oliver (2012) stated that the focus of symbolic interaction is how one interprets their context and chooses one course of action over another. Symbolic interaction provides a lens for understanding sibling relationships of youth in foster care and the course of action they choose about their sibling. The three aforementioned foundational premises of symbolic interaction: (a) humans act toward things based on the meaning they attribute to it, (b) the social interaction that facilitates the meaning of an object, and (c) meaning for that individual can grow out of the meaning they see others interact with that object, all provide a framework to explore what siblings mean to one another in the context of foster care, a unique system with a unique set of social interactions. It is imperative to talk about the context in which children live in order to understand the meaning that they ascribe to their sibling relationships.

Blumer (1969) spoke about symbolic interaction in terms of social structure and the ways in which humans fit together and engage in activities that help to make meaning. Within the social structure people have created social positions, roles, authority, status and so on. When considering the foster care system and the meaning of sibling relationships within this context, the influence of social structure needs to be considered. Several qualitative studies have explored the experiences of youth who are currently or who have lived in foster care and one overarching theme is the lack of power the youth feel in their own lives (Festinger, 1983; Freundlich, Avery, & Padgett, 2007; Kools, 1997). This lack of power is often the result of authority and hierarchy within the foster care system. For example, youth spoke about wanting more information about their case (Kools, 1997), or having the desire be an active part in the decision making process (Mathiesen, Jarmon, Clark, 2001), or wanting more contact with the people making decisions in their lives beside the day before court (Morris, 2007). Children and adolescents make meaning out of these interactions. As previously stated, social interactions influence conduct and interactions within an established social structure can impact the behaviors of those living in foster care. For instance, Blumer stated that in reaction to someone else's action, one can continue on their course, change it, stop it, or do whatever works, yet it is still influenced by someone else. This is of importance when exploring sibling relationships in the foster care system.

In a study examining the importance of sibling relationships from the perspective of key players in the foster care social structure: foster parents and case managers, 56.6% of the respondents believed that sibling relationships were "very important" with the remaining reporting that sibling relationships are "fairly" or "somewhat" important (Smith, 1996). This is significant because these key players often are the ones making decisions about whether or not siblings are placed together and if not, how to facilitate or not facilitate visitation with their siblings and how often. Children and adolescents may interpret these interactions and make meaning of their sibling relationships based on the meaning and actions of these key players. Some children and adolescents may decide that their sibling relationship is not important and adjust their conduct to represent the meaning that they attributed to their interaction with these key players. For a child who interprets that the key players do not value the sibling relationship, such adjustments might include not asking for visitation with a sibling, not asking to talk on the phone with them, or possibly not asking to live with them. For others, key players who ensure that sibling issues are important may promote greater meaning for sibling relationships. Furthermore, there may be some children or adolescents with whom the meaning and interpretation they have about their sibling relationship is steadfast and unwavering based on the meaning and interactions they had with one another prior to living in the foster care system.

Whether the youth adjusts his or her meaning to accommodate the perspective of the authority figures or decides to hold steadfast to his or her individual meaning despite the perspective of others, little is known about the impact social structure, meaning, and context have on the way they make meaning of their lives and their relationships. No studies have explored what a sibling means to someone who is in foster care from their own perspective. This information could be important to future research on understanding sibling relationships of youth in foster care. Further, exploring the association between positive sibling relationship quality and possible associations with resilience could be beneficial, particularly for children and adolescents in foster care. Exploring the association between positive sibling relationships and resilience could be one such way to promote greater protective factors and consequently outcomes for youth in foster care. As such, symbolic interaction as a framework to understand sibling relationships is fitting, but is also congruent with understanding resilience. Kolar (2011) stated that symbolic interaction is a useful theory to use to understand individual resilience because resilience is based on a constructivist lens that is influenced by language and individual meaning.

The concepts of sibling relationship and resilience are influenced by co-construction of meaning; as such, the use of symbolic interaction as the framework for understanding the association between sibling relationship quality and resilience is a good fit and will add a deeper understanding to an already complex system.

2.2 Sibling Relationships

Sibling relationships have many influential effects on development. Siblings influence socialization (Lamb, 1982), and competitiveness/rivalry (Bank & Kahn, 1982; Dunn, 1993), in addition to playing an important role in day to day childhood experiences, and serving as our first partners in life (Merrell, 1995). Childhood and adolescence are an important time period for the development and foundation of the sibling relationship that lasts throughout the person's life span. Merrell (1995) stated that it is through sibling relationships that children are able to play out their first "marriage" in the sense that they learn how to argue, negotiate, compromise, express affection, and the struggle for enmeshment and independence. During childhood, siblings are typically each other's primary confidant and source of emotional support, in adolescence they can turn to each other to discuss things that they do not feel comfortable discussing with parents such as friends, sex, and drugs (Lamb, 1982). Cicirelli (1982) stated that there is evidence that most siblings provide one another psychological support and feel affectionately close to one another throughout their adult lives.

There is no definitive way of categorizing sibling relationships as they vary from relationship to relationship. Some relationships may be more affectionate, while others are in constant conflict (Dunn, 1993). Merrill (1995) suggested that sibling relationships are without rules in the sense that we can choose to ignore our siblings, help them out in times of need, create distance between them, or celebrate in their accomplishments. She suggested that siblings are more like a cactus rather than an oak, as sibling relationships require less water than those of friendships (Merrill, 1995). Bank and Kahn (1982) stated that the emotional bond between siblings depends on something they identify as "access." They go further to state that there are three repeated predictable conditions that allow for strong sibling bonds: "high access between siblings, the need for meaningful personal identity, and insufficient parental influence" (Bank & Kahn, 1982, p. 18).

Sibling bonds are expected to grow more intense when children and/or adolescents have ample contact and access to their siblings and have been deprived of dependable parental care;

however, the converse of this is also true. If the parent relationship is strong and emotionally fulfilling there is not as high a need for an intense sibling relationship (Bank & Kahn, 1982). This would indicate that the sibling relationship could be very important prior to placement in foster care. Further, Dunn (1996) reported that children who experienced adversity in their lives tend to grow closer with an increase in affectionate behaviors. These implications are important to keep in mind when understanding sibling relationships of those in the foster care system as many have experienced adversity in at least one aspect of their lives. The current state of knowledge related to sibling relationships of youth in foster care is extremely limited. Learning about what siblings means to youth in foster care could be very important for research, policy and practice.

2.2.1 Siblings and Sibling Relationships in Terms of Individual Development

Sibling relationships are an important part of family functioning and individual development. Studies examining sibling relationships at different developmental stages are scarce (Kim, McHale, Crouter, Osgood, 2007). One of the first developmental studies was conducted by Buhrmester and Furman (1990) who created the *Sibling Relationship Questionnaire*. Using the tool they created, they examined cross-sectional ratings of sibling relationship quality from youth ranging from third to twelfth grade. Their study demonstrated that sibling relationship quality was warmer for younger siblings, and siblings tended to grow further apart through adolescence. The authors attributed this to normative development in which the adolescent is transitioning from dependence on their family to a more autonomous role in which they have closer relationships with peers and romantic partners.

Contrary to Buhrmester and Furman, Cole and Kerns (2001) found that positive sibling traits such as help and guidance, intimate exchanges, and caring activities demonstrated a U shape trajectory. In the cross-sectional study of fourth, sixth, and eighth graders, those in fourth and eighth grade reported greater positive sibling relationship qualities such as companionship, caring, guidance, and validation, than those in sixth grade. These findings supported Buhrmester and Furman's conclusions about normative development, yet they provide some evidence that sibling relationships do not follow one trajectory.

Building on these findings Kim, McHale, Osgood, and Crouter (2006) examined sibling relationships and development with a longitudinal dataset of 200 families. Their findings provided some support for each of the aforementioned studies. Their study indicated that there

was lower positivity and negativity in adolescence than there was in middle childhood; however, given their longitudinal data they were able to conduct growth curve analyses and reported that there was no uniform way that sibling relationships develop. Additionally, when investigating gender differences they reported that sister-sister dyads reported the greatest amount of intimacy and that same-sex dyads did not experience changes in their intimacy over time; however, the trajectory of mixed gender dyads reflected a U shaped trajectory with sibling intimacy growing more in adolescence.

Cicirelli (1996) discussed the importance and influence of sibling relationships of those in middle to old age. Throughout his research he has reported that the majority of siblings maintained contact with one another. The sibling relationship was considered important throughout their adult life and maintained influence over their life. For adults who were in their later years and had a sister, their sibling provided a sense of morale and greater sense of wellbeing. Future studies are needed to examine the sibling relationship in relation to individual development and more specifically to conduct studies with diverse populations and diverse family structure as each of these studies involved predominately Caucasian, two-parent families. The current study focused on examining developmental differences of sibling relationship quality of youth in middle childhood and adolescence. Middle childhood was defined as children between ages five and twelve (Votruba-Drzal, 2006). Adolescence on the other hand can be quite difficult to define because some consider it to extend into the early 20's (Dorn, Dahl, Woodward, & Biro, 2006). Generally stated, adolescence is the time between childhood and taking on adult responsibilities and roles (Dorn et al., 2006). For this study, the interval age between childhood and adult responsibilities was defined as a youth between ages 13 and 18. Currently there are no studies examining developmental stages and sibling relationship quality among a foster care population.

2.2.1.1 Developmental differences between middle childhood and adolescence

Although middle childhood and adolescence constitutes only two major developmental stages in one's life development, there are quite a few cognitive, social and physical differences that may influence how one interacts with their sibling. For instance the cognitive abilities of youth in middle childhood and adolescence vary greatly. For those in middle childhood, they are able to improve their problem solving skills and think about things with abstract representations and reasoning (Collins, Madsen, & Shsman-Stillman, 2002). Primarily they are increasing their

ability to acquire new information and make sense of it and consequently are able to take on more complex responsibilities at school and at home (Collins et al., 2002). For those in adolescence, they are beginning to think more like adults and are better able to utilize abstract and hypothetical thinking (Steinberg & Silk, 2002). Adolescents also begin to use metacognition and think about thinking and question some of the rules, norms, and standards as they are developing their own individual identity (Steinberg & Silk, 2002). Despite these cognitive advances, adolescents may still have deficits in their decision-making abilities.

The social development for each of these developmental stages is similar in that youth in each stage is experiencing a change in the expansion of their social interactions, yet this is happening within two different contexts. For youth in middle childhood, their social network and social skills are expanding as they enter school and begin to interact with more people outside of their family (Votruba-Drzal, 2006). With this greater exposure to other children, children in middle childhood often have a very strong sense of fairness and equal treatment among their peers (Collins et al., 2002). It is also during this phase where children are able to begin to understand other people's behaviors, can predict what someone will do and may also be able to deceive others (Collins et al., 2002). Adolescents' social expansion is also related with their peers, but mostly at the cost of decreased interaction and time spent with their parents due to greater school activities, recreational activities and opportunities to spend time with peers (Steinberg & Silk, 2002). Peers often fulfill the roles that parents typically did of confident, advisor, person from whom they sought guidance and so forth (Steinberg & Silk, 2002).

Lastly, in terms of physical development, the major difference between these two developmental stages is the vast amount of change observed in adolescence. During adolescence, youth encounter puberty, which results in a large amount of hormonal changes that impact the adolescent's body and emotions (Steinberg & Silk, 2002). The physical changes that adolescent bodies go through can impact the way that the individual views themselves and how others view them. It is the combination of the physical, social and cognitive changes that can inform one's own identity development that adolescents are often striving to achieve (Steinberg & Silk, 2002).

The cognitive, social, and physical differences experienced by youth in middle childhood and adolescence might have an impact on how one interacts with, values, and thinks about their sibling relationship, particularly when children in foster care may not have as much contact with their sibling as they would like. Exploring sibling relationships in the context of

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these different developmental stages has the potential to garner additional insight into the individual development of youth in foster care.

2.3 Sibling Relationships in Foster Care

The literature on sibling relationships is relatively limited compared to other important familial relationships. The literature on sibling relationships of those in foster care has long been ignored (Gardner, 1996), but has been growing since the late 1980's. Gardner pointed out that most of what we knew about biological relationships of youth in foster care was about the relationship between the biological parent and the youth in foster care. Since then, more has been done to understand sibling relationships; however the majority of what we know is based on research examining whether or not siblings are placed together. Sibling relationships within the foster care context are more complex than that and warrant further investigation.

2.3.1 Siblings and Placement

Youth in foster care can be separated from their siblings for a myriad of reasons. Some might be separated because their sibling group is too large and cannot be accommodated by one foster family, there may be special needs of one child that require a foster parent with a specific type of licensing, and a plethora of other reasons. During the time spent in foster care, siblings who are placed together tend to have fewer placements (Drapeau et al., 2000; Tarren-Sweeney & Hazell, 2005). Drapeau and colleagues (2000) compared sibling transitions between siblings who faced separation due to foster care placement or divorce. In their study, they found that regardless of why one was separated from one's sibling, those who were separated had the most instability in their placement. They also found that siblings who lived together were thought of as having more harmonious relationships, and those who were separated had less contact, even via telephone, with youth in foster care having the least amount of contact. These results confirmed the results of Gardner's (1996) comparative study of sibling relationships of youth in foster care and a community sample. She found that siblings in foster care that were not placed with their sibling and had little or no contact with their sibling reported feeling less close to them. Interestingly, she also assessed relationship quality of other children residing in the foster home. In these instances, ample contact was available and the youth reported feeling closer to their "foster sibling" than their biological siblings.

Herrick and Piccus (2005) discussed the importance of maintaining connections between siblings who are in foster care from a unique perspective. Each of these scholars was also in

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foster care and was separated from their siblings. In their literature review and personal stories, they discussed how siblings can help to lessen the uncertainty associated with placement in foster care. In Festinger's (1983) qualitative interviews with over 200 youth who aged out of foster care, participants reported that siblings functioned as natural support system and allies. In an unknown, complex system such as foster care, having an ally could be important to individual adjustment and outcomes.

2.3.2 Sibling Relationship Quality of Youth in Foster Care

To my knowledge, only two studies have examined sibling relationship quality of youth in foster care. Both studies examined the influence of sibling relationship quality as measured by the Sibling Relationship Questionnaire developed by Furman and Buhrmester (1985) and the effect it had on mental health outcomes and behavior. The Sibling Relationship Questionnaire assesses three major areas of sibling relationships: warmth/ closeness, conflict, and relative status/power. In Linares, Li, Shrout, Brody and Pettit's (2007) exploration of sibling relationships of youth in foster care between the ages of 7-14 and behavioral and depressive symptoms, several interesting findings were reported. The first finding was the impact of sibling relationship quality on behavioral problems. Specifically, biological parents reported fewer behavioral problems for siblings who reported having more positive relationships. The converse also was true. Biological parents reported more behavioral problems for those with a more negative sibling relationship. There were also interesting findings that occurred if there was a change in placement. For youth who had a low score on the Eyberg Child Behavior Inventory (EBCI) at time 1 and were placed with their sibling, then at time 2 were separated, there was an increase in their behavioral problems. However, youth who had higher scores on the EBCI and were placed with their sibling at time 1, and were subsequently removed at time 2, had lower scores on the EBCI. The authors asserted that these findings may be associated with more individualized attention for those in the latter group, and the distress associated with the first group.

When examining the association between sibling relationship quality and depression, Linares et al. (2007) hypothesized that a positive sibling relationship would be associated with lower depression and loneliness scores and sibling relationships categorized as negative would have higher levels of depression and loneliness. Contrary to their hypotheses, quality of sibling relationship did not have any impact on levels of depression or loneliness. In fact, the authors

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suggested that more needs to be done to improve the accurate measurement of depression of youth in foster care, as a trained clinician can see that youth in foster care are clinically depressed, yet only 13% of the sample was assessed as such according to their depression measure.

Linares' (2006) study explored sibling relationship quality, child behavior, sibling violence, and a several other contextual factors associated with foster care, such as placement characteristics and school disruptions. The goal of Linares' study was to examine if sibling positivity, quality of foster caregiving and foster rejecting moderated sibling violence and internalizing, externalizing and school competence in a foster care population. Biological parents and current caregivers of children and adolescents with sibling relationships characterized as having greater conflict reported higher scores on the EBCI. Siblings who were placed together reported greater sibling warmth and nurturance than those who were separated, and sibling conflict was associated with lower sibling positivity, lower warmth from foster caregivers, behavioral problems, less school competency, and depressive symptoms. Sibling relationships characterized as more positive were significantly associated with fewer behavioral problems, and more responsive parenting.

Each of these studies has made significant contributions to understanding the impact of sibling relationship quality on outcomes of youth in foster care. Further, the findings from these two studies confirm previous research indicating that siblings who are placed together have warmer relationships with their siblings, more positive sibling relationships are associated with decreases in behavioral problems, which can be associated with placement disruptions, and more positive sibling relationships had greater warmth from foster caregivers and more responsive parenting. While these studies add to the existing literature, there are some methodological flaws that could be addressed in future studies to help inform sibling relationship quality of youth in foster care. For instance, in Linares et al.'s (2007) study the dyadic data that was used to analyze sibling relationship quality was comprised of the biological parent's perspective and the oldest sibling's perspective. Linares (2006) did not clearly articulate who completed the SRQ, as there is a parent version of the measure. Gaining the information about sibling relationship quality from only the siblings who are living in foster care could be beneficial and was the intention of this study. Furthermore, future studies need to explore sibling relationship quality and the impact

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of positive sibling relationships on the lives of youth in foster in order to examine if a positive sibling relationships can serve as a protective factor for these youth.

2.3.3 Positive Sibling Relationships as Protective Factors

The question of whether or not sibling relationships can be a protective or risk factor when children and adolescents are faced with adversity has been a question that has garnered some research over the past decades, mostly within the general population. In a longitudinal study of 43 families, Dunn (1996) reported when children in a family faced negative life events the children grew closer together with increases in friendly and affectionate behavior. Bank and Kahn (1982) concluded after interviews and observations that in families where dependable parental caretaking is not available or adverse family situations are occurring, sibling relationships can be protective. Jenkins (1992) reported several significant findings in her study of 139 families and the potential protective role that sibling relationships play when their parents are experiencing marital distress. When the parental subsystem was not experiencing any marital distress, there were no significant relationships between sibling relationships and child behaviors; however, when there was marital distress, those with very close to moderately close sibling relationships had significantly fewer behavioral problems than those who reported not having a close sibling relationship (Jenkins, 1992). The protective nature of sibling relationships was not only associated with decreases in child behavioral problems, but the sibling was also a source of support to help one another cope. Jenkins reported that nearly 60% of the children reported going to their sibling when their parents were fighting and 40% talked about the parents fighting.

In more recent studies, similar protective findings have also been reported. In a longitudinal study of youth ages 8-17, Gass, Jenkins and Dunn (2007) examined whether or not positive sibling relationships moderated the relationship between stressful life events and the expression of emotional or behavioral problems later in life. Stressful life events included such things as illnesses, accidents, legal issues, marital problems, deaths, events at school, natural disasters, etc. This study was unique in that it is one of the few that included different family structures such as single mothers and stepfamilies. Findings from the Gass et al. (2007) indicated that those with positive sibling relationships who had experienced stressful life events reported fewer changes in internalizing behaviors over time compared to those without positive sibling relationships. Further, positive and affectionate sibling relationships moderated stressful life

events and adolescent outcomes. The authors also assessed if close sibling relationships were protective only in instances when the parent-child relationship was not as strong, as suggested in the literature. These findings indicated that an affectionate sibling relationship was still protective even when there was a positive parent-child relationship.

Yeh and Lempers (2004) assessed if positive peer relationships, higher self-esteem, and academic achievement mediated the effects of positive perceptions of sibling relationships on adolescent developmental outcomes including depression, loneliness, delinquency, and substance use across time. The results of the study indicated that there was no direct relationship between positive sibling relationships and any of the outcome variables, but there were several indirect effects: (a) positive sibling relationships at time 1 were positively associated with peer relationships at time 2, which decreased loneliness at time 3; and (b) positive sibling relationship were linked with higher self-esteem which had a positive effect on all three developmental outcomes. The authors commented that these results indicated that warm and nurturing sibling relationships were positively associated with decreases in negative adolescent outcomes. They also highlighted the positive effect that positive peer and sibling relationships had on one another, but stated that positive sibling relationships had a stronger effect on outcomes than did positive peer relationships. Those who had positive sibling relationships may have had more opportunities to practice positive social interactions which would lead to more positive peer relationships and increase in self-esteem which is associated with decreases in negative outcomes for adolescents.

Tucker, McHale and Crouter (2008) explored the potential protective role of siblings on one's self-esteem. In this study, the authors investigated if the role that the type of activities that siblings engaged in with one other influenced their self-esteem. Two types of activities were identified: constructive and unconstructive. Constructive activities included such things as playing games together, playing sports, and sharing hobbies; whereas unconstructive activities included watching television together and just "hanging out." Their findings indicated that siblings who participated in constructive activities had greater self-esteem and those that participated in unstructured activities were associated with lower levels of perceived social competence and depression for the younger sibling and lower self-esteem for the older sibling. Findings such as these, specifically the impact of specific activities on such outcomes is important, as there has been a call for interventions to improve sibling relationships.

Among a foster care sample, Leathers (2005) examined children and adolescents' integration and belonging into a foster family based on whether or not they were placed with their sibling. Greater integration and feeling like they belonged occurred when siblings were placed together. Former children who lived in the foster care system stated that siblings provided them with a readymade support group, an ally, someone to talk to if they had problems, and someone with whom they can depend on one another's strengths (Festinger, 1983). Whiting and Lee (2003) conducted a study with children currently living in foster care who reported themes of siblings suffering together and reliance on their siblings. Siblings who are placed together when they enter foster care may be more comfortable with the transition as there is continuity of their sibling relationships that leads to a greater sense of belonging (Leathers, 2005). Shlonsky, Bellamay, Elkins, and Ashare (2005) further stated that for siblings in foster care who are in an unknown situation, the presence of a sibling can play a crucial role in maintaining emotional stability and a sense of safety.

Given the strong support for positive sibling relationships within the general population and the relatively limited, but positive impact of intact sibling placements and positive sibling relationships for youth in foster care, greater empirical attention is needed to assess potential protective factors. Examining resilience and investigating a potential protective factor such as a positive sibling relationship could be one such way.

2.4 Sibling Relationships and Intervention

Given the potential protective nature and positive socializing aspect of sibling relationships, a call for researchers and clinicians to work to promote this relationship has been sounded (Conger, Stoker, & McGuire, 2009). One such intervention that has been empirically tested through a randomized clinical trial is the *Siblings Are Special* program (Feinberg, Solmeyer, Hostetler, Sakuma, Jones, & McHale, 2012). This intervention was designed with the whole family in mind. The program consists of twelve sessions with the siblings and three family nights. This program demonstrated an increase in sibling positivity and fair play as compared to the control group, and mothers of children in the study reported greater self-control of their child and fewer internalizing problems in comparison to the control group. The authors stated that the findings of their study supported the use of sibling focused treatment as a way to prevent adjustment problems in children.

The need for sibling interventions within the foster care system has reached a new level of recognition. In 2010, National Institutes of Health (NIH) funded the first randomized clinical trial of a sibling relationship intervention for youth in foster care. A research team at Portland State University, led by Lewis Bank, has designed a program that consists of eight sibling sessions that promote sibling relationships and enhance their self-determination. Siblings also learn problem-solving skills and have opportunities to use their skills in four community activities. Sibling dyads are randomly put into this treatment option or treatment as usual, meaning that sibling interactions occur as they would per current policy and practice. Follow-up with all participants occurs at six-month intervals up to 18 months after the intervention. Given the initial stages of this study, there are no reported results at this time, however, a federally funded commitment to this study is encouraging to researchers aimed to understand and improve sibling relationships of those in foster care.

The increase in sibling enhancement interventions, specifically for those involved in the foster care system is important given the potential benefits positive sibling relationships can have on individual outcomes. However, there remains a need for additional research on sibling programs and interventions. One such intervention is Camp To Belong, an organization with the goal of enhancing sibling relationships of youth who are separated due to their placement in foster care.

2.5 Camp To Belong

Camp To Belong is an international non-profit organization that provides a weeklong camp experience to siblings who are separated from one another due to their placement in foster care. Camp To Belong originated in Las Vegas, Nevada in 1995 when Lynn Price, a former youth in foster care, was serving as a court appointed special advocate (CASA) for a little girl who was living in a temporary shelter with her brother. While Price was visiting the girl, she noticed the girl looking at a boy across the courtyard. When she asked who that boy was, the girl stated it was her brother. Price decided to walk across the courtyard and let the two children interact with each other; however, midway through the walk she was stopped by the temporary shelter staff and told that they can't see each other. From this experience and her own experience growing up separated from her sister due to foster care placement, she started Camp To Belong (Huston, 2012).

The mission of Camp To Belong is to provide an experience that enhances sibling relationships of youth in foster care through specific and intentional sibling programming dedicated to enhancing the sibling bond, as well as empowering the youth to rise above their current circumstances, and empowering the children to advocate for themselves and their relationships with their families. There are currently nine camps held throughout the United States during the summer months and one held in Australia. The range in age of children who attend Camp To Belong varies from 6-18.

The structure of Camp To Belong is such that siblings are together all day long in what is termed a "family group." Within this family group, campers participate in various camp activities, swimming, mountain climbing, canoeing, archery, ropes courses, and also share all their meals together. One camper shared, "I didn't know until today that both of my brothers can swim" (camptobelong.org). While these activities may seem commonplace, the fact that siblings can do these together is an added benefit since they do not live with one another during the year.

In addition to these activities, Camp To Belong has several sibling activities that are designed to enhance the sibling bond. The first is the "sibling pillow." The pillows are roughly 12 inches by 12 inches with and 8 by 8 square of white cloth on which children write one another a message. The significance of this is twofold: (a) the campers are able to articulate their feelings about their sibling on a pillow; and (b) the camper is able to take the pillow home with them to keep.

The second activity is the birthday party. Each camper is given the opportunity to shop in a "store" that consists of donated gifts and pick out a present for their sibling. The campers also make a birthday card, and in the middle of the week the whole camp gets together and has a birthday celebration complete with individual cakes for each sibling set. The rationale behind this activity is that something as simple as celebrating a birthday is something that these siblings do not get to do since they are separated from one another.

The third activity is scrapbooking. Each of the campers is given a disposable camera at the beginning of the week. Near the end of the week, the cameras are collected and the film is developed. During the last full day of camp the children are given scrapbooks and scrapbooking material. The children are able to create a scrapbook about their experience while at Camp To Belong and have a visual representation of the time they spent with their siblings. In addition to

these signature activities, member camps are also able to develop other activities aimed to enhance the sibling bond.

Camp To Belong has additional intentional programming directed at promoting sibling relationship quality, but also aims to show the campers that they can rise above their current circumstances. At every camp, there is an "inspiration night" where campers are able to talk about what it is that they have experienced while in care and away from their siblings. Some campers' share about what they have overcome and others talk about the challenges. Through this event, campers report feeling not as isolated and stigmatized and that there are other people who are experiencing similar life experiences (Price, 2013). Another activity is the "Life Seminar" in which campers who are in high school can travel to a nearby college campus and learn about the college experience, walk around the campus, eat in the cafeteria, and learn about funding that is available to them. The younger siblings often participate in some type of service activity in order to build their awareness of being able to give back to one's community.

The intention of Camp To Belong is not to be a "therapeutic" camp, in fact their primary goal is to provide a neutral place where kids can be kids and not be under the scrutiny of case managers, therapists, foster parents, and biological parents. While this is the intent, the aim is to improve sibling relationships. Annually the camp collects camper surveys from all the campers about their sibling relationship, sense of belonging, ability to advocate for themselves, and hope for the future. This year, Camp To Belong began using a pre-test post-test design for their survey. They added sibling relationship quality questions as well as resilience questions. This new design allows for the examination of the impact of Camp To Belong programming on sibling relationship quality and resilience.

2.6 Resilience in Children and Adolescents

Research on resilience has burgeoned in the last few decades. The resilience literature was based off of the stress resistance and risk literature and the work of Norman Garmezy in the 1970's when he examined protective factors for those that were deemed "at risk" (Cicchetti & Garmezy, 1993). Scholars acknowledge that one has to have overcome adversity to be termed "resilient," yet there is a lack of consensus regarding what constitutes "at risk," "significant risk," and "successful outcomes" (Cicchetti & Garmezy; 1993; Richman & Fraser, 2001). Masten, Best, and Garmezy (1990) stated that risk factors are "statistical correlates of poor or

negative outcomes" and are often only identified retrospectively (p. 426). This definition in and of itself is broad and may be subject to speculation and individual interpretation.

In addition to the debate about what constitutes "at risk," the empirical knowledge about resilience has grown, and so have debates about what it means to fully understand resilience, operationalize it, and accurately measure it (Kolar, 2011; Liebenberg & Ungar, 2009). For the purposes of this paper, resilience was defined as one's ability to thrive in the face of adversity and stress (Campbell-Sills, Forde, & Stein, 2009; Connor & Davidson, 2003). Further, resilience is not a static trait, but rather something that may emerge through developmental transitions, stress, and adversity (Cicchetti & Garmzy, 1993). Ungar (2004) described two different ways in which resilience is conceptualized: (a) an individual's current well-being despite being exposed to situations that others would consider that person as "at risk," essentially saying that it is a trait of the person; or (b) the mechanisms and characteristics through which a person has reached positive well-being. In the latter definition, one can demonstrate resilient behavior amidst current circumstances or risk.

Another ongoing debate is whether resilience is an outcome or a process (Kolar, 2011; Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003). Kolar summarized the current stance on outcome versus process resilience research. Kolar stated that the outcome-based approach is highly criticized for not having a clear definition, whereas the process based approach conceptualizes resilience as a dynamic ability that can be influenced by risk and protective factors. Given the definition of resilience put forth in this paper and the developmental perspective of resilience, the process-based approach was used to conceptualize this study. Primarily, the aim was to understand whether or not positive sibling relationships were associated with resilience specifically for youth in foster care.

Ungar (2004) challenged our understanding and implications of resilience, particularly the social constructed nature of resilience and how when we categorize youth into resilient or vulnerable, adaptable or non-adaptable, and so forth we may be missing a valuable piece of the youth's experience. Ungar provided the example of an adolescent whose parent created and reinforced a problem saturated identity for the youth. He suggested even drug use and homelessness, for example, have been described later by the youth as a great learning experience that provided their life with meaning. Similarly, Cicchetti and Garmezy (1993) agreed that more needs to be done to understand successful adaptation in the face of adversity.

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In a qualitative study of 7 youth who were currently living in foster care and deemed resilient, similar themes emerged as factors associated with their process of resilience: loyalty to their birth parent; normalizing the abusive environment in which they lived before placement in foster care; invisibility to the abuser; self-value; and future vision (Henry, 1999). Considering these results and themes in the context of Unger's (2004) challenge to consider the youths' context more broadly, valuable information would have been lost. It may be common to assume that it would be unnatural for a child who has experienced abuse and/or neglect to still feel loyalty to their family, or believe that even though children live in foster care for an extended period of time that their parents still want them and love them. Such assumptions limit the potential to understand the constructivist nature of this complex process.

Additional studies have examined resilience within diverse contexts (Ungar, Lee, Callaghan, & Boothroyd, 2005). To explore culture and resilience, researchers studied 843 Chinese children and examined the predictive association between resilience beliefs and positive child development over three waves of data (Lee, Kwong, Cheung, Ungar, & Cheung, 2010). The Chinese Resilience Measure for Children and Adolescents in Hong Kong was used to capture culturally specific beliefs about resilience such as "we should be responsible for family members, however difficult, even if it would mean going beyond our limit" (p. 443) that included a specific cultural component. The authors reported children who had stronger resilience beliefs had more positive habits, fewer behavioral problems, and more positive child development in terms of less behavioral problems and more productive habits. Fincham, Altes, Stein, and Seedat (2009) examined the influence of abuse and neglect, perceived stress, trauma, and community violence on the likelihood of developing posttraumatic stress disorder (PTSD) in adolescents within a community sample in Capetown, South Africa. The findings from their study indicated that 33.4% of the variance was explained by these influences. Further, the authors investigated the moderating effect of resilience on these factors. The results indicated that resilience had a moderating effect on the relationship between childhood abuse and neglect and PTSD symptoms, but did not have a moderating effect on the other factors. The authors commented that community violence and continued daily stress may be more difficult for children as demonstrated by larger standardized beta coefficients than child abuse and neglect. In essence, for the diverse samples discussed here, higher levels of resilience was positively associated with child and adolescent well-being.

Haight and colleagues (2009) interviewed three young mothers who aged out of the foster care system and were deemed resilient in comparison to other young mothers who had lived in foster care because they had experienced stressful lives, graduated from high school, were enrolled in the community college, were parenting their children, and transitioned to independent living programs. Four main themes were identified that helped participants to be resilient: positive values for motherhood and children, access to various social supports including other mothers, spirituality, and an oppositional gaze that helped them to ignore the negativity and stigmatism and maintain a positive outlook.

Unfortunately, most empirical investigations of resilience within the foster care system have to do with youth after they age out of foster care (Haight, Finet, Bamba, Helton, 2009; Harder, Köngeter, Zeller, Knorth, & Knot-Dickscheit, 2011; Yates & Grey, 2012) instead of what to do while they are currently living in foster care (Osterling & Hines, 2006). Masten (2011) argued that the resilience literature has vastly expanded over the past few decades; however, despite this growth, empirical knowledge of what works to promote resilience for children and adolescents who have experienced adversity is coming forth at a slow pace. Given the relative lack of empirical findings within the foster care system, examining a potential resource such as sibling relationships could be very timely and informative.

The current study utilized quantitative and qualitative data from camper surveys administered at each member camp of Camp To Belong within the United States. The results of this study have the potential to generate an understanding of what siblings mean to each other, unearth any developmental differences in perceived sibling relationship quality, examine the impact of an intervention, Camp To Belong, on improving sibling relationship quality, and lastly explore if positive sibling relationships are associated with resilience.

CHAPTER THREE

METHODS

This chapter outlines the research design and methodology of the present study aimed at gaining a better understanding of the meaning of a sibling for youth in foster care, developmental differences of sibling relationship quality across middle childhood and adolescence, the impact of Camp To Belong on sibling relationship quality, and the association between positive sibling relationships and resilience. The last two questions will also have a developmental component that assess for differences between middle childhood and adolescence. A description of the data used for analyses will be described in detail, as well as the analytic techniques performed.

3.1 Camp To Belong Camper Survey

Data from this study were extracted from the Camp To Belong camper survey data that are collected annually at each of the member camps. Six out of the nine member camps throughout the United States had campers complete the survey. The six member camps serve separated siblings in Orange County, California, Oregon, Nevada, Colorado, Georgia, and Maine. Each Camp To Belong is designed to offer a similar experience to campers regardless of what location they attend. Camp To Belong has a standardized manual that requires all member camps to adhere to in terms of training, the camp experience, and activities. Member camps undergo periodic audits where the Camp To Belong executive director and board members who are trained in the camp standards attend the week at camp to ensure the standards are being upheld. Further, the camper survey is another method to ensure that the mission of the camp is being upheld.

The camper survey was designed by Penthea Burns at the Muskie School of Public Policy at the University of Southern Maine, and a team of colleagues. As previously mentioned, the primary purpose of the survey and data is for quality assurance of the program as well as for grant writing for each member camp and the international organization. The quality assurance is to confirm that the organization's mission is being met and that the programming is enhancing sibling relationships, empowering youth to be able to advocate for themselves, as well as to see if Camp To Belong normalized their foster care status in a way that enables them to feel that they can rise above their current circumstances (camptobelong.org). The same camper surveys are

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administered at each of the member camps; however, there may be some variation in the exact time that each camp administers the survey. For instance, the post-test may be administered in the last afternoon of one member camp and another may have the campers complete it after breakfast during the last day.

Camp To Belong as an organization has been growing and so has the purpose and use of the camper survey. Over the past few years data collected have been presented at national conferences. The Camp To Belong evaluation committee has also been growing and working to provide greater rigor to the survey by adding established measures and improved design. Traditionally Camp To Belong administers a one-time camper survey at the end of camp, but this year they utilized a pre-test post-test survey design.

3.1.1 Procedures

All of the participants in this study attended one of the six member camps held this past summer. Legal guardians of the children completed the consent process prior to a child participating in camp. The consent process provided general information about what to expect during camp, as well as specific information about the camper survey. While at camp, all campers with guardian consent were given the opportunity to participate in the survey; however, historically there have been a small number of campers, less than 5%, who choose not to participate and their wishes are honored. Children and adolescents who decided not to participate are asked to draw a picture of their favorite moment at camp.

Each member camp assigns a designated person to administer the surveys to the campers. The designated person assigns a code number to each individual camper. Camp To Belong as an organization has asked each member camp to follow a specific way of coding in order to track sibling sets and the number of times at camp. The idea is that the same number could be used to track each camper that returns to see if there are any changes over time. Each camp typically has 30-50% of the campers return for another year at camp. The camper maintains the same code across all years in order for the organization to track individual changes. The designated person who administrators the survey also provides an overview and the purpose of the survey to camp volunteers during the volunteer counselor training. It is important that the volunteer counselors have an idea about the survey as they assist the campers when the surveys are administered. Given the wide age range and reading abilities of the campers, volunteers may assist the children by answering any questions that they may have about the survey. They may read the questions to

the children and provide definitions of words to children upon children's request. They are asked not to bias the camper's response by reminding them of events they participated in during the week with their sibling.

3.1.2 Sample

Case managers identified and referred children to attend Camp To Belong if they lived in separate foster care placements from at least one of their siblings. Each member camp had a camper recruitment team for each camp. Once potential campers were identified, the camper recruitment team worked with the case manager, foster parent, and potentially biological parent to complete the necessary paperwork and ensure that there are no serious sibling issues, such as incestuous or abusive sibling relationships, that would keep the children from benefiting from Camp To Belong.

The age range of campers that attended Camp To Belong this past summer was 6-19 years of age with an average age of 12.83 years ($SD = 2.93$). The camper's race and ethnicity mirrors that of the general foster care population (AFCARS, 2012), with 44.8% of the campers reporting that they are White, 21.5% African American, 19.5% Hispanic, 3.9% Other, and 6.3% as Biracial. The number of campers that attended each camp ranged from 20-90, depending on the member camp. This past year, six member camps reported camper survey results; the total sample size across all camps was 353 campers. It is important to note that it is not uncommon to have sibling sets of up to 6 siblings. In these instances, the Camp To Belong survey does not ask them to identify which sibling they are referring. The participant can choose whomever they like when completing the survey. For analytic purposes, only two of the siblings were used for analyses, one in middle childhood and one in adolescence.

Due to this limitation and in accordance with fundamental assumptions of the analyses, primarily the interdependence of the data, three different subsamples were created based on the data provided by Camp To Belong. The first subsample consisted of those in middle childhood. To be consistent, the youngest sibling who was between the ages of 6-12, was identified and kept in the middle childhood subsample, resulting in a sample size of $n = 76$. The average age was 9.80 years with 47.4% of the campers reporting as female. The second subsample consisted of youth in adolescence. As is similar to the middle childhood subsample, the oldest sibling in each sibling set who was between 13-18 was identified and kept in the adolescent subsample, resulting in a sample size of $n = 85$. The average age was 15.32 years with 50.6% reporting as

female. Lastly, the third subsample was created to address the differences between developmental stages. In this subsample, only one sibling from each sibling group was identified to be part of the subsample. To ensure that both developmental stages were accurately represented, a camper from one of the developmental group was identified in one sibling group and the next developmental group was identified in the next sibling group. This process resulted in a sample size of $n = 107$ campers with an average age of 12.96 and 52.5% reporting as female. Please see Table 1 for demographic information.

Table 1

Youth report of Demographic Variables, Sibling Relationship Quality, and Resilience

Variables	Middle Childhood (n= 76)		Adolescence (n = 85)		Developmental Stages (n = 107)	
	M	*SD*	*M*	*SD*	*M*	*SD*
Age	9.80	1.98	15.32	1.57	12.84	3.12
Number of times at CTB	1.59	1.00	1.84	1.29	1.80	1.27
Pre-sibling warmth	21.73	3.36	20.78	3.30	21.27	3.41
Pre-sibling conflict	5.62	1.89	5.17	1.49	5.42	1.67
Pre-resilience	37.94	6.22	39.21	3.90	39.36	5.00
Post-sibling warmth	21.08	3.32	20.28	4.54	21.06	3.85
Post-sibling conflict	4.85	1.90	4.62	1.68	4.73	1.80
Post-resilience	38.77	5.49	38.24	6.18	39.23	5.64

3.1.3 Measures

        Each member Camp To Belong administered camper surveys that have measures for sibling relationship quality and resilience. The aim is to determine if, through camp participation, sibling relationship quality and children's resilience are improved from pre- to post-intervention.

        Meaning of sibling in foster care. The Camp To Belong survey asked "what does your brother or sister mean to you since you have been in foster care?" Reponses to this open-ended question were analyzed in order to answer the first research question.

        Sibling Relationship Quality. Sibling relationship quality was assessed using subscales that measure *sibling warmth* and *sibling conflict*. Throughout the literature sibling warmth, sibling conflict, and relative status/power are standard components used to assess sibling relationship quality (Furman & Buhrmester, 1985). The evaluation committee unanimously decided to withhold the component of relative status/power as that is often assessed as preferential treatment from the parent, which is not presently applicable to these youth due to their current placement in foster care and separation. Linares et al., (2007) also withheld this portion of the Sibling Relationship Questionnaire (Furman & Buhrmester, 1985) when administering it to a foster care sample. For this measure, *sibling warmth* was comprised of six items and *sibling conflict* was comprised of three items. The questions for *sibling warmth* and *sibling conflict* were generated by the Camp To Belong evaluation committee and were influenced by questions on the Sibling Relationship Questionnaire. The entire SRQ was not used as the evaluation committee was reluctant to ask the campers to complete two 48 item questionnaires in addition to the other items ask in the survey in order to keep the camper's attention and compliance. The *sibling warmth* subscale has been used by the Camp To Belong survey data in the past. Questions on the *sibling warmth* subscale consist of "I can count on my sibling to be there for me if I need them," and "I care about my sibling." The *sibling conflict* subscale was new to the camper survey and an example of a question is "how much do you and your sibling get mad and get in arguments with each other." The *sibling conflict* subscale has one item that was reverse coded, "me and my sibling can work out or problems." Response options for each of the questions are on a four point Likert scale ranging from *not at all* (1) to *a lot* (4). Higher scores on each subscale indicate greater sibling warmth and/or sibling conflict. After running reliability, only two items of the sibling conflict scale were used to assess sibling conflict. The internal consistency for sibling warmth and sibling conflict subscales was assessed.

Sibling warmth had strong reliability while sibling conflict had moderate reliability, please see Table 2.

Resilience. The individual subscale of the Child and Youth Resilience Measure-28 was used to assess individual resilience of youth in foster care at pre-test and post-test. This shortened scale was developed by Liebenberg, Ungar, and Van de Vijver (2012). Indicators of reliability reported for the individual subscale are strong (Cronbach alpha = 0.80). The measure was normed on an original sample of children living in diverse family constellations including those who were living with both of their biological parents, those living with a single parent, others living in out of home placement, and some in independent living programs in Canada (Liebenberg, et al., 2012). Examples of questions assessing individual resilience include, "I know where to get help," "I feel supported by my friends," and "I am aware of my own strengths." There were a total of eleven questions that addressed the three components of individual resilience as suggested by Liebenberg et al; *personal skills*, *peer support*, and *social skills*. The children and youth's responses were on a four point Likert scale ranging from "not at all" (1) to "a lot" (4). Higher scores represented "increased presence of resilience processes" (Liebenberg et al., 2012, p. 22). The internal consistency of this measure for the present study was strong, please see Table 2.

Covariates. The limited demographic information provided by the youth such as gender, race, and number of times that one has attended Camp To Belong were covariates in this study.

Table 2

Cronbach's Alpha Coefficients of Measures by Subsample

Measures	Middle Childhood		Adolescence		Developmental Stages	
	Pre	Post	Pre	Post	Pre	Post
Sibling Warmth	0.86	0.84	0.87	0.91	0.87	0.88
Sibling Conflict	0.73	0.56	0.60	0.60	0.64	0.61
Resilience	0.87	0.86	0.78	0.84	0.86	0.90

3.2 Analytic Strategy

The main objective of this study was to add greater understanding about sibling relationships of youth who are currently living in foster care and separated from one another. Specifically, the research questions were: (a) what does a "brother" or "sister" mean to youth in foster care, (b) are there developmental differences between middle childhood and adolescents when it comes to how youth perceive their sibling relationship quality while in foster care, (c) to what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children and adolescents who are participating in a five-day sibling enhancement intervention, Camp To Belong, and (d) does sibling relationship quality have an association with youth's report of individual resilience?

Research Question 1: What does a "brother" or "sister" mean to youth in foster care?

To answer the first research question an open-ended question from the camper survey was utilized: "what does your brother or sister mean to you since you have been in foster care?" In order to analyze this question and conceptualize what siblings mean to those who are separated from their sibling in foster care, qualitative techniques of grounded theory methods were used to identify themes in the post-test data. LaRossa (2005) outlined five principles associated with grounded theory methods. The first is that "language is central to social life. Thus, the microanalysis of written texts, the heart of a grounded theoretical analysis, is a worthwhile enterprise" (p. 838). This principle coincides with the social aspect of symbolic interaction and the language and meaning that is generated from that interaction. According to LaRossa's principle, examining the written text of what siblings mean to one another while in foster care is a worthwhile enterprise. Second, LaRossa stated, "words are the indicators upon which grounded theory method-derived theories are formed" (p. 838). This further iterates the importance of obtaining information from the voices and experiences of those that currently live in the foster care system and what their sibling means to them. The third principle is: "coding and explanation are built upon a series of empirical and conceptual comparisons" (p. 838). This occurred throughout the coding process where as a researcher, I compared codes from different individuals to generate a theory about what siblings mean to one another. And finally, the last two principles include: "from a grounded theoretical perspective, theories are sets of interrelated propositions, whereas propositions state how variables are related" (p. 838); and "there is value in choosing one variable from among the many variables that a grounded theoretical analysis

may generate and make that variable central when engaged in theoretical writing" (p.838). With these guiding principles, responses to "what does your sibling mean to you since you have been in foster care" were analyzed.

The grounded theory method involved open, axial, and selective coding strategies (Strauss & Corbin, 1998). Open coding consisted of breaking down the existing written text and reading for similarities and differences (Strauss & Corbin). In this study, each of the camper's responses were examined word for word, line by line. In my journal, I wrote about the difficulty I had coding some of the camper's responses, primarily when they involved really short responses. For instance, many of the campers just listed the two words "a lot" as a response, or "I don't know." Open coding these responses resulted in codes with the same words, "a lot" and "I don't know." These responses meant that the breaking down of the written text when looking for similarities and differences as described by Strauss and Corbin (1998) was simpler for these responses than responses that had more complexities.

LaRossa (2005) described the second phase of axial coding as a constant comparison that occurs in open coding to see if two of the same codes could be placed together, understood as a concept or if it is better to create a new concept that best encapsulates each code. In this phase, the researcher was looking for a concept to reach saturation from the various participants experience in order to move onto the last phase of coding, selective. In order to conduct axial coding, I read through the open codes multiple times before generating any potential labels or constructs. While doing this, I was open to seeing what types of labels or constructs emerged. Through this process, I identified 15 axial codes. Please see Appendix B (Table 6) for details of all the open codes that fit into the axial code. The codes included: *means a lot*: *undefined*, *means a lot*: *defined*, *sadness/despair*, *understanding*, *connection*, *helpful*, *someone to look up to*, *not alone*, *separation*, *don't care*, *love*, *hope*, *difficulties (not having contact)*, *can't conceptualize it*, *and special relationship*. After coding was completed, my major professor verified my codes. In this process, there were several open codes that fit into multiple different axial codes.

Lastly, in selective coding, the open and axial codes were reviewed and a story line of the participant's voice and experience emerges and helps to generate the theory of what siblings mean to one another while in foster care (Echevarria-Doan & Tubbs, 2005). Of these axial codes, I grouped them based on the similarities and differences in order to try identify the selective codes (Strauss & Corbin, 1998), and ultimately a theory about the meaning of sibling

relationships of youth in foster care. Two selective codes emerged: *positive/protective* and *challenges*. When discussing what their sibling means to them, campers clearly identified many positive and protective factors as well as some real challenges experienced. Please see the second chart in Appendix B (Table 7) for axial to selective codes. There was one axial code that did not reach saturation: *don't care*. There was also another axial code that did reach saturation, but did not fit into these selective codes, *can't conceptualize it.*

Achieving Rigor. Interpretation requires concentration, heightened awareness of the data, and openness to the faint nuances of social life (Anfara, Brown, & Mangione, 2002). In order to accurately make sense of the data, I must be able to understand and articulate my personal biases on the research topic. In an effort to be consistent with the use symbolic interaction, I felt it was important to share my personal biases, perceptions, and assumptions of sibling relationships and sibling relationships of those in foster care.

> I identify as having one sibling, a sister. My view of sibling relationships has drastically changed over the past several years. For the longest time I took my sister for granted and didn't really value the impact she had on my life or how much she meant to me. It wasn't until my volunteer experience with Camp To Belong that I realized how important she is to me and since then we have grown closer.
>
> During my volunteer time at Camp To Belong I saw children and adolescents who were so grateful for the opportunity to spend quality time with their siblings who they rarely saw and yet others who were not as excited. I witnessed siblings who were so sad at the end of the week because they didn't know when the next time they would see their sibling. I left Camp To Belong feeling that it provided a wonderful service to siblings who were separated and I wanted to get more involved.
>
> I joined the evaluation committee three years ago during my master's program when they were piloting the camper survey. Since that time I have been able to work alongside the committee on improving the use and outcomes of the camper survey. I also voluntarily analyze all of the camper survey data each year and provide reports to each member camp and the organization as a whole.

In order to address confirmability, the authenticity of representation, I maintained a researcher's journal/memos with my thoughts and process as I coded the responses (please see Appendix C for my diary). I compared the categories/themes and subcategories with my

dissertation chair (Echevarria-Doan & Tubbs, 2005). To further build the trustworthiness of this study, I was and am committed to explicitly stating my research questions (please see Appendix A) and I described the process of coding as well as how I recognized the themes that emerged, and practiced reflexivity (Anfara, Brown, & Mangione, 2002) as I worked until saturation of themes occurred.

Research Question 2: Are there developmental differences between middle childhood and adolescence when it comes to how youth perceive their sibling relationship quality while in foster care?

In order to address the second research question of the study, an analysis of covariance (ANCOVA) was conducted in order to examine the difference in means of *Sibling Relationship Quality* between the two groups while accounting for the covariates. Pre and post-test data were used to answer this research question. ANCOVA was appropriate because there is only one dimension being examined - sibling relationship quality. ANCOVA has several assumptions that need to be considered: independence of data, homoscedasticity, and normality as well as equal number of participants in each group (Keselman, et al., 1998). Appropriate measures were taken to ensure that the assumptions were met. For instance, to address homoscedasticity and normality scatterplots and histograms were conducted. In order to address for independence of data among a sample that is dependent, participants were broken up into two age subsamples: middle childhood and adolescence. Youth in the middle childhood subsample included only one sibling from a sibling constellation who is in middle childhood. The adolescence subsample included only one sibling from a sibling constellation who is in adolescence. There were instances of sibling groups larger than two members; to be consistent, the oldest that met the age defined as adolescence was identified and the youngest who met the age defined as middle childhood was identified, the rest of the sibling data was not used in order to meet the assumption of independent data. Significance was determined at $p = 0.05$.

Research Question 3: To what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children who are participating in a five-day sibling enhancement intervention? Further, does it vary by developmental stage?

In order to address the third research question, a repeated measures t-test was used. The use of a repeated measures t-test enabled the examination of the difference between two

measures, specifically a pre-test and post-test (Cohen & Lea, 2004). In a pre-test post-test the data are not independent and the repeated measures t-test accounted for that consideration. One caution when using repeated measures t-tests was that a statistically significant *t* value can occur even when there is a small sample size and relatively little change (Cohen & Lea). In order to account for this, confidence intervals were obtained. Further, in order to contend with keeping the data independent, two analyses were run with the two subsamples (a) youth in middle childhood and (b) youth in adolescence. In order to address for developmental differences, a change score was created between the pre- and post-camper surveys and an ANCOVA was run using the developmental subsample. Significance was determined at $p = 0.05$.

Research Question 4: Does sibling relationship quality have an association with youth's report of individual resilience?

In order to address the last research question, correlations and simple linear regressions were conducted on post-test data. In order to address assumptions of multiple regressions, such as, independence, homoscedasticity and normality, scatterplots and histograms were conducted before further analyses. Correlations indicated the direction of the relationships and the linear regression determined if sibling relationship quality was associated with resilience. Similarly, separate regressions were conducted with those in middle childhood and those in adolescence to test if there were developmental differences in order to contend with independence of data. Lastly, an ANCOVA was conducted using the developmental subsample to see if there is a difference between the two developmental periods. Significance was determined at $p = 0.05$.

Missing Data. Listwise deletion was used to handle missing data. There were several issues that resulted in higher than expected amounts of missing data. At one member camp, the pre- test surveys were not administered to all campers resulting in over 50 camper's data not being used. Furthermore, in another campsite, 23 campers did not complete the surveys. Of the remaining 353 surveys, 278 had complete data for both pre- and post- measures. In all, 22% of the surveys were not usable for the study.

CHAPTER FOUR

RESULTS

In this chapter, the results from each of the research questions and the analyses used to answer each question are provided. Given the exploratory nature of this study, no hypotheses were tested.

4.1 Research Question One

What does a "brother" or "sister" mean to youth in foster care?

Grounded theory methods were used to qualitatively examine what a brother or sister meant to participants living in foster care. The first phase involved open coding of the camper's responses. The second phase of coding consisted of axial coding, where I went through and looked at all of my open codes and saw if there was any way they could be placed together or labeled to represent a specific construct (Strauss & Corbin, 1998). Lastly, I then grouped the axial codes based on the similarities and differences in order to identify the selective codes (Strauss & Corbin, 1998), and generate a theory about the meaning of sibling relationships of youth in foster care. The two selective codes that emerged were *positive/protective* and *challenges.*

Positive/Protective. Overwhelmingly, the camper's discussed the positive and protective factors associated with what their sibling means to them. One camper wrote that a sibling means, "someone to talk to, love, have your back." Other campers shared that their brother or sister means, "someone who can help you through everything," "someone you can rely on and to have someone who understands you," "it means that I have someone that cares about me," "that I still have someone there for me, no matter where we are," and "someone you can count on to be there for you whenever you need them."

Challenges. Other campers discussed the challenges that they experienced when thinking of the meaning of their sibling relationship. Most of the challenges were related to the fact that the campers were separated from their sibling and had limited contact. Campers shared these sentiments about what their sibling means to them: "that we are separated," "it honestly doesn't feel like I have one because I almost never see them, but when we finally see each other, it is awesome," "I can't talk to my other brothers and sister and I can't even visit them," "I don't

know, it's complicated because now I hardly know them. I mean, I know what they tell me, but it is not the same. Now a brother or sister is your mother's other kids," and "I may never get to see them again." Please see the third chart in Appendix B (Table 8) for additional exemplar quotes for this theme.

Grounded theory. Given these selective codes and camper quotations, the grounded theory that emerges is one of complexity. Siblings mean different things to different campers and to use one of the camper's own words, "it's complicated." For many, their sibling relationship offered them very real comforts in a somewhat uncertain situation—placement in foster care; however, for others, placement in foster care impacted their relationship. One camper wrote, "um, I think it is harder to be separated then come back together because even though we are together we still tend to push each other way harder than siblings that live together because we don't want to get hurt." This camper seems to be describing a way in which he or she is protecting himself or herself from being hurt by not leaning on his or her sibling because they don't know how the relationship will progress or if that sibling has the ability to even be there for them. The uncertainty of the placement in foster care manifested into the uncertainty of the sibling relationship and the potential protective role a sibling can play in their life. The uncertainty was captured in this camper's feelings, "I may never get to see them again." It is not difficult to see how this fear could complicate the sibling relationship. For children in foster care, the positive and potential protective nature of siblings relied on the fact that they had access to one another. As demonstrated by these responses of what a sibling means, that they had someone to "rely on," "care about me," "help me get through tough times," "talk to about my problems," and "someone you can count on to be there for you whenever you need them." The access and meaning is not surprising given the premise of symbolic interaction, primarily, "the meaning of such things is derived from, or arises out of, social interaction that one has with one's fellows" (p. 2, Blumer, 1969). If siblings were not interacting with one another, had limited time with one another, and don't know when or if they will see their sibling, it is not surprising that when asked what their sibling means to them would result in "it's complicated."

4.2 Research Question Two

Are there developmental differences between middle childhood and adolescence when it comes to how youth perceive their sibling relationship quality while in foster care?

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In order to assess for developmental differences in how youth perceived their sibling relationship quality, the developmental subsample was used to conduct two different one-way analysis of covariance (ANCOVA): one for sibling warmth and one for sibling conflict. The independent variable was the respective developmental group to which each sibling belonged. There were two developmental groups, those in middle childhood and those in adolescence. The dependent variables, sibling warmth and sibling conflict, were each tested independently with the covariates of gender and race. A preliminary analysis evaluating the homogeneity-of-slopes assumptions indicated that the relationship between the covariates and the dependent variables, sibling warmth and sibling conflict did not differ significantly as a function of the developmental group, $F(2, 76) = 0.17$, $MSE = 17.50$, $p = 0.84$, partial $\eta^2 = .01$ and $F(2, 76) = 1.84$, $MSE = 3.16$, $p = 0.17$, partial $\eta^2 = .05$ respectively. These results warranted testing the developmental differences with an ANCOVA. The results of the ANCOVA indicated that there was not a significant differences between middle childhood and adolescence in how they perceive their sibling warmth ($F(1, 78) = 0.48$, $MSE = 17.13$, $p = 0.49$, partial $\eta^2 = .01$) and sibling conflict ($F(1, 78) = 0.76$, $MSE = 3.22$, $p = 0.39$, partial $\eta^2 = .01$) for youth in foster care.

4.3 Research Question Three

To what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children who are participating in a five-day sibling enhancement intervention? Further, does it vary by developmental stage?

In order to assess whether or not there was a significant change in sibling relationship quality by participating in a five-day sibling enhancement intervention, two repeated measures t-tests were conducted. The middle childhood and adolescence subsamples were used separately in order to adhere to assumptions of independence of data. There were no significant differences for how youth in middle childhood [pre ($M = 21.86$, $SD = 3.21$), post ($M = 21.15$, $SD = 3.16$)] and adolescence [pre ($M = 20.81$, $SD = 3.32$), post ($M = 20.43$, $SD = 4.42$)] perceive sibling warmth after a 5 day sibling enhancement intervention [($t(65) = 1.45$, $p = .15$) and ($t(73) = .69$, $p = .49$)]. In accordance with the caution of significant t-tests with a small sample size, the confidence intervals were examined and neither middle childhood (95% CI [-.27, 1.70]) nor adolescence (95% CI [-.72, 1.48]) contained zero indicating that there were no significant changes in how they perceived sibling warmth after a five-day intervention.

There was a significant decrease for both youth in middle childhood [pre ($M = 5.56$, $SD = 1.9$), post ($M = 4.84$, $SD = 1.91$)] and adolescence [pre ($M = 5.16$, $SD = 1.50$), post ($M = 4.56$, $SD = 1.67$)] in how they perceived their sibling conflict after participating in a five-day sibling enhancement intervention [($t(72) = 2.87$, $p < .01$), ($t(80) = 2.79$, $p < .01$)]. The caution of significant t-tests with a small sample size was also examined for how the youth perceived their sibling conflict. The confidence intervals for middle childhood (95% CI [.23, 1.28]) and adolescence (95% CI [.17, 1.04]) did not contain zero, indicating significance. Please see Table 3.

Table 3

Descriptive Statistics and t-test Results for Middle Childhood and Adolescence Sibling Relationship Quality

Outcome	Pretest		Posttest		95% CI for Mean Difference	*r*	*t*	*df*
	M	*SD*	*M*	*SD*				
Sibling Warmth								
Middle Childhood	21.86	3.21	21.5	3.16	-0.27, 1.70	.21	-2.59	65
Adolescence	20.81	4.42	20.4	4.42	-0.72, 1.48	.28*	0.69	73
Sibling Conflict								
Middle Childhood	5.56	1.50	4.84	1.91	0.23, 1.28	.30*	2.87	72
Adolescence	5.16	1.90	4.56	1.67	0.17, 1.04	.24*	2.79	80

$* p < .05$

In order to assess for developmental differences, change scores were computed using the developmental subsample in order to account for independence of the data. After the change scores were created an ANCOVA was conducted to assess for significant differences in sibling warmth and sibling conflict based on developmental stages. The independent variable was the respective developmental group to which each sibling belonged. There were two developmental groups, those in middle childhood and those in adolescence. The dependent variables, sibling warmth and sibling conflict, were each tested independently with the covariates of gender and race. A preliminary analysis evaluating the homogeneity-of-slopes assumptions indicated that the

relationship between the covariates and the dependent variables, sibling warmth and sibling conflict did not differ significantly as a function of the developmental group, $F(2, 67) = 0.37$, $MSE = 13.87$, $p = 0.70$, partial $\eta^2 = .01$ and $F(2, 73) = 0.71$, $MSE = 3.99$, $p = 0.50$, partial $\eta^2 = .02$ respectively. These results warranted testing the developmental differences with an ANCOVA. The results of the ANCOVA indicated that there was not a significant differences between middle childhood and adolescence in how they perceive their sibling warmth ($F(1, 69) = 1.44$, $MSE = 19.66$, $p = 0.23$, partial $\eta^2 = .02$) and sibling conflict ($F(1, 75) = 0.00$, $MSE = 3.96$, $p = 0.97$, partial $\eta^2 = .00$) for youth in foster care.

4.4 Research Question Four

Does sibling relationship quality have an association with youth's report of individual resilience, and further does it differ by developmental stage?

Prior to testing the research question with multiple regressions, correlation analyses and descriptive statistics were conducted among all the study variables being assessed in this question for the middle childhood and adolescence subsamples: number of times the youth had attended CTB, the youth's gender and age, as well as the post measures for sibling warmth, sibling conflict, and individual resilience. For the middle childhood analysis, there were several significant associations. Males were significantly more likely than females to have attended camp more than once. The camper's age was significantly associated with the number of times that one has attended camp, such that older campers have attended camp more frequently. Camper age was also negatively associated with sibling warmth, such that older campers reported less sibling warmth. Sibling warmth was negatively associated with sibling conflict and positively associated with individual resilience. There were also significant associations for youth in adolescence. Female campers were more likely to be older in age compared to male campers. Camper age was also significantly associated with the number of times they have attended camp and their perception of sibling warmth and resilience. The camper's perception of sibling warmth was also negatively associated with sibling conflict and positively associated with individual resilience. Please see Tables 4 and 5 for correlation coefficients.

Multiple regression analysis was conducted to predict sibling relationship quality (warmth and conflict) on individual resilience when controlling for the number of times the youth had attended CTB, as well as the youth's gender and race. In order to comply with assumptions of independence of data, two separate subsamples were used, one for those in

middle childhood and one for those in adolescence. The number of times they attended CTB, their gender and race did not account for a significant variation in individual resilience for both middle childhood [$R^2 = .01$, $F(3, 47) = .08$, $p > .05$] and adolescence [$R^2 = .03$, $F(3, 62) = .73$, $p > .05$].

A second analysis was conducted to evaluate whether the sibling relationship quality predicted individual resilience above the covariates. Sibling relationship quality accounted for a significant proportion of the individual resilience of both middle childhood R^2 change = .28, $F(5, 47) = 3.70$, $p < .01$, and adolescence R^2 change = .33, $F(3, 60) = 6.95$, $p < .01$ when controlling for the number of times they attended CTB, gender, and race. Of the sibling relationship quality measures for both middle childhood and adolescence, sibling warmth significantly predicted individual resilience ($\beta = .56$, $p < .01$, and $\beta = .63$, $p < .01$) whereas sibling conflict did not ($\beta = .03$, $p > .05$, and $\beta = .14$, $p > .05$).

Lastly, an analysis of covariance (ANCOVA) was conducted to see if there were developmental differences in how youth in middle childhood and adolescence perceived their individual resilience. The independent variable was the respective developmental group that each sibling belonged, middle childhood or adolescence. The dependent variable, resilience, was tested independently with the covariates of gender, race and number of times at CTB. A preliminary analysis evaluating the homogeneity-of-slopes assumptions indicated that the relationship between the covariates and the dependent variable, resilience did not differ significantly as a function of the developmental group, $F(2, 72) = .21$, $MSE = 7.56$, $p = .81$, partial $\eta^2 = .01$. These results warranted testing the developmental differences with an ANCOVA. The results of the ANCOVA indicated that there was not a significant differences between middle childhood and adolescence in how they perceived their individual resilience ($F(1, 74) = 1.09$, $MSE = 37.63$, $p = .30$, partial $\eta^2 = .01$).

Table 4

Youth Reports of Demographic Variables, Sibling Relationship Quality, and Individual Resilience (Middle Childhood, n = 76)

Variables	1	2	3	4	5	6	7
1. Camper Age	–						
2. Camper Gender	.19	–					
3. Camper Race	.89	-.22	–				
4. Number of Times at CTB	.26*	-.28*	.07	–			
5. Post-Sibling Warmth	-.28*	-.17	-.22	-.08	–		
6. Post-Sibling Conflict	.14	.07	-.01	.04	-.34**	–	
7. Post-Resilience	-.06	.02	.01	-.04	.52**	-.10	–

$* p < .05, ** p < .01$

Table 5

Youth Reports of Demographic Variables, Sibling Relationship Quality, and Individual Resilience (Adolescence, n = 85)

Variables	1	2	3	4	5	6	7
1. Camper Age	–						
2. Camper Gender	.26*	–					
3. Camper Race	-.10	-.10	–				
4. Number of Times at CTB	.28*	-.10	-.00	–			
5. Post-Sibling Warmth	.37**	.14	-.09	.02	–		
6. Post-Sibling Conflict	-.14	.05	-.04	.05	-.38**	–	
7. Post-Resilience	.29*	.19	-.14	-.09	.59**	-.10	–

$* p < .05, ** p < .01$

CHAPTER FIVE

DISCUSSION

The purpose of this study was to explore an important factor that is often over looked and under studied, sibling relationship quality of youth in foster care. More specifically investigating the influence that positive sibling relationships has on resilience and to begin the first step in developing a systematic research program by testing a sibling intervention using a pre, post-test design with no control as suggested by Markes and Rhoades (2012). Symbolic interaction provided the theoretical framework used to explore the sibling relationship quality for these youth. The research questions addressed in this study included:

1. What does a "brother" or "sister" mean to youth in foster care?

2. Are there developmental differences between middle childhood and adolescence when it comes to how the youth perceive their sibling relationship quality while in foster care?

3. To what extent does sibling relationship quality of youth who are currently separated from one another increase from time one to time two for children who are participating in a five-day sibling enhancement intervention? Further, does it vary by developmental stage?

4. Does sibling relationship quality have an association with youth's report of individual resilience, and does that vary based on developmental stage?

As stated in the introduction, this study was exploratory with no explicit hypotheses. However, the results of these questions do begin to build a strong base for growing the empirical knowledge of sibling relationships of those in foster care.

5.1 Research Question One

What does a "brother" or "sister" mean to youth in foster care?

In the current foster care literature there is no qualitative investigation into the meaning of sibling relationships. Given this lack of information and the qualitative nature of this question, this study was designed to use grounded theory methods to analyze the data. After conducting open, axial, and selective coding, the theory that developed was one of complexity. When talking about what their siblings mean to them while in foster care, overwhelmingly, the participants described very positive and protective meanings of their sibling relationships. More specifically,

they discussed how their sibling relationships provided them with understanding, love, hope, help, feelings of not being alone and connection. However, participants also discussed the very real challenges they experienced, primarily related to the fact that they were separated from their siblings and how that influenced their sibling relationships. Participants shared such sentiments as "since I have been in foster care, I never knew I had them," and "it's really hard because you don't get to see them very much" highlighting the influence that lack of contact has on what their sibling means to them.

Symbolic interaction purports that the meaning of an object can change based on an individual's interpretation (Blumer, 1969). As previously stated, for the purposes of this study, the object is the sibling relationship. Blumer described the way in which an individual's meaning of an object can be influenced by the meaning that others have for that object. Based on the results of this study, particularly the challenges that the participants described, one can not help but wonder how the meaning of sibling relationships of those making decisions for these children's lives influences how the youth themselves are making meaning about their sibling relationship, particularly those that are reporting difficulties with their sibling relationship. Smith (1996) identified how a little more than half (56%) of the two most important people making decisions about the lives of children in foster care, case managers and foster parents, report that sibling relationships are very important for the children they serve. If these key people do not value siblings or the sibling relationships for those in foster care and make decisions for these youth from that perspective, it is not surprising that some of the youth reported challenges with what their sibling means to them in foster care. The campers could be making interpretations such as their sibling relationships don't matter. This may be what is being experienced by this camper's comment, "I don't know, it's complicated because now I hardly know them. I mean, I know what why tell me, but it is not the same. Now a brother or sister is your mother's other kids." This sentiment reflects how the lack of contact has influenced her relationship and the lack of connection. "Your mother's other kids" implies a lack of connection. The lack of connection can be attributed to a lack of contact with their siblings, and a lack of contact has implications for relationship quality. Indeed, a lack of sibling contact has been associated with decreases in sibling relationship quality (Gardner, 1996; Wojciak, McWey, & Helfrich, 2013). These results can have serious implications, particularly when considering the positive and protective meaning of siblings that so many campers described.

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The fact that the campers' responses were often positive and in a lot of ways could be described as protective confirms what other scholars have reported, particularly, the fact that siblings were someone with whom they could talk about their problems and rely on (Festinger, 1983). Other positive factors regarding sibling relationships include creating a sense of belonging, safety, and emotional stability (Shlonsky, et al., 2005; Whiting & Lee, 2003). While the results of these campers' experiences do not fit with that exactly, it does help to explain why the sibling relationship may be protective and what may contribute to their sense of belonging, safety, and emotional stability reported. When discussing what their sibling means to them, the campers discussed such things as love, connection, hope, and understanding; - all relational aspects that had not yet been studied within this population. It is perhaps not surprising that having continued contact with someone that one reports as "someone who will love me unconditionally," "someone who LOVES you with their full heart," and "someone who is there to remind me I am not alone," would help youth have a sense of belonging, safety, and emotional stability. The positive and protective meanings these youth are attributing to their siblings may have greater credence given the often uncertain environment of foster care. Love, understanding, hope, and connection are not things that are required of the foster care system or foster parents, and may not be characteristics they attribute to their biological parents, but for these children they reported that their sibling means these things to them.

5.2 Research Question Two

Are there developmental differences between middle childhood and adolescence when it comes to how youth perceive their sibling relationship quality while in foster care?

Similar to research question one, there is no known empirical research that has investigated developmental differences between youth in middle childhood and adolescence in how they perceive their sibling relationship quality while in foster care. Contrary to existing knowledge about sibling relationship quality of youth in the general population, there is no significant difference in how youth in foster care perceived their sibling warmth and sibling conflict during middle childhood and adolescence. Results from cross-sectional studies exploring sibling relationship quality have demonstrated two different types of patterns: a U-shape (Kim, et al., 2006) and a steady decrease (Buhrmester & Furman, 1990) in terms of sibling warmth. For this study, youth reported relatively high sibling warmth for both developmental stages.

Furthermore, the average score for sibling conflict also was similar for youth in middle childhood and adolescence.

The lack of statistical significance of developmental differences for this population is important and has implications for practice and policy. Adolescents in foster care are more likely to have placement disruptions (Leathers, 2006; Milan & Pinderhghes, 2000) and subsequently increased likelihood of being separated from their sibling due to the moves. Given the current literature for the general population, primarily that sibling warmth/positivity and sibling conflict decrease in adolescence, it may be that those making decisions about sibling contact do not feel it is important to ensure these relationships are maintained. The common belief is that siblings aren't as important to adolescents when their peer relationships may become more important (Steinberg & Silk, 2002). This belief, however, may not be true for youth in foster care. For youth in this study, there were no significant differences in sibling warmth and sibling conflict for those in middle childhood and adolescence and they reported similar levels of sibling warmth and conflict. This may be due to what a sibling means to them since they are in foster care, specifically the positive/protective nature that they provide one another: love, connection, and understanding in an uncertain environment. Knowing that there is a very real likelihood of sibling separation and given the relatively high scores on sibling warmth and lack of statistical difference between the two developmental periods, more should be done to ensure that contact and subsequently opportunities to maintain sibling relationship occur for these youth.

5.3 Research Question Three

To what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children who are participating in a five-day sibling enhancement intervention?

A previous investigation into the effects of an intervention on sibling relationships has demonstrated promising results. Feinberg and colleagues (2012) indicated that as a result of their intervention there were increases in positivity and fair play between siblings. The results of the current study also demonstrated a significant decrease in sibling conflict after participating in a five-day sibling enhancement intervention. There were no significant changes in sibling warmth associated with the intervention; however, the rates of sibling warmth were relatively high for middle childhood and adolescence and remained high after the intervention.

The significant decrease in sibling conflict is an important finding. Linares (2006) demonstrated that sibling violence of youth in foster care along with placement characteristics (whether they are placed together or not) and having a mental health diagnosis were risk factors for negative outcomes such as internalizing and externalizing behaviors, school performance, and social competence. While the current study did not assess for sibling violence, an intervention that could help reduce sibling conflict may be useful in decreasing the likelihood of experiencing sibling violence and potentially these negative outcomes. Furthermore, siblings may be separated due to a high degree of sibling rivalry (Hegar, 1988; Staff & Fein, 1992; Whelan, 2003). If siblings can be part of an intervention that decreases sibling conflict it may have an influence on placement stability. Placement stability is associated with improved overall outcomes for youth in foster care (Thorpe & Swart, 1992; White et al., 2009) and children who are placed with their siblings tend to have fewer placements and greater stability (Drapeau et al., 2000; Tarren-Sweeney & Hazell, 2005). Examining interventions that promote sibling relationship quality and specifically decrease sibling conflict warrants greater attention.

5.4 Research Question Four

Does sibling relationship quality have an association with youth's report of individual resilience, and further does it differ by developmental stage?

Resilience in this study was defined as one's ability to thrive in the face of adversity and stress (Campbell-Sills, Forde, & Stein, 2009; Connor & Davidson, 2003). For youth in foster care, the mere placement in foster care can pose adversity and stress, let alone what lead up to the placement in foster care and their continued experiences while in care. Examining factors that can influence individual resilience can inform efforts aimed to promote resilience and ultimately better outcomes. Kolar (2003) described how resilience could be a process as opposed to an outcome. In this study resilience was conceptualized as a process indicating that things can act on it to promote it or dampen one's resilience. In the current investigation, the goal was to see if warm sibling relationships could influence this process of resilience for youth in foster care. Similar to the other research questions investigated in this study, there were no empirical investigations examining whether or not sibling relationship quality could predict resilience and furthermore if there are differences based on developmental stage. In this study, sibling warmth did significantly predict higher scores of individual resilience for both those in middle childhood and adolescence. There were no significant differences in the levels of resilience for those in

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middle childhood and adolescence. The lack of significant differences between the developmental stages and that those with greater sibling warmth had greater individual resilience, indicate that promoting sibling warmth could be a protective factor for all youth in foster care.

Most of the empirical investigations into resilience for youth in foster care is retrospective and looks at older youth who have aged out of the foster care system (Haight, Finet, Bamba, Helton, 2009; Harder, Köngeter, Zeller, Knorth, & Knot-Dickscheit, 2011; Yates & Grey, 2012). This study identified a readily available resource that can be drawn upon, sibling relationships, and can significantly predict resilience for youth who are currently in care. Identifying and using something that can be done now to try and improve outcomes for these youth is paramount. The literature is plagued with negative outcomes children have while in foster care and once they leave. For instance, children in foster care have a 3-10 greater likelihood of having a mental health diagnosis as compared to those with similar socioeconomic backgrounds (Harmon et al., 2000), and have behavioral problems (Barth et al., 2007). Mental health and behavioral problems can have short-term and long-term effects for these youth. Children with greater mental health and behavioral problems are more likely to have more placements (Barth et al., 2007; Hegar & Rosenthal, 2011; White et al., 2009) and greater placement instability is associated with poorer outcomes (Thorpe & Swart, 1992; White et al., 2009). Furthermore mental health concerns in adolescence is associated with higher rates of suicide, substance use, poorer academic performance and comorbidity of other mental health diagnoses (Birmaher, Ryan, Williamson, Brent, Daufman et al., 1996) as well as having an increased likelihood of having a diagnosis later in life as well as impaired social and health outcomes (Naicker, Galambos, Zeng, Senthilselvan, & Colman, 2013). More attention should be given to factors that promote resilience among youth in foster care.

Bell and colleagues (2013) reported that 8.2-9.6% of children who have been in foster care long term and were resilient on one behavioral outcome were also resilient in their academic performance and peer relationships. Being resilient in one area can have positive effects on other areas. Bolstering warm sibling relationships for youth in foster care can be important to helping them be resilient in other behavioral outcomes. Youth who are placed with their siblings have reportedly lower issues of behavioral problems and mental health concerns compared to those who are separated (Hegar & Rosenthal, 2011; Smith, 1998; Tarren-Sweeny & Hazell, 2005).

Furthermore, having a warm sibling relationship may indicate that the youth has the ability to be socially competent, a factor that is often associated with resilience (Brownlee, Rawana, Franks, Harper, Bajwa, O'Brien, & Clarkson, 2013) and one of the three subscales measured in the resilience measure used (Liebenberg et al., 2012). The social competence piece may be further explained by the camper's responses to what a sibling means for them. For instance, the code of helpful was used to describe how some camper's wrote that their sibling was there for them when they needed it or that they turned to their sibling when they had problems. Being able to listen to one's problems and offer advice or comfort are characteristics of social competence.

5.5 Implications

The results of this study have several implications for future research as well as clinical application and policy.

5.5.1 Implications for Sibling Research

This study yielded promising results that warrant future investigation. First and foremost, it is important to continue to explore what one's sibling means to youth in in foster care. This study is one of the first to examine this from the perspective of youth currently in foster care. From the camper's responses the theory that emerged was one of complication. The meaning of siblings while in foster care was positive and protective, but there were also some challenges that impacted their relationships. It was clear that for the majority of these youth their sibling was a comfort to them in the unknown circumstance of foster care. Campers suggested their sibling provided them with love, understanding, and a special connection. Future exploration should focus on obtaining a more in depth understanding of what a sibling means. The theory derived from this study was based on one open ended question at the end of a survey. There may have been respondent fatigue as well as limitations in being able to fully express themselves in writing. The age range for campers was 6-19 with varying degrees of educational attainments and writing skills. In the future, in depth one-on-one interviews and focus groups could shed greater light into the nuances of sibling relationships in this context.

Second, greater attention to sibling relationships from a developmental perspective is needed. For this study, youth in middle childhood and adolescence did not differ significantly on how they perceived their sibling warmth and sibling conflict. This study was cross-sectional in nature and cannot make claims about developmental trajectories. In the future, it would be

important to study sibling relationship quality longitudinally. Doing so has the potential to inform and provide decisions regarding placement and contact.

Third, an intervention for improving sibling relationships is merited. From this study it is clear that for those in foster care, their sibling means a lot to them and has a special role. Additionally, warm sibling relationships were predictive of higher scores of individual resilience, a trait that is associated with improved outcomes in the face of adversity. Based on these results, it is critical to look at ways to promote warm sibling relationships for youth in foster care, primarily since it can be used as a protective factor. Campers who participated in the five day Camp To Belong experience had significant decreases in their sibling conflict for both those in middle childhood and adolescence. This decrease may improve sibling relationship quality. Camp To Belong is an annual one-week event, future research should investigate other interventions that can be implemented throughout the year to promote sibling warmth and decrease sibling conflict. Ideally, the intervention would be manualized and tested for efficacy and effectiveness.

Lastly, the significant association between warm sibling relationships and resilience is a good first step in empirically supporting warm sibling relationships as a protective factor. Future research is needed to investigate if warm sibling relationships are associated with fewer mental health diagnoses, behavioral problems, and better academic performance for youth in foster care. Establishing these associations with empirical support would translate to practice and policy to help to improve outcomes for these youth.

5.5.2 Implications for Clinical Practice

Based off of the results of this study, there are several practical implications for those that work with youth in foster care. The first consideration is being curious about their family and not just about their parents. It is important to assess for sibling relationship quality and what strengths and weaknesses the youth perceives in their relationship. Further, it is also important to assess for what their sibling means to them knowing that it can be complicated. It is worth exploring what ways their sibling relationship may be protective or pose challenges. By assessing this, clinicians can learn about who is in their support system and why they are there. For instance, one of the campers talked about the fact that their sibling was there since "day 1." For this camper, there may be loyalty or the shared history that they are pulling on in order to report having a warm relationship.

It would be important to also assess for the amount of contact they have with their sibling if they are not currently living together. When assessing for contact, consider keeping it broad to include telephone contact and multi-media communication. The amount of contact siblings have has been associated with how they view sibling relationship quality (Gardner, 2000; Wojciak et al., 2013). If the youth does not have much contact, it would be important to assess for how much contact they would like and how comfortable they feel in discussing this with their case manager and/or their foster parents. This could be a place to help them promote agency, another characteristic associated with resilience and improving outcomes.

After conducting an assessment, it is important to consider the sibling relationship as a place for intervention to improve the experiences and outcomes for youth in foster care. Based off of existing literature in the general population and given the results of this study, sibling relationships matter and can influence outcomes. When creating interventions or thinking of how to promote warm sibling relationships, Tucker, McHale and Crouter (2008) found that siblings who participated in constructive/structured activities reported more positive adjustment than those in unstructured activities. Structured activities included such things as playing games, participating in the same club, having shared hobbies and playing sports together, whereas unstructured activities including just hanging out or watching TV. For youth in foster care who may not live with their sibling or have time with them, it may be tempting to just let them hang out and spend time together, but the results from Tucker and colleagues suggest that clinicians would be well advised to creating specific activities that can bolster sibling relationships and promote the sharing of experiences.

5.5.3 Implications for Policy

The federal policy named Fostering Connections to Success and Increasing Adoptions Act of 2008 outlined two specific tenets that should directly impact siblings in foster care. The tenets state that reasonable efforts be made to:

(A) place siblings removed from their home in the same foster care, kinship guardianship, or adoptive placement, unless the State documents that such a joint placement would be contrary to the safety or well-being of any of the siblings; and

(B) in the case of siblings removed from their home who are not so jointly placed, to provide for frequent visitation or other ongoing interaction between the siblings, unless that State documents that frequent visitation or other ongoing interaction

would be contrary to the safety or well-being of any of the siblings (42 USCA § 671(a)(31)).

Prior to this act, most states did not have legislation regarding sibling relationships for youth in foster care with the exceptions of Maine, Iowa, and Tennessee (Jim Casey Youth Opportunities Initiative). The lack of attention to policy related to sibling relationships in foster care is alarming, particularly since dimensions such as closeness (Hsiu-Chen & Lempers, 2004) and daily interactions (Brody, 1998) have been demonstrated to influence warm sibling relationships. While the Fostering Connections to Success and Increasing Adoptions Act of 2008 has been an important step in sibling relationship advocacy, more can be done to specify what "reasonable efforts" are in order to ensure these youth have contact with their sibling. Nevada recently amended policy related to siblings in foster care to specify that contact with siblings should be "arranged on a regular basis and on holidays, birthdays and other significant life events, unless such contact is contrary to the safety of the child or his or her siblings" (NRS 432.525). The results of this study can be used to further justify the need to specify what reasonable efforts are and specify what a plan is to ensure contact occurs.

For youth in foster care, there are various reasons why siblings may not be placed together, and there are multiple reasons as to why they may not have frequent contact with their sibling. Such reasons include; difficulty with transportation or living too far away, needing supervised visitation (Pavao, St. John, Cannole, Fischer, Maluccio, & Peining, 2007), and possibly foster parents feeling as though they are the gatekeepers to these relationships and protecting the youth from getting hurt (James, Monn, Palinkas, & Leslie, 2008). In the present study, regardless of developmental age, warm sibling relationships significantly predicted individual resilience, a trait that may be particularly beneficial for youth in foster care. As such, results of this study provide preliminary support for the importance of promoting sibling relationships for youth in foster care.

5.6 Limitations

The aim of this study was to build the foundational knowledge base for understanding sibling relationships of youth in foster care. While the beginning steps of this are being taken, there were several limitations that need to be considered. The first is with regard to the sample. Specifically, results should be understood with the possibility of selection bias. Case managers referred the campers so they could spend quality time together at a camp aimed to promote

sibling relationships. Therefore, case managers had to believe that siblings would benefit from time together. As such, there may be differences in youth referred to the program compared to those not referred. Further, the member camps often require that no serious sibling issues exist, indicating that these are all siblings who enjoy being around each other and don't have serious problems. While this is what is often suggested, it does not mean that there are not real problems between the siblings that the member camps may not be aware of. In addition, most member camps screen for emotional or behavioral problems that may negatively influence their time at camp. This screening is used for the member camps to make decisions about who attends and whether or not they have the appropriate volunteers to ensure that each camper has a positive time at camp. Given these precautions, it is possible that the sample represents children with fewer emotional and behavioral problems and better than average sibling relationships. However, in full disclosure, it has been my experience, that member camps will work hard to ensure that all children regardless of emotional or behavioral concerns or sibling issues can attend camp. In fact, they work hard to find volunteers who can best support the needs of the campers. Furthermore, from my experience being a camp counselor and camp director, sibling conflict and working through difficult sibling issues regularly occurs with these campers as they are trying to navigate all their feelings about seeing each other and participating in these activities designed to improve their relationship. The camper's quote "Um, I think it is harder to be separated then come back together because even though we are together, we still tend to push each other away harder than siblings who live together because we don't want to get hurt" summarizes the struggle many of the campers have while at camp. When further examining this potential selection bias, it is important to note that the camper's did report relatively high sibling warmth for both the pre- and post-test. This may be indicative of better than average sibling relationships, but it may also be that the camper's may have felt that they needed to respond positively given the nature of the camp. They know they are attending a sibling camp and may want to represent their sibling relationship in the most positive light they can.

There are also limitations in terms of the analyses and the loss of data that occurred in order to comply with the assumption of independence with the analyses conducted. While the division of campers into the various subsamples; middle childhood and adolescence, was done in a systematic way, identifying the oldest of each sibling set that met the criteria for adolescence and then selecting the youngest sibling out of the sibling set that met the middle childhood

criteria, there is the possibility that there is some information that is missed since not all children were used. In a similar vein, most research conducted with siblings specifies the number of years that is between the oldest and youngest sibling. In this study, there was no set number of years and so there can be great variability in the age ranges of the siblings in this study. To further complicate things, the campers did not specify what sibling they were answering about. In sibling sets of two this could be understood, but for the majority of the sibling sets that attended Camp To Belong, there were more than 2 in a sibling set with up to six siblings in a set. In the future, it would be useful to have the siblings identify whom they are answering the question about and collect information pertaining to sibling constellations to better understand sibling dynamics.

Unfortunately, a limited amount of demographic information was collected from the campers. The variables that were collected included age, gender, race, and the number of times they attended Camp To Belong. Additional information such as whether or not they are living separately from one sibling or all siblings, how long they have been in foster care, what type of foster care placement they live in (traditional foster care, kinship care, group homes), how long they have been in their current placement, and type of abuse they experienced prior to placement in foster care would be information that would be useful in helping to better understand the results of this study and the role that sibling relationships can play in their lives.

Although the measure of relationship quality demonstrated acceptable indicators of reliability, the measure, could use further development. For the sake of not overburdening the campers, a minimal number of questions were asked. In the future, it would be useful to ask more questions about relationship quality to get at more relational aspects than just warmth and conflict. This may be at play with the results of a significant decrease in sibling conflict. These results should be considered with caution. When examining the actual score of the measure, there were only a total of 2 items for a total score of 8, indicating that a small difference could be significant. In the future, having a measure that more accurately and fully measured sibling conflict could garner different results. Furthermore, the long-term effects of the intervention are not known. In the future, it would be beneficial to complete follow up measures of relational quality to see if the effects of the intervention sustained over time.

Lastly, while this study used pre- post-test design, this study is cross-sectional in nature and does not have causal implications. In the future it will be imperative to investigate these

measures in a longitudinal design to better understand the causal relationship between these factors.

5.7 Conclusions

The purpose of the current study was to explore sibling relationships of youth in foster care and begin to build foundational knowledge about these relationships using symbolic interaction as a theoretical lens. The results of this study indicated that sibling relationships for youth in foster care could be a protective factor for youth in middle childhood and adolescence. The youth signified what their sibling meant to them while in foster care in positive and protective terms and indicated that warm sibling relationships significantly predicted higher individual resilience scores. This study also examined if there were developmental differences between youth in middle childhood and adolescence in how they perceived their sibling relationship quality in terms of sibling warmth and conflict, if there were differences in perceived relationship quality as a result of an five-day intervention, and in how they perceived their resilience. There were no statistically significant differences between the two developmental groups. Lastly, this study reported that a five-day intervention designed to enhance sibling relationships significantly decreased sibling conflict for youth in middle childhood and adolescence. Given the dearth of empirical knowledge about sibling relationships of youth currently living in foster care, this study increases the understanding of sibling relationships and has implications for future research, clinical practice, and policy.

APPENDIX A

RESEARCH QUESTIONS

1. What does a "brother" or "sister" mean to youth in foster care?

2. Are there developmental differences between middle childhood and adolescence when it comes to how the youth perceive their sibling relationship quality while in foster care?

3. To what extent does sibling relationship quality of those who are currently separated from one another increase from time one to time two for children who are participating in a five-day sibling enhancement intervention? Further, does it vary by developmental stage?

4: Does sibling relationship quality have an association with youth's report of individual resilience, and does that vary based on developmental stage?

APPENDIX B

QUALITATIVE TABLES

Table 6

Open and Axial Codes

Open Codes	Axial Codes
A lot	Means a lot: undefined
Means the world Reminds you that you are not alone Unconditional love Love with your whole heart Completes you	Means a lot: defined
Sad Separated Doesn't feel like you have one if you don't see them Hard not to see them when you want to Since in foster care: don't know that you have them May never see them again Harder to be separated Push each other away because you don't want to be hurt	Sadness/Despair
Sib understands when others don't Having a friend that you have been around since day 1 Understands you Grateful that you have someone like them in your life	Understanding
Reminds you that you are not alone Still connected and share even though they are separated Love them unconditionally My whole family Sib understands even when others don't Person you talk to about your problems We have become closer I consider them my friend Share a close bond with Completes the other half of me Still have someone there for me Someone that cares about me Grateful that you have someone like them in your life	Connection

Table 6 - continued

Open Codes	Axial Codes
Get you through tough times Reminds you that you are not alone Sib understands even when others don't Still have someone there for me Helpful Someone to count on to be there when you need them Someone that cares about me That we are together Having a friend you have been around since day 1	Helpful
Have a lot to look up to Someone to look up to Someone to help you through everything	Someone one to look up to
Reminds you that you are not alone My whole family Completes the other half of me Still have someone there for me Someone that cares about me That we are together Having a friend that you have been around since day 1	Not alone
Good, can't talk to or visit with them Nothing because I don't really care Doesn't mean anything that I have brothers and sisters	Don't care
Keep living Hope Reminds you that you are not alone Get you through tough times Don't see them, but relationship builds hope Blessing from God Bring joy to my life Still hope	Hope
I don't know	Can't conceptualize it
Still connect and share even though we are separated My whole family Sib understands even when others don't Sibs have become more important since entering foster care It means the world Blessing from God Brother is like having a best friend Spending time with brother equals present Sister is like my mom	Special relationship

Table 6 - continued

Open Codes	Axial Codes
Separated Miss them Miss them more Doesn't feel like you have one if you don't see them Still connected and share even though we are separated I miss him Cant talk to or visit with them A lot because we might not see my family Still have someone there for me no matter where they are Hard not to see them when you want to Don't get to see them Complicated: hardly know them Complicated: only know what they tell you Complicated: now a brother or sister is your Mother's other kids Harder to be separated then come back together When together we push each other away because we don't want to be hurt Brother separated forever Since in foster care never knew I had them	Separated
Miss them more Doesn't feel like you have one if you don't see them Hard not to see them when you want to I don't know, it's complicated Complicated: hardly know them Only know what they tell you Complicated: now a brother or sister is your mother's other kids Don't get to see them very much Harder to be separated then come back together When we are together we push each other away harder than siblings that live together Don't want to get hurt Since in foster care I never knew I had them Sister is like my mom	Difficulties (not having contact)
Love them unconditionally Loves you with their full heart Love	Love

Table 7

Qualitative Axial and Selective Codes

Axial Codes	Selective Codes
Means a lot: undefined Means a lot: defined Understanding Connection Helpful Someone to look up to Not alone Love Hope Special relationship	Positive/protective
Sadness/despair Separation Difficulties	Challenges

Table 8

Selective Codes and Exemplar Quotations

Selective Codes	Exemplar Campers' Quotes
Positive/Protective	"It means that I am able to keep living" "Someone who is there to remind me that I am not alone" "It means someone who will love me unconditionally" "It means that when other foster kids or parents doesn't understand me, I know he will" "It means a lot. My sister is the only person I talk to about my problems" "Since entering foster care my siblings have become more important to me. We have become closer and I consider them my friends" "Someone who loves you with their whole heart" "It means that I have someone I can share a really close bond with me and who completes the other half of me" "Have someone there for me to help me get through the tough times" "That I still have someone there for me! No matter where we are" "He means the world to me, I miss him" "It means the world to me to have siblings. I feel like it's a blessing from God. Though I don't see them as much, our relationship still builds up my hope" "It is like a present for me to spend time with my brother"
Challenges	"It's hard not to see them when you want to" "It honestly doesn't feel like I have one because I almost never see them, but when we finally see each other it is awesome" "I don't know, it's complicated because now I hardly know them. I mean, I know what why tell me, but it is not the same. Now a brother or sister is your mother's other kids" "It's really hard because you don't get to see them very much" "It means a lot. I care and love my brothers and being separated makes it hard to see each other" "I may never get to see them again" "Um, I think it is harder to be separated then come back together because even though we are together, we still tend to push each other away harder than siblings who live together because we don't want to get hurt" "A brother separated forever" "Since I have been in foster care, I never know I had them" "It means a lot more. I have learned not to take advantage of your family because they won't always be around"

APPENDIX C

QUALITATIVE DIARY

January 10th, 2014

        As I was getting the qualitative data together, I recalled a time during my prospectus meeting stating that I was not going to code all the campers' responses to the question "what does your brother or sister mean to you since you have been in foster care." I looked through my prospectus and did see where I had specified what to do. I looked through my notes from the meeting and could not find anything. I then emailed Lenore to see if she remembered this conversation. She had the same recollection, but couldn't recall exactly what we said. We decided to then choose 10-15 camper's responses from each member camp resulting in over 60 responses.

January 17, 2014

        When going through the surveys and having to identify which responses to use, I decided I needed to have some way to strategically pick the responses to use. Given that the camps varied in the number of campers that attended, I decided for the member camps with around 20 campers, I would only choose 11 or 12 responses and for the larger camps, I would choose 15 responses. When choosing which responses to pick from that point, I didn't want to just get the first responses, so when I was able to distinguish sibling groups, I only picked on response from the sibling set. For camper Ids that were indistinguishable I just copied and pasted the responses in a row until I reached the amount of responses that I had decided I needed.

        When putting together the document that I will use to code, it was really interesting to see the responses. I found myself wanting to read the other responses. I also found myself being very much aware of the fact that researcher bias could easily come in. I want to see that there is a positive role that siblings play and mean to those in foster care, and thought about the fact that I could be selective and only use the responses that I liked. Even though it was tempting, I did not do that. I do wonder if I am missing anything. I guess time and analysis will tell. Hopefully I get to saturation.

January 19th, 2014

This morning I did the first round of coding, open coding. I will say it was a little difficult since the responses are so short. A lot of my codes were one word, which was the same word used by the respondent. There were also a couple of responses that I did not understand. This could be something that could have been lost in translation. The person who types up all the responses may have mistyped something, or the youth may not have been able to clearly articulate what they meant.

I was also surprised by how many campers said, "I don't know" when responding to the question of "what your brother or sister means to you." One camper shed a little of light into it by saying it was complicated. The camper then described the fact that you hardly see them and don't really know them. Another talked about that you don't want to get hurt. It does seem like these relationships are complicated.

It seems like the theme of separation comes up quite often as well as the fact that siblings are people who are there for you. There is part of me that is wondering if I should go through more responses to get better depth in responses. Due to the random way in which I gathered these, I may be missing something, but then it might not be a "non-biased". Who knows, I may be again searching for something to further my thoughts about what I think a brother or sister means. I am going to keep it as is and move onto the next stage: axial coding.

January 20th, 2014

Today I did the axial coding. In order to do this, I reread my prospectus and some literature on what to do to ensure I did it right. I read through all the codes multiple times and then thought about how some of them were grouped together with the constant comparison. I was able to come up with 15 axial codes. While coding, I did put some open codes into different axial codes. They were not mutually exclusive. I do feel that I may have been able to get at all the open codes with these axial codes.

When creating the codes, I do not feel like I had any difficult decisions to make. I feel like the axial codes were easy to develop based on the open codes. I do feel that for the axial code separation, that it is a complex code and that it can be separated into two different categories of separation: I will give it a little bit of time and then go back and review it and determine if it is needed. It almost seemed like there could be the struggles of separation emotionally, and what it does to the relationship.

January 28th, 2014

       I got the confirmation from Lenore that she agreed with my codes. Once I got that approval I moved on to the next stage, which is selective coding and trying to generate a theory. I need to be very mindful about my theory of symbolic interaction in thinking about what I think about these codes and the theory. When looking over the codes, I decided to see if there was something in the axial codes that could be placed together or if a theory emerged. When looking at them, it was very obvious that there are strengths/protective factors and that there are also real challenges and difficulties that they experience and that influences the meaning they have of their sibling. Roughly grouping them together, I put as positive/protective: means a lot: defined and undefined, understanding, connection, helpful, someone to look up to, not alone, love, hope, special relationship. I felt that each of these did reach saturation from the responses. When conceptualizing the challenges, I put the following axial codes together: sadness/despair, separation, difficulties (not having contact). I was not sure how to incorporate: can't conceptualize it and don't care. Don't care did not reach saturation. I don't know did. Multiple campers said that when asked the question.

       I think with these two main aspects: protective/positive and the challenges piece, I think camper's own words could best be used to generate a theory, and that is that it is complicated.

APPENDIX D

INTERNAL REVIEW BOARD

Florida State UNIVERSITY

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 07/12/2013

To: Armeda Wojciak ███████████████

Address: ██████████████

Dept.:   FAMILY & CHILD SCIENCE

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
    Exploring sibling relationships among youth in foster care

The application that you submitted to this office in regard to the use of human subjects in the research proposal referenced above has been reviewed by the Human Subjects Committee at its meeting on 06/12/2013 Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 06/11/2014   you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing, any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Lenore McWey ████████████, Advisor
    HSC No. 2013.10630

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BIOGRAPHICAL SKETCH

Armeda Stevenson Wojciak is originally from Las Vegas, Nevada. She earned her Bachelors of Science degree in Psychology in 2006, and a Masters of Science degree in Marriage and Family Therapy in 2010 from the University of Nevada Las Vegas. Armeda began work on her doctorate in the Marriage and Family Therapy Program at The Florida State University in the fall of 2010. While at The Florida State University, Armeda has published and presented findings related to her work focused on identifying protective factors that can be used to improve the outcomes of children and families involved with the child welfare system. Armeda has been a Graduate Teaching Assistant, including primary teaching responsibilities for both in-person and online courses. Armeda has also been a therapist in the community providing in home therapeutic services to families involved with the child welfare system. In addition to these activities, Armeda served as the Vice President of the Graduate Student Advisory Committee for the 2012-2013 academic year, as well as serves on the Camp To Belong Georgia's Board of Directors since 2012 and the Evaluation Committee for Camp To Belong International since 2010. Armeda has earned several scholarships and was inducted into the Glenn Society in 2013. Armeda has recently accepted a position as a tenure track assistant professor at the University of Iowa. Armeda is excited about being able to pursue her program of research. Armeda's goal for the future is to develop empirically supported interventions based off of her research that can be used to influence practice and policy to improve outcomes of youth and families involved with the child welfare system.