"Will You Stop Saving the Day? You're Just the Sidekick:"

Rivalry in Young Children's Sibling Relationships

Laurie Kramer[1]

Department of Applied Psychology, Northeastern University, Boston MA

Department of Human Development and Family Studies, University of Illinois, Urbana, IL

ABSTRACT

This chapter addresses the question of how sibling rivalry and competition may play both damaging and adaptive roles in young children's development and in the relationships they form with their siblings and other family members. Long considered to be an inevitable part of growing up another child who is also predisposed to desire parents' attention and love, we broaden our view to examine rivalry as it occurs in early childhood, when the transition to becoming a sibling may have less immediacy as a crisis and children's social competencies and emotional understanding are growing at impressive rates. Using family systems theory as its core framework, the research reviewed in this chapter illustrates how rivalry can not only be a potent source of influence on the development of individual children but also on other family relationships.

Keywords: Sibling rivalry, jealousy, siblings, sibling relationships, family systems theory

Kramer, L. (2018). "Will you stop saving the day? You're just the sidekick:" Rivalry in young children's sibling relationships. In N. Jones and S. Hart (Eds.), *The psychology of rivalry* (pp. 77-109). Hauppauge, NY: Nova Science Publishers.

[1] Department of Applied Psychology, 360 Huntington Ave., Boston, MA 02115
Email: lfkramer@illinois.edu

"Will You Stop Saving the Day? You're Just the Sidekick:"[2]

Rivalry in Young Children's Sibling Relationships

INTRODUCTION

As most parents will attest, irritation, animosity, jealousy, competition and conflict can arise among young siblings in virtually any context, at practically any time, and with seemingly little to no provocation or explanation. Even in early childhood, it's not surprising to hear children issue vague complaints (but with great earnestness) about one another's behavior or demeanor: "You gave him more than me," "Why does she get to stay up late and I don't?" and, my personal favorite, "Mom, he's looking at me again." As the title of this chapter is intended to convey, any context— even one in which children are deeply engrossed in the excitement of fantasy play— can be a backdrop for sibling rivalry, competition, and one-upmanship. In the play episode from which this title was taken, an elder sibling objected when his younger brother sought centerstage by repeatedly assuming the role of a superhero who "saves the day," rather than keeping to his place as the mere "sidekick." This scenario reflects the fact that, in the course of daily interaction, young siblings have extensive opportunities to experience feelings of jealousy and envy that are expressed through rivalrous and competitive behaviors—and the forms with which sibling rivalry may take, may be limited only by children's imagination.

Parents consider sibling rivalry and competition in early childhood to be significant problems affecting the quality of family life— problems that they often feel ill-equipped to

[2] Quote courtesy of Henry Graaf to his brother, Clark, presented with permission

manage on their own (Kramer & Baron, 1995). At the same time, parents may, paradoxically, acknowledge seeing some value for children when they engage in mild to moderate forms of competitive or even rivalrous behaviors (Hughes, 2011), perhaps believing that competition spurs each child to continually strive and perform at their very best. As discussed below, despite its irritating, and sometimes, alarming quality, instances of sibling rivalry and competition may not always be undesirable—in fact, these processes may hold some adaptive developmental functions for children as they prepare to make their way in a complex world (Hughes, 2011) with people who are not always motivated to behave in ways that support their interests. This chapter explores the ways in which sibling rivalry may be experienced and manifested in early childhood and addresses the question: *In what ways do sibling rivalry and competition play damaging or adaptive roles in young children's development and in the relationships they form with their siblings and other family members?*

We begin to address this question by clarifying what we mean by sibling rivalry and exploring how rivalry is related to other sibling processes observed in early childhood, such as conflict and agonism. We then address the question of what typically leads children to experience sibling rivalry, the common theoretical and conceptual perspectives that have been advanced to explain the occurrence of rivalry, and conclude with a discussion of the ways in which sibling rivalry can be adaptive and maladaptive for young children and their relationships with others. Along with the results of recent research, family systems theory is used as a foundational framework to help us consider the mechanisms by which rivalry develops, is sustained, and impacts the well-being of individuals and families, particularly in early childhood.

WHAT IS SIBLING RIVALRY?

Rivalry and competition are particular behaviors that are largely manifested when individuals experience emotions of jealousy and envy and seek to compete and out-do the other (Volling, Kennedy, & Jackey, 2010). But what are jealousy and envy? Several chapters in this volume provide thorough examinations of the various ways rivalry, jealousy, and envy have been defined in the literature, and so, for the purposes of this chapter, we provide only a brief overview of major conceptualizations of sibling jealousy and rivalry.

Drawing from the conceptualizations of Daly et al. (1982), Parrot and Smith (1993), and White and Mullen (1989) on adult romantic relationships, Hart (2015) advanced that, "Jealousy's defining feature is threat of losing exclusivity in a valued relationship to a rival" (p. 7). Generally referring to a "triadic context consisting of an individual, her beloved, and an interloper who represents threat to the individual's valued relationship with the beloved" (Hart, 2015, p. 7), sibling jealousy represents a child's emotional reaction to the threat of losing an exclusive relationship with one's parent (typically their mother), precipitated by the attention-seeking— or even mere presence— of a sibling.

Volling et al. (2014) further operationalized the construct of jealousy as "a *patterned* response of intrapersonal affects, behaviors, and cognitive appraisals that form a jealousy profile. For instance, a child may appraise the infant as a threat to the mother-child relationship, feel anxious, and interfere in infant-mother interaction, or she may appraise her mother as inaccessible, feel sadness, and withdraw from interaction. Jealousy is elicited when the individual appraises the rival relationship between their beloved and another as a threat to their primary relationship with the beloved" (p. 635) *[original emphasis*]. Volling et al.'s concept

of jealousy as a *patterned response* that integrates cognitions, affect, and behavior adds valuable dimensionality to our understanding of jealousy among siblings, and further illustrates that sibling rivalry may be expressed in a variety of forms, including protests, aggression, or even withdrawal (with the latter not commonly associated with rivalry).

In addition to considering sibling jealousy as emerging upon the threat of losing an exclusive relationship with a parent (although the literature has emphasized the relationship with mothers, jealousy may also emerge with regard to fathers or other parental figures), are there other relationships or social contexts in which sibling jealousy may be invoked? That is, should we be using a broader lens to examine sibling jealousy and rivalry?

Rivalry in a Complex Social World

Longitudinal studies on children's adaptation to becoming a sibling have shown that most children successfully adapt to the transition fairly well, with few long-lasting developmental disruptions (Dunn & Kendrick, 1982; Kramer & Gottman, 1992; Volling et al., 2017), although the process of establishing a positive relationship with one's sibling can be an evolving process (Kramer & Kowal, 2005). It is possible that as children move through early childhood and increasingly enter into novel and diverse social contexts, the presence of a new sibling is no longer perceived as a new crisis to be managed. As a result, children may be less concerned about the potential loss of an exclusive relationship with a beloved parent, and more concerned about how they are treated, relative to a sibling, by individuals encountered in contexts beyond the home (e.g., in preschool, on the playground). For example, younger children often complain that teachers expect them to be as academically proficient as their

older sibling was when she or he were in their classes. Thus, rivalry and/or resentment may be stimulated by factors that originate from beyond the doors of the family home.

Even in early childhood, children operate in a variety of complex social environments and so it is appropriate to consider the broader contexts in which sibling rivalry may develop and operate, including the encompassing family system and the social, cultural and organizational environments in which they are embedded (Bronfenbrenner, 1979). Thus, this chapter will not only explore sibling rivalry in early childhood as it may develop in reaction to changes in parent-child relationships, but will also include examination of how rivalry functions in diverse family systems which, in turn, operate in diverse social contexts.

Rivalry as an Internalized Process

In addition to the threat of the loss of a valued relationship, we must also acknowledge that there may be internal forces at play that can serve as the impetus for sibling rivalry. Children's emerging abilities in self-examination and reflection may foster a greater awareness of how they fare in comparison to others (Feinberg, Neiderhiser, Simmens, Reiss & Hetherington, 2000; Salovey, 1991). Jealousy may emerge in response to a child's perception that their sibling possesses greater talents or abilities than they, and perhaps that these abilities are positively regarded by others. While children may hold admiration and pride for their siblings' accomplishments and talents, they may also experience this comparison as a mark of their own shortcomings, and jealousy, envy, and resentment may ensue. Loeser, Whiteman and McHale (2016) defined jealousy as, "an emotional, behavioral, or affective response in which an individual may be envious or resentful of something that another person has garnered (e.g.,

parental attention), achieved (e.g., better grades), or may be better at than themselves (e.g., extracurricular activities)" (p. 2).

Thus, while sibling rivalry can be a manifestation of the jealousy children experience when they perceive a threat of losing an exclusive relationship with a loved one, it may also, relate more broadly, to a variety of perceived "losses" (Viorst, 1986), such as the loss of one's notion of oneself as strong, smart, talented, adored, etc. due to the presence of an apparently more gifted, talented, or valued sibling. Thus, in this chapter we will consider how children's perceptions of their own capabilities and self-worth may relate to dynamics of sibling rivalry.

How does Sibling Rivalry Differ from other Sibling Dynamics, such as Conflict?

The question of how children's experiences of jealousy of a sibling are manifested is not entirely understood. This is because young children's experiences of complex emotions such as jealousy and envy are difficult to observe and are more likely to be inferred. Given their limited emotional vocabularies and abilities in emotional understanding (Dunn, 2007), preschool-aged children are not fully reliable reporters of their emotional experiences. Thus, it is difficult to ascertain the extent to which instances of sibling conflict, animosity, and rivalry are differentially motivated by feelings of jealousy and we must keep this observation in consideration as we review relevant research and theory. That said, the occurrence of sibling conflict and other forms of negative interaction (e.g., agonism) merit examination as some forms of sibling conflict may indeed be manifestations of sibling rivalry (Volling et al., 2014) even though rivalry and conflict represent different processes (Kolak & Volling, 2011).

Parents also appear to consider rivalry and conflict as separate, but related, constructs. In a study of parents' perceptions of the quality of their children's sibling relationship in early to

middle childhood, Kramer and Baron (1995) found that mothers' and fathers' reports of agonism (which encompassed both conflictual behaviors and emotions related to antagonism, such as anger, rage, and sadness) were only moderately correlated with their reports of sibling jealousy, rivalry, and competition; both were negatively correlated with warmth and closeness to a similar degree. Parents viewed both rivalry/competition and agonism to be significant problems that they desired help with—problems that were significantly more worrisome to them than low levels of warmth (which, ironically, was correlated more strongly with poor sibling relationships quality than was either rivalry/competition or agonism). Taken together, these results suggest that in the eyes of parents, sibling rivalry/competition and agonism are related, but not identical, constructs. Although not directly assessed in this study, it is possible that parents view some (but not all) acts of agonism as expressions of rivalry.

Both sibling rivalry and agonism performed in early childhood may foreshadow other forms of aggressive behaviors both within and beyond the home. Kolak and Volling (2011) found that siblings who demonstrated more jealous reactions and poorer emotional regulation skills during an infant-sibling-parent triangle task when younger siblings were 16 months engaged in more conflictual sibling relationships 2.5 years later. Ensor, Marks, Jacobs and Hughes (2010) showed that antisocial behaviors with preschool-aged siblings at home predicted the bullying of peers at school, thereby suggesting that sibling aggression can be a "gateway" to additional, and perhaps more intense forms of aggressive behaviors across different relational contexts.

Conflictual sibling relationships have also been linked with a host of psychological difficulties in childhood and adolescence, such as externalizing behavior problems (Dirks,

Persram, Recchia, & Howe, 2015) and various forms of conduct (Garcia, Shaw, Winslow, & Yaggi, 2000) and antisocial (Criss & Shaw, 2005) behaviors. In their meta-analysis of 34 studies that examined associations between measures of sibling relationship quality and internalizing and externalizing behavior problems, Buist, Deković, and Prinzie (2013) found that children's perceptions of differential treatment (considered to be an index of rivalry in this study) was positively associated with both types of behavior problems, with stronger associations found with children rather than adolescents.

Whereas sibling jealousy and rivalry may be at the root of relational difficulties such as antisocial behaviors and bullying, it may also be the basis for individual difficulties, such as internalizing behavior problems, like social withdrawal and depression (Dirks et al., 2015). For example, Aguilar, O'Brien, August, Aoun, and Hektner (2001) showed that in comparison to non-aggressive children, the sibling interactions of aggressive children were characterized by lower levels of self-reported positivity along with higher levels of observed conflict.

Although further research is needed to test the degree to which expressions of conflict, aggression, negativity, and other forms of agonism in early childhood are indeed expressions of sibling jealousy and rivalry, it is likely that at least some expressions of rivalry in early childhood are likely to occur via conflict and agonism.

How Often does Rivalry Occur?

Animosity and conflict between siblings has been observed to occur frequently in early childhood. Perlman and Ross (2005) found that 2- to 4-year-old siblings engaged 7.65 disputes per hour on average, with 10.69 changes of speaker (i.e., exchanges) per dispute. Using wireless microphones to surreptitiously monitor sibling interaction when adults were not physically

present (but were listening in another room of their home), Kramer, Perozynski and Chung (1999) clocked the number of conflicts that siblings, aged 3 to 7 years, had as they went about their normal interactions. Focusing only on extended conflicts in which mutual opposition between children occurred, Kramer et al. found that approximately 3.5 conflicts occurred per hour, with each lasting between 3 seconds and 6 minutes (with an average of 45 seconds).

In addition to supporting previous findings that extended conflicts occur frequently among preschool-aged siblings in natural contexts, observational research, such as that conducted by Perlman and Ross (2005) and Kramer et al. (1999), have vividly shown that disagreements among young siblings invariably come with the expression of some form of negative affect, such as anger, irritation, whining, and, perhaps even, withdrawal and despair. However, the degree to which experiences of rivalry, jealousy, or envy precipitate or accompany agonistic interactions such as these is not presently clear, as the motivations and attributions that may contribute to conflict are particularly difficult to assess in early childhood.

What Leads Children to Experience Jealousy and Rivalry?

Psychoanalytic theory (as advanced by Sigmund Freud (1920/1965), and further developed by Anna Freud (1937), Adler (1927/1988) and others, has long suggested that rivalry and competition for mother's exclusive love and attention, considered innate and universal, may be at the heart of rivalrous behavior and affect. According to Freud, sibling rivalry is a natural reaction, experienced by all individuals, to the changes that occur as mothers become preoccupied with the care and nurturance of a new child in the family. While a child may be angry with his/her mother for bringing this rival into the family, it may be too risky to express anger directly toward her, as she may respond with anger and abandonment. It may be safer to

express one's anger at the newcomer—the interloper—as this new child is powerless and vulnerable, more likely to accept the blows without dangerous retaliation. According to S. Freud (1920/1965, p. 235):

> "A small child does not necessarily love his brothers and sisters… often he does not… He hates them as his competitors, and it is a familiar fact that this attitude often persists for long years, till maturity is reached or even later, without interruption."

In the psychodynamic view, if not resolved in early on, feelings of jealousy, and its manifestation through sibling rivalry, may persist throughout life.

Following this theoretical framework, David Levy (1937) performed a classic set of studies in which he observed children's reactions to play scenarios in which a child doll discovers a mother doll breastfeeding a baby doll. While he observed some children to behave aggressively and punish the baby (or, in some cases, the mother doll), other children appeared to actively refrain from responding in a negative fashion, for example, by sitting on their hands. Interestingly, Levy interpreted both types of responses (aggression and withdrawal) as indications of sibling rivalry— leaving virtually no situations in which there was no evidence of sibling rivalry. This interpretation of children's responses to the scenarios was particularly curious in those case in which a child did not even have a sibling.

Fortunately, this line of inquiry of observing children's reactions to situations in which mothers were devoting exclusive attention and affection to an infant has improved with the research of contemporary developmental scientists. For example, following attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988), Volling, McElwain and Miller (2002)

conducted triadic home observations of mothers caring for their toddlers as their preschool-aged children looked on. Elder siblings who, according to parents' Attachment Q-sort ratings, were securely attached, demonstrated fewer protests, disruptions, and negativity to parents and siblings when parents interacted affectionately with the toddlers. Secure attachment was thought to enable children to feel more confident about their parents' availability to them, allowing them to use their parents as a secure base from which to explore and play freely, rather than engaging in protest or other behaviors aimed at disrupting parent-infant interaction. Further, older siblings who scored higher on emotional understanding were less likely to demonstrate negative emotions and behavioral dysregulation during the jealousy triangle. Volling et al. interpreted such behaviors as reflecting greater emotional regulation and ability to cope with jealousy.

In a subsequent longitudinal study, Volling et al. (2014) used parents' ratings of their preschool children's attachment security assessed 1 month prior to the birth of a sibling to predict children's expressions of jealousy in the triadic context at 1 month, and behavior problems at 1 and 4 months, post-birth. Older siblings who were considered to be part of a "regulated-exploration" group (representing 60% of the sample) appeared to closely monitor parent-infant interaction and either periodically join the interaction or sit closeby playing with toys without disruptive behaviors. In contrast, children considered to be in "disruptive" (2.7%) or "approach-avoidant" (30%) groups displayed more behavioral problems and emotionally reactivity at 4 months. Results such as these reinforce that the importance of examining expressions of sibling jealousy in light of the quality of children's prior attachment relationships and with respect to the broader family context.

Hart's observational research provides further support of the notion that indications of jealousy emerge quite early in life. She observed children as young as 9-months of age demonstrating "jealousy protests," for example, by exhibiting signs of distress and actively seeking mothers' exclusive attention when their mothers cuddled a baby doll. Following premises from evolutionary psychology, Hart (2016) suggested that the general onset of jealousy protests at 9 months may be tied to biological factors, such as gestational intervals of child-bearing. From an evolutionary perspective, before formula became available as a substitute or supplement to breast milk, infants' biological need to sustain food intake came exclusively through breast milk; such access would be threatened if their mother had another child before they were weaned. Thus, the onset of jealousy protests—in which a child actively provokes maternal attention— at 6- to 9- months occurs at the time when a subsequent pregnancy may be increasingly likely, and thus, jealousy protests may serve to protect the infant from a loss of food. Hart contended that although infants may first be capable of demonstrating overt signs of jealousy at 9 months, they may actually experience feelings of jealousy prior to that time, possibly even before a sibling enters the family (Hart, 2001).

While researchers such as Hart (2001) and Volling et al. (2014) have devised contexts in which the occurrence of jealousy is relatively easy to detect and distinguish from other forms of negative affect, it is important to note that sibling rivalry as it naturally occurs in early childhood is often difficult to reliably discern. We currently have few tools with which to distinguish indicants of jealousy and rivalry from other forms of negative affect and behavior as they may be freely expressed at home, for example, frustration or anger. For many reasons, young children are rarely asked about their feelings related to jealousy and rivalry and few

investigators would trust the veracity of whatever reports a very young child might provide. Rather, feelings of jealousy are typically inferred from children's behavior and affect. As such, we must caution that our understanding of sibling rivalry in early childhood could possibly reflect adults' perception of child behavior and affect and may not necessarily be a true indication of children's experiences. For example, in a study of children's perceptions of the causes of sibling rivalry, fourth and fifth grade students reported that sibling rivalry in their families did not come about because they were competing against their siblings for parents' attention (Prochaska & Prochaska, 1985).

Alternate Drivers of Sibling Rivalry

In addition to the threat of losing an exclusive relationship with a "beloved," what else could be behind expressions of jealousy and rivalry in early childhood? Below, we explore a few potential mechanisms that have been advanced in the literature, including power differentials; the interrelated processes of social comparison, deidentification and parental differential treatment; and finally, variations in children's social and emotional competencies that are critical for establishing prosocial sibling relationships.

Power differentials. Dunn (2007), Campione-Barr (2017), and others have noted that, as a largely complementary or hierarchical relationship, the power differential between siblings in early childhood, typically associated with differences in age, experience, maturity, and stature, may lead elder siblings to exert greater control over younger siblings which, in turn, may set the stage for expressions of resentment, anger, and jealousy. Campione-Barr pointed out that the "sibling relationship is unique in that it transforms across development from hierarchical in early childhood, to egalitarian by adulthood" (p. 1). Few relationships change in relative power

status over time, and those that do are generally associated with greater conflict and resentment— consider, for example, the envy that may surface when a younger adult surpasses an elder counterpart's professional (or financial) accomplishments.

Power differentials may be particularly salient in early childhood where an age difference of 3 or 4 years could signify vast developmental differences; elder children may have significantly more advanced capabilities that they can use to support, help, teach, and comfort their younger siblings— or alternately, to take advantage of them. Whereas younger siblings often seem predisposed to adore and emulate their elder sisters and brothers, their elder siblings have the power to take advantage of their younger sibling's willingness to submit to many forms of inequitable or demeaning acts of domination. For example, elder siblings may use their status to manipulate younger siblings to carry out undesirable tasks (e.g., doing their chores; Dunn, 2007; Kramer, 2014). Even in early childhood, older siblings may engage in forms of *relational aggression*, for example, through embarrassment, humiliation, or threats of exclusion or of damaging a valued relationship with another person (Stauffacher & DeHart, 2005). Stauffacher and DeHart found that relational aggression occurred more with siblings than with peers in early childhood, suggesting that even at a young age, children may be aware that sibling relationships can withstand greater hostility than can friendships.

In the extreme, elder siblings may use their relative power and status to compel siblings to submit to physical or sexual forms of abuse (Caffaro, 2013; Wiehe, 1997). This is not to say that younger siblings never behave aggressively or inappropriately to their elder siblings, as they do; however, in early childhood, it is more likely that the perpetrator will be an elder sibling who is perceived by both the aggressor and recipient as holding greater power. Wiehe

emphasized the importance of recognizing that abuse between siblings is not simply a dramatic form of sibling rivalry (as calling it "sibling rivalry" could serve to normalize the behavior), but rather a critical form of aggression in its own right.

***Social comparison, differentiation, and sibling deidentification*.** Based on social comparison theory (Festinger, 1954), Feinberg et al. (2000) defined sibling comparison as a process by which individuals use their sibling as a basis of comparison and self-evaluation, which may serve to protect children from the jealousy, envy, competitiveness, and perhaps, resentment that may follow from forming a lowered perception of their worth relative to a sibling. Using family systems theory as a framework for examining trajectories of differential parental warmth and conflict over a 2-year period, Feinberg, McHale, Crouter and Cumsille (2003) found that different trajectories of parent-child warmth for first- and second-born adolescents were associated with more positive appraisals of the sibling relationship, with firstborns reporting more warmth and less conflict and secondborns reporting more warmth. They concluded that the act of differentiating oneself from a sibling, and establishing one's own identity, interests, preferences, goals, etc., reduces the likelihood of sibling rivalry and conflict, particularly in families in which there is differential warmth in the parent-adolescent relationship. The degree to which processes of sibling comparison and differentiation are present in early childhood, albeit in rudimentary forms, is not yet known as few studies have directly questioned young children about their perceptions of how they and their siblings compare (Pike, Coldwell, & Dunn, 2005).

Based on studies of college students, Frances Fuchs Schacter and her colleagues advanced the construct of *deidentification* to describe processes in which individual siblings

tend to differentiate themselves and establish their own unique identity, role, or niche within the family system (Schachter, Shore, Feldman-Rotman, Marquis, & Campbell, 1976). According to Schachter et al., individuals' identities are influenced, in part, by their perceptions of their siblings' identities. For example, a boy who views his brother as an exceptional basketball player may feel that he could never surpass his brother's achievements and so gravitates toward a totally different outlet for his interests, such as designing iPhone apps. Whiteman and Christiansen (2008) demonstrated that deidentification is relatively common as 40% of secondborns and 31% of firstborn adolescents they studied reported taking steps to differentiate themselves from their sisters or brothers in some way. Additionally, deidentification was linked with lower levels of reported sibling competition.

Deidentification processes are thought to operate more strongly among siblings who are more similar, such as those who share the same gender or are close in age (Schachter et al., 1976). Feinberg and Hetherington (2000) found that siblings who were closer in age were less similar across a range of personal adjustment variables than siblings further apart in age. Thus, through processes of deidentification, siblings who share similar characteristics may be able to carve out their own niches, thereby avoiding damaging forms of rivalry and conflict that stem from social comparisons (Feinberg et al., 2003; Whiteman, McHale & Crouter, 2007).

Unfortunately, we know little about possible processes of sibling deidentification in early childhood, yet this would be a very interesting line of research to pursue once appropriate methodologies for this age group are developed. In most studies of adolescents, the presence of sibling deidentification has been inferred on the basis of investigators' discoveries of significant differences among siblings. In very few studies have siblings in the same family been

directly observed or interviewed about whether and how they define themselves in relation to their perceptions of their siblings' characteristics (Whiteman, Becerra, & Killoran, 2009). One notable exception was a study conducted by Whiteman et al. (2007) in which secondborn adolescents were asked about the extent to which they tried to be like, different, and competed with their elder sibling in athletics, arts, academics, and conduct. Twenty-seven percent of the younger siblings' responses were consistent with sibling differentiation efforts in that they reported trying to be different from, and not like, their elder siblings. This provides some support for the premise that deidentification is a critical mechanism for avoiding or managing sibling rivalry, at least among adolescents.

***Parental differential treatment*.** The perception that one is not treated or valued by parents with the same regard as is a sibling is thought to be a strong correlate, if not precipitant, of sibling jealousy (Thompson & Halberstadt, 2008) and rivalry. The desire to be treated the same as, or equally to, a sibling is a well-documented phenomenon, found among children as young as 2 years of age (Dunn & Kendrick, 1982) and that persists through adolescence (Daniels & Plomin, 1994), adulthood (Suitor et al., 2009), and late adulthood (Suitor, Gilligan, Johnson, & PIllemer, 2014). Despite this desire, parental differential treatment (PDT), defined as those unique behaviors parents exhibit toward individual children, and that that may lead siblings raised in the same family to seem very different from one another (Daniels & Plomin, 1994), is not unusual and has been linked to a variety of difficulties. Higher levels of PDT in middle childhood (McGuire, Manke, Eftekhari, & Dunn, 2000) and adolescence (Kowal & Kramer, 1997; McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000) are associated with poorer quality sibling relationships. In addition, higher levels of PDT in

adolescence have been linked with poorer parent-child relationships (McHale, Crouter, McGuire, & Updegraff, 1995; Kowal, Krull, & Kramer, 2004) as well as with lower self-esteem and well-being (Kowal, Kramer, Krull, & Crick, 2002). Significant differences in parent–child warmth and hostility have been associated with internalizing and externalizing behavior problems in children (Buist et al., 2013) as well as with lower levels of sibling warmth and positivity (Shanahan, McHale, Crouter, & Osgood, 2008).

However, it's not only the occurrence of PDT that is important—another key feature is the degree to which individuals perceive that the differential treatment is *fair* or warranted. Kowal and Kramer (1997) found that adolescents were quite observant of when their parents treated them and their siblings differently with respect to expressions of affection and warmth and with control and discipline. Using an interview protocol that was based on the Sibling Inventory of Differential Experience (SIDE; Daniels & Plomin, 1985), Kowal and Kramer (1997) found that adolescents generally formed attributions about why their parents treated them and their sibling differently. For example, when asked why they believed their parents differentially directed more attention, affection/warmth, and control to one sibling over another, adolescents indicated that such treatment might be due to a child's age or gender, or because one child shared a particular interest with a parent or had a specific need that could be best addressed with additional parental attention, affection, or control. Furthermore, when asked whether they believed this differential treatment to be warranted or fair, the adolescents generally considered a parent's greater attention to, or exertion of greater discipline towards, one child over another to be justified if they believed that the sibling was in greater need of such parental attention or control. Adolescents did not believe that it was fair for a parent to be

more affectionate with one child than another, unless they could justify the differential warmth and affection as being in the service of meeting a child's unique need. In fact, attributing instances of PDT as occurring to meet a child's need was found to mitigate some of the damaging correlates of PDT for both sibling (Kowal & Kramer, 1997) and parent-child (Kowal et al., 2004) relationship quality. Interestingly, the adolescents did not always view equal treatment as fair, as they expected parental behaviors to be tailored to the needs and interests of individual children (Kowal, Krull, & Kramer, 2006); for example, setting the same bedtime for a 3- and an 8-year-old would be considered unfair.

In an interesting study in which adolescents were interviewed about their perceptions of the fairness of PDT, as well as their feelings of jealousy toward their parent's treatment of their sibling, and their personal well-being, Loeser, et al. (2016) found that perceptions of fairness of PDT significantly moderated the association between PDT and jealousy. Reports of jealousy were associated with more depressive symptoms and risk-taking behaviors as well as with lower self-worth and reports that PDT was unfair. However, when PDT was judged as fair, jealousy was no longer linked with poorer adjustment.

Poor social and emotional competencies. Following a socioemotional competence perspective, researchers and practitioners have posited that a lack of knowledge and experience in how to effectively interact with others in a socially competent manner may be at the root of some experiences of rivalry, jealousy and competition (Feinberg et al., 2013; Kramer, 2010). Children who have less developed abilities in engaging in coordinated play and conversation; in taking the perspective of another child who may have very different goals, preferences and intentions; in regulating intense emotions; and in managing conflict

management, may have greater difficulty responding to conflict or any situations in which they experience strong affect (Kramer, 2010), including feelings of jealousy.

As described above, many sibling encounters are emotionally-charged, laden with jealousy, anger, frustration, disappointment, and more. Unchecked, children may act upon these emotions in ways that can be disruptive to sibling harmony. In early childhood, limitations in children's understanding of complex emotions and social behaviors such as these, as well as limitations in their ability to communicate about, and regulate, these emotions and exert control over reactionary behaviors, may contribute to their experience of sibling rivalry.

In early childhood, children generally possess a rather narrow emotional vocabulary, with their discussion of internal states limited to the fundamental emotions, such as love, hate, anger, and sadness (Dunn, 1988; Pons & Harris, 2005). Preschool-aged children are first learning to identify and verbally express complex emotions, such as envy or jealousy, disappointment, or combinations or blends of emotions, such as experiencing a mixture of envy and pride, leaving children to rely on more simplistic, and possibly inaccurate, terms to describe these feeling states. For example, they may say that they "hate" a sibling who has just beat them in a race, when in truth, they may feel something more complex or nuanced, such as envy, disappointment, or even shame, stemming from their own perceived shortcomings, possibly mixed with admiration for the sibling's skill. And, in many cases, there may be genuine confusion about what they are feeling, and even which specific behaviors performed by their siblings (or parents) have led them to experience these difficult or complex emotions. Children who are better able to articulate their emotions and use more internal state language have also

been observed to engage in less sibling conflict (Howe, Petrakos, & Renaldi, 1998; Recchia & Howe, 2008).

In addition to having a limited emotional understanding, it may be difficult for young children to regulate or manage the experience and expression of these difficult emotions, which can contribute to responses of anger, rage, fury, or withdrawal—behaviors that may be more likely to exacerbate conflict than promote understanding (Howe et al., 1998). Children who are unable to tolerate, manage, or control difficult emotions are at greater risk for experiencing unresolved conflicts with siblings which, over time, can contribute to poor sibling relationship quality (Kennedy & Kramer, 2008). Interestingly, in Volling et al.'s (2002) study of infant-sibling-mother triangles, preschool-aged older siblings who demonstrated higher levels of emotional understanding were more able to curtail the expression of negative emotions and were better able to regulate their behavior when their mothers devoted unilateral attention to their infant sibling.

In sum, the ability to communicate effectively about emotions, and regulate intense emotional experiences, better enables siblings to fully understand each other's points of view, clarify their intentions and experiences, and correct misunderstandings and misattributions that have arisen. Without these competencies, children will face greater challenges in resolving issues and disputes associated with rivalry and competition.

It should also be noted that parents may play an instrumental role in helping children to develop more effective social and emotional competencies with which to establish prosocial sibling relationships. In addition to parents serving as "emotion coaches" to validate and help children understand their emotional experiences, and find appropriate ways to express and

regulate challenging emotions (Gottman, 1997), parents may also model prosocial (as well as rivalrous and competitive behaviors) through their interactions with children and with one another (Yu & Gamble, 2008). For example, children who witness parents working through a marital conflict using effective communication and collaborative problem solving, may be learning effective strategies that they can apply when having a dispute with their sibling. The beliefs that parents hold around rearing siblings can also be important to consider, as parents who believe that sibling rivalry is an inevitable, natural part of siblinghood may respond to difficulties in the sibling relationship in very different ways than parents who do not believe that rivalry can be improved, if not resolved (Perozynski & Kramer, 1999).

In summary, many drivers of sibling rivalry exist— the threat of the loss of a beloved object, power differentials, social comparison, differentiation, and deidentification, as well as the acquisition of relevant social and emotional competencies. As the available research provides support for each of the mechanisms described above, we must assume there are multiple mechanisms by which sibling rivalry may develop and be maintained. However, we do not yet know which types of sibling and families may be more susceptible to the influences of some of these processes over others. With the recognition that many drivers of rivalry exist, we next examine the implications that various forms of sibling rivalry may have for the development of individual siblings.

IMPLICATIONS OF SIBLING RIVALRY FOR DEVELOPMENT

How can Rivalry Promote Individual Development, Success and Well-being?

In many Western cultures, and especially in the U. S., competition and rivalry are valued as important ingredients for success and competence. By competing with others—or even with

oneself— and establishing rivalries with similarly talented peers, individuals are thought to be inspired to perform at their highest levels.

Becoming the best possible versions of themselves through competition. A popular conception of sibling rivalry is that through competition, each individual is motivated to accomplish more than they might have ordinarily accomplished on their own, e.g., they are pushed to "become the best possible versions of themselves." Serena and Venus Williams have publically discussed how their years of practice together as they grew up led them each to develop the caliber of skills, endurance, and persistence that contributed to their individual success. For some children, having a sibling who is considered to excel in a given area can motivate them to strive to develop new skills and strategies so that they can be on par—or possibly, ultimately surpass— their sibling in this domain.

Within limits, competition and rivalry can be perceived by siblings to be fun. "It made everything more exciting and even simple games became really fun," (Olympic champion Jonathan Brownlee said of his relationship with his brother Alistair as they described how they made every activity a competition—which they credited as pushing them both towards athletic success (Sofeminine, October 25, 2013). Similarly, Shaquem Griffin talked about how his rivalry with his twin brother, Shaquill, an NFL Seattle Seahawks player, has pushed him towards his own success as a likely NFL draftee, even as an amputee. He jokes that their rivalry will spur them on throughout their lives: "We're gonna be 60 years old or 75 with walkers, talkin' about who can run the fastest 40" (CBS News, April 21, 2018).

Joining forces: Sibling solidarity. Staying within the athletic arena, the "Shib Sibs" Alex and Maia Shibutani, a brother-sister ice dancing duo who thrilled 2018 Olympic audiences,

expressed an opposing sentiment to that of the Brownlees and Griffins— that competition can promote sibling teamwork and success. In a commercial that aired during the competitions, the Shibutanis stated in alternating voices: "Most siblings grow up making everything a competition. We're the same way. The difference is, when we compete, we do it as a team." This "us against the world" orientation can be a common theme among siblings who have faced particular challenges or adversities (Bank & Kahn, 1988).

However, as seen from the discussion of deidentification theory (Schachter et al., 1976), it is also possible that when the disparity in skill level is perceived as too great, children who feel unlikely to surpass their sibling may withdraw and refuse to compete. Children with such views may narrow their interactions with their sibling to a limited set of domains in which they feel that even if they cannot excel, then at least they can hold their own.

In contrast, siblings who view themselves as considerably stronger or more capable than a sibling may avoid competition, perhaps believing that overpowering their sibling might not be an enjoyable or rewarding experience for either of them. For example, a 9-year-old participant in one of my studies stated that he didn't even bother arguing with his little sister when they disagreed because she was "not a worthy opponent" (Kramer, 2014, p. 169). He spoke disparagingly of her, and avoided her, and their relationship suffered as a result.

Building social and emotional competencies through rivalry/competition. As discussed above, experiences with sibling jealousy and rivalry can contribute to individual children's social and emotional development – if only because they are provided with countless opportunities to strategize about how to win a competition or win favor with a parent, to reason and formulate arguments as one advances their own needs and goals, and to learn to manage the varied and

intense emotions that can come with competition and conflict. Kramer (2014) argued that as children begin to experience a variety of emotions that may accompany forms of sibling conflict (e.g., fury, hurt, humiliation), their ability to identify, label, communicate, and perhaps, ultimately, regulate difficult emotions, may also develop. In the most fundamental fashion, as children learn to control their negative impulses— for example, by sitting on their hands instead of lashing out (Levy, 1937)— they are learning the rudiments of behavioral self-control and emotional regulation. In early childhood, elder and younger siblings may differ significantly in physical size, requiring elder siblings to learn how to compete, argue, express anger, and perhaps physically confront a younger sibling, all without causing injury.

Sociocognitive gains are also likely to accompany many forms of interaction with siblings in early childhood. Dunn, Brown, Slomkowski, Tesla, and Youngblade (1991) were among the first developmental scientists to demonstrate that children who engage in positive interactions with their siblings outperformed their peers on tests of social understanding (in this case, false-belief tasks) than those with more negative interactions. From there, researchers have identified a host of developmental benefits for children who experience prosocial sibling relationships (e.g., Downey, Condron & Yucel, 2015; Jambon, Madigan, Plamondon, Daniel, & Jenkins, 2018; Kramer & Conger, 2009). However, even negative sibling interactions can be a training ground for learning about the emotions and mental states of others, perspective-taking, and understanding of rules of fair play, emotion regulation, and strategies for conflict management (Kramer & Conger, 2009).

Hughes (2011) has vividly shown that social understanding may be accelerated by their interactions with their siblings. In her 5-year longitudinal study, Hughes observed the pretend

play conversations of two-year-olds and their preschool-aged siblings over time and found that their conversations were rich and exhibited a strong awareness of the mental states of others. Even during episodes of sibling rivalry where siblings were teasing or arguing, it was clear that younger children benefitted from participating in conversations in which their elder sister or brother talked about emotions and the mental states of others. Thus, even when children are frustrated by their sibling, they may still be growing their abilities to form persuasive arguments, regulate their emotions, and perhaps, understand how their actions can affect the emotions of others (Hughes, 2011).

UNDERSTANDING SIBLING RIVALRY WITHIN THE CONTEXT OF THE FAMILY SYSTEM

In addition to the contributions that sibling rivalry can make towards the development of children as individuals, it is also clear that rivalry develops, is maintained, and impacts multiple aspects of the family's operation as a whole. In fact, a major premise of family systems theory (Cox & Paley, 1997; Minuchin, 1974) is that it is not possible to fully understand the dynamics of sibling rivalry without considering the family context in which siblings interact, grow, and develop. As discussed below, sibling rivalry may reflect and/or fulfill some functions— that may range from adaptive to maladaptive— that are integral to the homeostatic operation of the family. We begin with an exploration of how dynamics of the sibling subsystem may operate to support and maintain rivalrous behaviors. We then discuss how rivalry in the sibling subsystem affects, and is affected by, interpersonal dynamics occurring within other critical subsystems and the family as a whole.

The Sibling Subsystem

From the vantage point of family systems theory (Minuchin, 1974), rivalry and competition may function to keep siblings engaged with one another and, despite the negative affect that may be expressed in the process, build an alliance that can prepare them to work together during times of stress or challenge. As children compete or work to outdo the other, or complain about receiving less preferred treatment from a parent, they are carefully monitoring one another's behaviors. Thus, paradoxically, they are staying connected through their vigilant observations (and perhaps, emulations) of each other's actions and accomplishments. What the other does is salient to them, even as a sibling outperforms them. For example, if it is important to a child that he garners more attention and affection from a parent, then it is important for siblings to carefully monitor how the other elicits and sustains parental attention. And, the in-depth knowledge of the other's capabilities and vulnerabilities can help them join forces when necessary to address external stressors. Thus, although the type of connection that siblings form when they are competing against one another may not be what we typically think of as "supportive," "warm," or "accepting," through rivalry, siblings remain engaged with each having their sibling top of mind.

The intimacy of sibling relationships. Although rivalry may occur in many types of relationships that individuals have, the rivalry that occurs among siblings is unique in that individuals know their siblings better than those outside of the family— and, the intimate knowledge they have of each other's strengths and vulnerabilities can set the stage for more pronounced, intense, and prolonged forms of rivalry. For example, a child does not need to boast that she just had special "alone time" with a parent—given their vigilant scrutiny of one another's actions and whereabouts, siblings are very well aware of when they have been left

out. In fact, flaunting such favored treatment is like adding salt to a sibling's open wound, accentuating the pain of feeling less favored, and possibly, less loved.

The intense familiarity that comes with siblinghood is a factor that can paradoxically heighten competition and rivalry. Intimate knowledge of one another's strengths and vulnerabilities can lead siblings to become the most formidable of opponents— and with their shared history and near open access to one another, they may have countless opportunities to strike physical or emotional blows in ways that a stranger could not know would have impact. Siblings are very knowledgeable about the ways their sisters and brothers may react in various situations and this knowledge can be very useful during times of stress and change (Bank & Kahn, 1988), for better or for worse (Kramer & Conger, 2009). For example, siblings may form strong alliances to work together to, on the one hand, support and help one another (Kramer & Hamilton, in press) or, on the other hand, take advantage of the other's vulnerabilities. Sibling alliances, can also lead to shared deviance or collusions that undermine parenting (Patterson, 1984) and that could increase their risk for antisocial behaviors in the future (Bullock & Dishion, 2002).

In the extreme, rivalry can lead to manipulation and duplicity, which although not typically considered desirable interpersonal processes, they are sophisticated ones (Kramer, 2014). It takes a great deal of social and emotional understanding to formulate a plan that meets one's personal needs by taking advantage of another's interest, goals, capabilities and vulnerabilities (Dunn, 2007). For example, when a child "allows" his younger sister to join him and his friends at the park— but first she needs to do all of his chores— involves careful planning and implementation of a complex plan that takes into consideration the perspectives,

needs, and feelings of a sibling. This requires correctly deciphering what acts could both motivate a sibling and advantage him, and putting a plan into action, all while disguising one's intentions and culpability. Further, the feelings that emerge as children realize that they have been manipulated offer additional opportunities for children to learn about emotions and the internal states and motivations of others (Dunn, 2007).

The fact that siblings are in an involuntary relationship that provides unlimited access to one another throughout their lives, makes for the possibility that rivalry is long-standing. For example, it is not uncommon for adult siblings to base the amount of caregiving they are willing to devote to an elderly parent (and, accordingly, how much they are willing to relieve siblings of these responsibilities) on feelings of resentment about unfair forms of differential treatment that began in childhood (Suitor et al., 2014).

Children's sibling relationships are ambivalent relationships. In seeking to understand sibling rivalry, we must consider that rivalry rarely fully defines the sibling relationship and that, likely, there are some forms of positive engagement or affiliative connection that also characterize the relationship. Beneath the demonstrations of rivalry and competition, there may be underlying levels of pride, admiration, connection, and perhaps, warmth and support, that, even though they may not be acknowledged or displayed very often, these affiliative feelings may yet exist. For example, a child who routinely behaves in a competitive fashion toward a sibling may nonetheless provide comfort and care when that sibling is injured; further, that child may take a protective or defensive stance when that sibling is under attack from a peer (Kramer & Hamilton, in press).

According to Dunn (2007), sibling relationships are "ambivalent relationships" in that they are mixtures of positive and negative behaviors and affects—and children can fluctuate between the positive and negative at astonishing rates. Thus, rarely is a sibling relationship wholly negative (or positive, for that matter). In contrast to cases in which unrelated people have developed a rivalry, and the other is viewed as an evil villain—wholly bad and someone to defeat— sibling relationships are unique in that the sibs are usually aware at some level that the other has at least some redeeming qualities (or at least, that their parents believe that is the case).

Given the ambiguous nature of sibling relationships, the presence of significant levels of rivalry/competition, agonism and warmth are not mutually exclusive, as they commonly co-occur. Therefore, it is important to gauge the extent to which rivalry and conflict color children's sibling relationships. Siblings who exchange more prosocial behaviors and affect relative to rivalry and agonism, tend to enjoy more positive relationships than those who have a predominance of rivalry, competition and conflict (Kramer, 2010). It is not necessary for a sibling interaction to be uniformly prosocial (e.g., warm, supportive, accepting) to be considered as positive, as even positive sibling relationships include conflict and competition. What is critical to assess is whether the form of conflict is constructive, rather than destructive, and whether the children have learned and are using the skills they need to manage these conflicts (Ross & Lazinski, 2014). Unmanaged conflicts, and particularly those that are destructive (hurtful physically or emotionally) can be most damaging to the sibling relationship, with less likelihood of siblings granting concessions to one another or attempts to repair the relationship. Less is known about the long-term outcomes for sibling relationships that are

colored by high levels of sibling rivalry that persist over time without resolution or management. Siblings in these relationships may disengage from one another in order to avoid intense negative emotions.

This recognition that sibling relationships are ambivalent relationships— in which some form of positive engagement or affiliation likely exists even in the face of rivalry— is important because it provides clinicians, educators, and parents something to work with-- something to reinforce and promote (Caspi, 2012). If we can identify the areas in which siblings connect and/or value one another, we can work to strengthen those processes and help children to call upon them during times of animosity or resentment. From a clinical standpoint, the intention is not to overlook or ignore feelings of jealousy and rivalrous behaviors, but to acknowledge them while placing them in the larger context. The objective is to help siblings to appreciate that although they may feel negatively about a sibling in a given moment, there have been times, and will likely be more times in the future, in which they have enjoyed companionship, solidarity, support, and fun. That is, we can help them to embrace the ambiguity of their relationship, with both its assets and flaws.

Rivalry and Adaptive Family Functioning

In family systems terms, the sibling subsystem is important—not only because it is a potent context in which individual siblings interact and mutually shape one another's development— but also because it is influenced by, and is a powerful influence upon, other subsystems in the family, such as the marital and parent-child subsystems.

Following family systems theory (Cox & Paley, 1997; Minuchin, 1974), the presence of interpersonal processes such as sibling rivalry and competition can tell us much about how a

family operates, the roles that particular individuals play, the rules that govern interactions among family members, as well as how subsystems in the family operate and interface with one another as interdependent units. In particular, sibling rivalry may fulfill key functions in the family, for example, to help individual family members to regulate their closeness and distance from one another, to establish and maintain personal and generational boundaries, or to help individual family members express their individuality while staying connected. While rivalry can have adaptive functions in terms of helping the family to stay connected and cohesive, it can also have maladaptive functions, for example, by disrupting healthy family organization, placing pressure on vulnerable relationships, or stimulating conflict in other subsystems. We explore some of these functions below, beginning with potential adaptive outcomes.

Maintaining parent-child engagement. Clinicians and parent educators have suggested that sibling conflict (which may be stimulated by rivalry) often occurs in the service of keeping parents engaged with children, for example, as they are enlisted to manage disputes (Dreikurs, 1964). For example, children may engage in conflicts or behave in a rivalrous fashion in order to stimulate a depressed or withdrawn parent to interact with them. This could be one mechanism by which sibling rivalry can paradoxically contribute to healthier outcomes for parents, and for parent-child relationships. However, it should be noted that there is not a great deal of evidence to support the idea that children intentionally engage in rivalrous or conflictual behaviors as a way to draw parents out (Prochaska & Prochaska, 1985). Although clinicians may contend that such behaviors are not necessarily conscious or intentional, we must await further studies to provide support for this supposition.

Strengthening the marital alliance. In a similar fashion, it is also possible that sibling rivalry and conflict can serve to keep the marital subsystem intact and strong. For example, as children engage in rivalrous and competitive behaviors that elicit parental concern, parents may find they need to work together—consult each other for advice or join forces— to determine a plan of action. In the course of figuring out how to address the problem, sibling rivalry can paradoxically, function to build greater cohesion in the marital/parental subsystem (Minuchin, 1974). When parents are facing difficulties in their relationship, having to address children's conflict could be a welcome distraction from facing the reality of a marriage in trouble. Of course, if parents find it difficult to effectively work together to strategize how to best respond to sibling rivalry, interparental conflict and estrangement may result—in which case the vitality of marital/parental subsystem may be threatened— and this may be one of the reasons that parents may find sibling rivalry stressful to manage.

Fostering family cohesion. Furthermore, as parents foster good-natured competition and mild forms of rivalry among their children, the system as whole may be strengthened as family members have fun and enjoy their time together.

In summary, rivalrous processes may help siblings, and their parents, to stay connected with one another, to express interest in one another's activities and accomplishments, to collaborate and learn from one another, and sustain patterns of interaction that involve the pursuit of shared interests and goals (albeit within the frame of competition).

Rivalry and Maladaptive Family Functioning

Through repetition, reinforcement, and the family's desire to maintain its homeostasis, sibling rivalry can become a persistent pattern of interaction that may be linked with some

maladaptive outcomes for the family. Below we review a few ways that difficulties in family functioning can promote and maintain sibling rivalry. We follow with a brief discussion of how helping families to view processes, such as conflict and sibling rivalry as "symptoms" that play a role in perpetuating dysfunctional family operations can lead to a new modes of operation and better outcomes for its members.

Fostering competition. Parents (and other adults) may, intentionally or inadvertently, behave in ways that promote or feed rivalry and competition. In family systems thinking, families are composed of at least three generations (Minuchin, 1974). Even if a household does not include grandparents, given the principle of interdependence, it is still necessary to consider the reciprocal influences of grandparents (and other extended family members) on other parts of the family system. For example, parents (or grandparents or other adults) may intentionally or unintentionally encourage forms of competition that lead children to harbor resentment and negative feelings about one another, perhaps by emphasizing winning at all cost, over fair play, cooperation, and sharing experiences of fun.

Comparisons and unwarranted differential treatment. Adults in the family (e.g., parents, grandparents, or others) may compare children in inappropriate ways and/or engage in unfair or unwarranted forms of differential treatment. With a lack of recognition and appreciation of differences in individual children's needs, interests, preferences, skills, and competencies, individual children may feel that they are less valued by parents than are their siblings. In turn, resentment and rivalry may ensue. Similarly, parents may assign roles to individual children that may lead some of them to feel that there are limitations in what they might achieve in life (e.g., if one child is considered to be the "smart one" in the family, even if

it is not explicitly stated, the other children may consider themselves to be not as bright, which may limit their aspirations, confidence, effort, and, ultimately, their accomplishments. Thus, unchecked, excessive sibling comparisons, and, worse, parental differential treatment that is judged to be unfair may lead children to engage in undo competition and rivalry, perhaps becoming resentful, unhappy, and wish to disengage with one another.

Failure to build socioemotional competencies. Parents may not support children's acquisition of skills and competencies which would enable them to interact in a respectful and cooperative manner (Kramer, 2010). As discussed above, competencies in emotion regulation, self-control, perspective-taking, and conflict management, among others often do not develop without intentional instruction and support

Weak or inappropriate boundaries. Violations of generational boundaries—such as when a parent elevates one child to be a confident or special partner, or where one child is viewed as the cause of family difficulties— can contribute to the onset or perpetuation of sibling rivalry. Inappropriate alliances between a parent and one child, and particularly when one child (or parent) is treated as the "odd man out," or is "triangulated" in family systems terms (Minuchin, 1974) is likely to spur resentments and hostility that may be expressed through rivalrous, or hostile, acts. In the same way, generational boundaries between the parent and grandparent generation may be overly permeable, such as when one spouse's parent is intrusive and the strength of a marital coalition is diluted or threatened.

It is also possible that the generational boundary between the parent and sibling subsystem is too rigid, reducing the likelihood that parents are aware of aggressive acts that occur among siblings and therefore fail to intercede when rivalry is excessive and threatens the

sibling relationship and, as a result, the family. It is important to note that even in early childhood, parents may not be aware of all facets of their children's interactions and the degree to which social comparison processes, for example, are contributing to sibling rivalry. Parents may not directly witness occasions in which one child "lords" over a sibling, or worse, torments or bullies the other, perhaps because they feel they received preferential treatment from a parent. Thus, parents may not be aware of the extent to which their children are overly competitive or are experiencing strong feelings of jealousy, envy or resentment. This may be more likely to occur in families where parental monitoring is weak and channels of communication are not clear and open (Bank, Burraston, & Snyder, 2004; Patterson, 1984).

Rivalry as a symptom. Finally, given the tendency of families to develop homeostatic modes of operation, which lead them to adhere to implicit and explicit sets of rules that may inadvertently perpetuate problem behaviors, and in ways that may not always be evident to family members, change is difficult (Haley, 1987). Thus, patterns of sibling rivalry can serve as a symptom of an underlying problem (e.g., poor marital functioning) that can be resistant to change, particularly when the family is facing additional sources of stress (McCubbin & Patterson, 1983). As symptoms are believed to serve some function in maintaining the family's homeostasis even when it is creating difficulties for its members (Haley, 1978), the goal of family systems treatment may be to change the family organization and mode of functioning so that the symptom no longer has any function, and so family members no longer see the need to engage in problematic behaviors. For example, if children are behaving in a rivalrous fashion to pull their parents together in the hope that they can work effectively as team, then it is important for parents to demonstrate to children that their marriage is intact, thereby allaying

children's implicit fears about a pending marital disruption. With the underlying concern alleviated, there is no need for children to engage in rivalry.

Potential Mechanisms to Reduce Rivalry within the Family Context

Although ingrained patterns of sibling rivalry are difficult to interrupt, there is hope. Several evidence-based preventive interventions have been developed which are aimed at helping siblings interact more positively with one another, while curtailing conflict and agonism, including resentment and rivalry. For example, the More Fun with Sisters and Brothers Program (Kennedy & Kramer, 2008), developed for siblings aged 4- to 8-years, has been shown to help siblings increase prosocial forms of interaction as well as reduce conflict, agonism and parents' perceptions of sibling rivalry/competition. In addition, the program has been shown to help children and their parents (Ravindran, Engle, McElwain, & Kramer, 2015) to better regulate emotions related to negative (and stressful) sibling interactions. Strengthening parents' abilities to address the stressors they face when parenting siblings, can play an important role in recalibrating what is occurring in the sibling and parent-child subsystems that may be maintaining sibling rivalry and agonism.

Furthermore, focused interventions have been developed to effectively help parents support their preschool-aged children as they learn to manage conflicts, for example, by teaching parents mediation skills (Ross & Lazinski, 2014; Siddiqui & Ross, 2004). Gains have also been made in promoting positive sibling relationships among siblings in middle childhood and adolescence (Feinberg, et al., 2013). Further investigations of how preventive interventions such as these serve to improve sibling relationship quality promise to not only help promote a

higher quality of family life, they also will help to build our theoretical understanding of how sibling relationships operate and contribute to individual and family well-being.

Future investigations are recommended to extend our knowledge of the variations in sibling dynamics (such as rivalry) that may occur in early childhood with respect to ethnicity, culture, family structure, and socioeconomic status. We know from research with adolescents that siblings whose families are facing serious economic pressures often have very different experiences than siblings from economically secure families (Conger, Conger, & Elder, 1994). Further, sibling rivalry may be experienced very differently, if at all, in economically diverse families. Although there have been some excellent studies of sibling relationships in African American (Brody & Murry, 2001) and Mexican American (Updegraff, McHale, Whiteman, Thayer, & Delgado, 2005) families, few have directly examined sibling rivalry dynamics in early childhood and with respect to different family structures [but see Harrist et al. (2014) and Brody and Murry (2001) for relevant exceptions]. Clearly, the examination of rivalry in diverse family systems represents a fertile area of research that has critical implications for promoting the well-being of individual children and families.

CONCLUSION

In exploring the ways in which sibling rivalry may be damaging or adaptive in young children's development and in the relationships they form with others, this review has highlighted that rivalry can indeed play fundamental roles in shaping both positive and negative outcomes for children and their families. Experiences of sibling jealousy and rivalry can promote social and emotional development for individual children – there is much to learn

about how to negotiate relationships in the world when one has had constructive experiences in managing conflict, disappointment, jealousy and resentment with siblings.

It is impossible to truly comprehend the significance and impact of sibling rivalry without understanding its function within the larger family system. Sibling rivalry can serve as a signal that family processes have gone awry, perhaps indicating that parents or extended family members are inadvertently promoting dysfunctional forms of parenting, social comparison, or differential treatment that is leading children to not develop the types of social and emotional competencies that will prepare them for establishing positive relationships with others. Viewing rivalry as a possible symptom of underlying dysfunctional family operations, interventions may be directed at strengthening the sibling, parent-child, or marital/parent subsystems, for example, by helping parents to strengthen their marriage or coparenting relationship so that they can better support prosocial sibling dynamics.

Finally, the observation that even in early childhood, sibling relationships are intimate but "ambivalent" relationships offers hope for the effective remediation of dysfunctional forms of sibling rivalry. For example, teaching children about the meaning of ambivalence in relationships—that feelings of love and jealousy, pride and envy, frustration and love, can co-exist, without the negative emotions necessarily overshadowing the positive— can be most formative (Donaldson & Westerman, 1986). Because sibling rivalry may not be as pervasive or permanent as once believed, we know that children can learn to accept and even open their hearts to another who, yes, may be a rival or competitor at times, but who also may be a potential collaborator, a partner, who sometimes takes the lead as the action figure rather than the sidekick. And, isn't that understanding of ambivalence, the ability to tolerate ambiguity,

along with the ability to not allow negative emotions and impulses to overpower our desire to behave prosocially, what we all need to learn in order to build other meaningful relationships in our lives?

REFERENCES

Adler, A. (1927/1998). *Understanding human nature*. Garden City, MI: Hazelton.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.

Aguilar, B., O'Brien, K. M., August, G. J., Aoun, S. L., & Hektner, J. M. (2001). Relationship quality of aggressive children and their siblings: A multiinformant, multimeasure investigation. *Journal of Abnormal Child Psychology*, *29*, 479-489.

Bank, L., Burraston, B., & Snyder, J. (2004). Sibling conflict and ineffective parenting as predictors of adolescent boys' antisocial behavior and peer difficulties; Additive and interactive effects. *Journal of Research on Adolescence*, *14*, 19-125. Doi:10.1111/j.1532-7795.2004.01401005.x

Bank, S. P., & Kahn, M. D. (1982). *The sibling bond*. New York, NY: Basic Books.

Bowlby, J. (1988). *A secure base*. New York, NY: Basic Books.

Brody, G. H., & Murry, V. M. (2001). Sibling socialization of competence in rural, single-parent African American families. *Journal of Marriage and Family*, *63*, 996-1008. doi: 10.1111/j.1741-3737.2001.00996.x

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.

Buist, K. L., Deković, M., & Prinzie, P. (2013). Sibling relationship quality and psychopathology of children and adolescents: A meta-analysis. *Clinical Psychology Review*, *33*, 97-106. doi:10.1013/j.cpr.2012.10.007

Bullock, B. M., & Dishion, T. (2002). Sibling collusion and problem behavior in early

adolescence: Towards a process model of family mutuality. *Journal of Abnormal Child Psychology*, *30*, 143-153. doi:10.1023/A1014753232153

Caffaro, J. V. (2013). *Sibling abuse trauma: Assessment and intervention strategies for children, families, and adults*. London: Taylor & Francis, Ltd.

Campione-Barr, N. (2017). The changing nature of power, control, and influence in sibling relationships. In N. Campione-Barr (Ed.), *Power, control, and influence in sibling relationships across development. New Directions for Child and Adolescent Development*, *156*, 1 - 8. doi:10.1002/cad.20202

Caspi, J. (2012). *Sibling aggression: Assessment and treatment*. New York, NY: Springer.

CBS News (April 21, 2018). Meet Shaquem Griffin, the one-handed player who's probably headed to the NFL. https://www.cbsnews.com/news/shaquem-griffin-one-handed-player-whos-probably-headed-to-the-nfl/

Conger, K. J., Conger, R. D., & Elder, G. H. Jr. (1994). Sibling relations in hard times. In R. D. Conger & G. H. Jr. Elder (Eds), *Families in troubled times: Adapting to change in rural America* (pp. 235- 254). Hawthorne, NY: Aldine.

Cox, M. J., & Paley, B. (1997). Families as systems. *Annual Review of Psychology*, *48*, 243-267. doi:10.1146/annurev.psych.48.1.243.

Criss, M. M., & Shaw, D. S. (2005). Sibling relationships as contexts for delinquency training in low-income families. *Journal of Family Psychology*, *19*, 592-600. doi:10.1037/0893-3200.19.4.592

Daly, M., Wilson, M. I., & Weghorst, S. J. (1982). Male sexual jealousy. *Ethology and Sociobiology*, *3*, 11-27. doi:10.1016/0162-3095(82)90027-9

Daniels, D., & Plomin, R. (1985). Differential experience of siblings in the same family. *Developmental Psychology*, *21*, 747-760. doi:10.1037/0012-1649.21.5.747

Dirks, M. A., Persram, R., Recchia, H. E., & Howe, N. (2015). Sibling relationships as sources of risk and resilience in the development and maintenance of internalizing and externalizing problems during childhood and adolescence. *Clinical Psychology Review*, *42*, 145-155. doi: 10.1016/j.cpr.2015.07.003

Donaldson, S., & Westerman, M. (1986). Development of children's understanding of ambivalence and causal theories of emotions. *Developmental Psychology*, *22*, 655-662.

Downey, D. B., Condron, D. J., & Yucel, D. (2015). Number of siblings and social skills revisited among American fifth graders. *Journal of Family Issues*, *36*, 273-296. doi:10.1177/0192513X13507569

Dreikurs, R. (1964). *Children: The challenge*. New York, NY: Hawthorn Books.

Dunn, J. (1988). *The beginnings of social understanding*. Cambridge, MA: Harvard University Press.

Dunn, J. (2007). Siblings and socialization. In J. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 309-327). New York, NY: Guilford Press.

Dunn, J., Brown, J., Slomkowski, C., Tesla, C., & Youngblade, L. (1991). Young children's understanding of other people's feelings and beliefs: Individual differences and their antecedents. *Child Development*, *62*, 1352-1366.

Dunn, J., & Kendrick, C. (1982). *Siblings: Love, envy and understanding*. Cambridge, MA: Harvard University Press.

Ensor, R., Marks, A., Jacobs, & Hughes, C. (2010). Trajectories of antisocial behavior towards

siblings predict antisocial behavior towards peers. *Journal of Child Psychology and Psychiatry*, *51*, 1208-1216. doi:10.1111/j.1469-7610.2010.02276

Feinberg, M. E., & Hetherington, E. M. (2000). Sibling differentiation in adolescence: Implications for behavioral genetic theory. *Child Development*, *71*, 1512-1524. doi:10.1111/1467-8624.00243

Feinberg, M. E., McHale, S. M., Crouter, A. C., & Cumsille, P. (2003). Sibling differentiation: Sibling and parent relationship trajectories in adolescence. *Child Development*, *74*, 1261-1274. doi:10.1111/1467-8624.00606

Feinberg, M. E., Neiderhiser, J. M., Simmens, S., Reiss, D., & Hetherington, E. M. (2000). Sibling comparison of differential treatment in adolescence: Gender, self-esteem, and emotionality as mediators of the parenting-adjustment association. *Child Development*, *71*, 1611-1628. doi:10.1111/1467-8624.00252

Feinberg, M. E., Solmeyer, A. R., Hostetler, M. L., Sakuma, K. L., Jones, D., & McHale, S. M. (2013). Siblings are special: Initial test of a new approach for preventing youth behavior problems. *Journal of Adolescent Health*, *53*, 166-173. doi: 10.1016/j.adohealth.2012.10.004

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117-140.

Freud, A. (1937). *The ego and mechanisms of defence*. London: Hogarth Press.

Freud, S. (1920/1965). *Introductory lectures on psycho-analysis*. New York, NY: Norton.

Garcia, M. M., Shaw, D. S., Winslow, E. B., & Yaggi, K .E. (2000). Destructive sibling conflict and the development of conduct problems in young boys. *Developmental Psychology, 36*, 44-53. doi:10.1037/0012-1649.36.1.44

Gottman. J. M. (1997). *Raising an emotionally intelligent child: The heart of parenting*. New York, NY: Fireside.

Haley, J. (1987). *Problem solving therapy*. San Francisco, CA: Jossey-Bass.

Harrist, A. W., Achacoso, J. A., John, A., Pettit, G. S., Bates, J. E., & Dodge, K. (2014). Reciprocal and complementary sibling interactions: Relations with socialization outcomes in the kindergarten class. *Early Education and Development*, *25*, 202-222. doi: 10.1080/10409289.2014.848500

Hart, S. L. (2015). *Jealousy in infants*: *Laboratory research on differential treatment*. SpringerBriefs in Psychology, Switzerland: Spring International Publishing. doi:10.1007/978-3-319-10452-2_1

Hart, S. L. (2001). *Preventing sibling rivalry*. New York: The Free Press.

Hart, S. L. (2016). Jealousy protests: Ontogeny in accord with the 9-month period of human gestation. *Evolutionary Psychology*, April-June, 1-9. doi:10.1177/1474704916636775

Howe, N., Petrakos, H., & Rinaldi, C. (1998). "All the sheeps are dead. He murdered them:" Sibling pretense, negotiation, internal state language, and relationship quality. *Child Development*, *69*, 182-191. doi: 10.1111/j.1467-8624.1998.tb06142.x

Hughes, C. (2011). *Social understanding and social lives: From toddlerhood to the transition to school*. New York, NY: Psychology Press.

Jambon, M., Madigan, S., Plamondon, A., Daniel, E., & Jenkins, J. M. (2018). The development of empathic concern in siblings: A reciprocal influence model. *Child Development*, 1-6. doi:10.1111/cde.13015

Kennedy, D., & Kramer, L. (2008). Improving emotion regulation and sibling relationship quality:

The More Fun with Sisters and Brothers Program. *Family Relations*, *57*, 567-578. doi:10.1111/j.1741-3729.2008.00523.x

Kolak., A. M., & Volling, B. L. (2010). Sibling jealousy in early childhood: Longitudinal links to Sibling relationship quality. *Infant and Child Development*, *20*, 213-226. doi:10.1002/icd.690

Kowal, A., & Kramer, L. (1997). Children's understanding of parental differential treatment. *Child Development*, *68*, 113-126. doi:10.2037/1131929

Kowal, A. Kramer, L., Krull, J. L., & Crick, N. (2002). Children's perceptions of the fairness of parental differential treatment and their socioemotional well-being. *Journal of Family Psychology*, *16*, 297-306. doi:10.1037//0893-3200.16.3.297

Kowal, A., Krull, J. L., & Kramer, L. (2004). How the differential treatment of siblings is linked with parent-child relationship quality. *Journal of Family Psychology*, *18*, 685-665. doi:10.1037/0893-3200.18.4.658

Kowal, A., Krull, J. L., & Kramer, L. (2006). Shared understanding of parental differential treatment in families. *Social Development*, *15*, 276-295. doi:10.1111/j.1467-9507.2006.00341.x

Kramer, L. (2010). The essential ingredients of successful sibling relationships: An emerging framework for advancing theory and practice. *Child Development Perspectives*, *4*, 80-86. doi:10.1111/j.1750-8606.2010.00122.x

Kramer, L. (2014). Learning emotional understanding and emotion regulation through sibling interaction. *Early Education and Development*, *25*, 160-184. doi:10.1080/10409289.2014.838824

Kramer, L., & Baron, L. (1995). Parents' perceptions of children's sibling relationships. *Family Relations*, *44*, 95-103.doi:10.2307/584746

Kramer, L., & Conger, K. J. (2009). What we learn from our sisters and brothers: For better or for worse. In L. Kramer & K. J. Conger (Eds.), *Siblings as agents of socialization. New Directions for Child and Adolescent Developmen*t, *126*, 1-12. doi:10.1002.cd.253

Kramer, L., & Gottman, J. M. (1992). Becoming a sibling: "With a little help from my friends." *Developmental Psychology*, *28*, 685-699.

Kramer, L., & Hamilton, T. (in press). Sibling caregiving. In M. Bornstein (Ed.), *Handbook of Parenting: Volume 3: Being and Becoming a Parent* (3rd Edition). New York: Taylor & Francis Group.

Kramer, L., & Kowal, A. K. (2005). Sibling relationship quality from birth to adolescence: The enduring contributions of friends. *Journal of Family Psychology*, *19*, 503-511. doi:10.1037/0893-3200.19.4.503

Kramer, L., Perozynski, L. A., and Chung, T.-Y. (1999). Parental responses to sibling conflict: The effects of development and parent gender. *Child Development*, *70*, 1401-1414. doi: 10.1111/1467-8624.00102

Levy, D. M. (1937). Studies in sibling rivalry. *American Orthopsychiatric Association Research Monographs* (Vol. 2).

Loeser, M. K., Whiteman, S. D., & McHale, S. M. (2016). Siblings' perceptions of differential treatment, fairness, and adolescent adjustment: A moderated indirect effects model. *Journal of Child and Family Studies*, *25*, 2405-2414. doi:10.10007/s10826-016-0429-2

McCubbin, H. I., & Patterson, J. M. (1983). The family stress process: The double ABCX model of adjustment and adaptation. *Marriage and Family Review*, *6*, 7-337. doi: 10.10300/J002v06n01_02

McGuire, S., Manke, B., Eftekhari, A., & Dunn, J. (2000). Children's perceptions of sibling conflict during middle childhood: Issues and siblings (dis)similarity. *Social Development*, *9*, 173–190. doi:10.1111/1467-9507.00118

McHale, S. M., Crouter, A. C., McGuire, S., & Updegraff, K. A. (1995). Congruence between mothers' and fathers' differential treatment of siblings: Links with family relations and children's well-being. *Child Development*, *66*, 116-128. doi:10.1111/j.1467-8624.1995.tb00859.x

McHale, S. M., Updegraff, K. A., Jackson-Newsom, J., Tucker, C. J., & Crouter, A. C. (2000). When does parents' differential treatment have negative implications for siblings? *Social Development*, *9*, 149-172. doi:10.1111/1467-9507.00117

Minuchin, S. (1974). *Families and family therapy*. London, UK: Tavistock.

Parrott, W. G. (1991). The emotional experiences of envy and jealousy. In P. Salovey (Ed.), *The psychology of jealousy and envy* (pp. 3-30). New York, NY: Guilford.

Patterson, G. R. (1984). Siblings: Fellow travelers in coercive family processes. In R. J. Blanchard (Ed.), *Advances in the study of aggression* (pp. 174-213). New York: Academic Press.

Perlman, M., & Ross, H. S. (2005). If-then contingencies in children's sibling conflicts. *Merrill-Palmer Quarterly*, *51*, 42-66. doi:10.1353/mpq.2005.0007

Perozynski, L., & Kramer, L. (1999). Parental beliefs about managing sibling conflict. *Developmental Psychology*, *35*, 489-499.

Pike, A., Coldwell, J., & Dunn, J. (2005). Sibling relationships in early/middle childhood: Links with individual adjustment. *Journal of Family Psychology*, *19*, 523-532. doi:10.1037/0893-3200.19.4.523

Pons, F., & Harris, P. (2005). Longitudinal change and longitudinal stability of individual differences in children's emotion understanding*. Cognition and Emotion*, *19*, 1158-1174. doi: 10.1080/02699930500282108

Prochaska, J. M., & Prochaska, J. O. (1985). Children's views of the "causes" and cures of sibling rivalry. *Child Welfare*, *64*, 427-433.

Ravindran, N., Engle, J., McElwain, N., & Kramer, L. (2015). Fostering parents' emotion regulation through a sibling-focused experimental intervention. *Journal of Family Psychology*, *29*, 458-468. doi:10.1037/fam0000084

Recchia, H. E., & Howe, N. (2008). Family talk about internal states and children's relative appraisals of self and sibling. *Social Development*, *17*, 776-794. doi:10.1111/j.1467-9507.2007.00451.x

Ross, H. S., & Lazinski, M. J. (2014). Parent mediation empowers sibling conflict resolution. *Early Education and Development*, *25*, 259-275. doi:10.1080/10409289.2013.788425

Salovey, P. (1991). *The psychology of jealousy and envy*. New York: Guilford.

Schachter, F. F., Shore, E., Feldman-Rotman, S., Marquis, R. E., & Campbell, S. (1976). Sibling deidentification. *Developmental Psychology*, *12*, 418–427. doi:10.1037/0012-1649.12.5.418

Shanahan, L., McHale, S. M., Crouter, A. C., & Osgood, D. W. (2008). Linkages between parents' differential treatment, youth depressive symptoms, and sibling relationships. *Journal of Marriage and Family, 70*, 480-494. doi:10.1111/j.1741-3737.2008.00495.x\

Siddiqui, A., & Ross, H. S. (2004). Mediation as a method of parent intervention in children's disputes. *Journal of Family Psychology*, *18*, 147-159. doi:10.1037/0893-3200.18.1.147

Sofeminine (2013). https://www.sofeminine.co.uk/children/the-positive-side-of-sibling-rivalry-an-interview-with-the-brownlee-brothers-s190793.html

Stauffacher, K., & DeHart, G. (2005). Preschoolers' relational aggression with siblings and friends. *Early Education and Development*, *16*, 185-206. doi:10.1207/s15566935eed1602_5

Suitor, J. J., Gilligan, M., Johnson, K., & Pillemer, K. (2014). Caregiving, perceptions of maternal favoritism, and tension among siblings. *The Gerontologist*, *54*, 580–588. http://dx.doi.org/10.1093/geront/gnt065

Suitor, J. J., Sechrist, J., Plikuhn, M., Pardo, S., Gilligan, M., & Pillemer, K. (2009). The role of perceived favoritism in sibling relations in midlife. *Journal of Marriage and Family*, *71*, 1026-1038. doi:10.1111j.1741-3737.2009.00650.x

Thompson, J. A., & Halberstadt, A. G. (2008). Children's accounts of sibling jealousy and their implicit theories about relationships. *Social Development*, *17*, 488-511. doi:10.1111/j.1467-9507.2007.00435.x

Updegraff, K. A., McHale, S. M., Whiteman, S. D., Thayer, S. M., & Delgado, M. Y. (2005). Adolescent sibling relationships in Mexican American families: Exploring the role of familism. *Journal of Family Psychology*, *19*, 512-522. doi:10.1037/0893-3200.19.4.512

Viorst, J. (1986). *Necessary losses*. New York, NY: Fireside.

Volling, B. L., McElwain, M. L.., & Miller, A. L. (2002). Emotion regulation in context: The jealousy complex between siblings in relation with child and family characteristics. *Child Development*, *73*, 581-600. doi:10.1111/1467-8624.00425

Volling, B. L., Gonzalez, R., Oh. W., Song, J.-H., Yu, T., Rosenberg, L., Kuo, P. X., Thomason, E., Beyers-Carlson, E., Safyer, P. & Stevenson, M. M. (Eds.) (2017). Developmental trajectories of children's adjustment across the transition tom siblinghood: Pre-birth predictors and sibling outcomes at one year. *Monographs of the Society for Research in Child Development* (Serial No. 326, Vol. *82*(3), 1-216. doi:10.1111/mono.12265

Volling, B. L., Kennedy, D. E., & Jackey, L. M. (2010). The development of sibling jealousy. In S. L. Hart & M. Legerstee (Eds.), *Handbook of jealousy: Theory, research, and multidisciplinary approaches* (p. 387-417). Oxford: Wiley-Blackwell. doi:10.1002/9781444323542.ch17

Volling, B. L., Yu, T., Gonzalez, R., Kennedy, D. E., Rosenberg, L., & Oh, W. (2014). Children's responses to mother-infant and father-infant interaction with a baby sibling: Jealousy or joy? *Journal of Family Psychology*, *28*, 634-644. doi: 10.1037/a0037811

White, G. L., & Mullen, P. E. (1989). *Jealousy: Theory, research, and clinical strategies*. New York: Guilford.

Whiteman, S. D., Becerra, J. M., & Killoran, S. E. (2009). Mechanisms of sibling socialization in

normative family development. In L. Kramer & K. J. Conger (Eds.), *Siblings as agents of socialization. New Directions in Child and Adolescent Development*, *126,* 29-43. doi:10.1002/cd.255

Whiteman, S. D., & Christiansen, A. (2008). Processes of sibling influence in adolescence: Individual and family correlates. *Family Relations*, *57*, 24–34. doi:10.1111/j.1741-3729.2007.00480.x

Whiteman, S. D., McHale, S. M., & Crouter, A. C. (2007). Competing processes of sibling influence: Observational learning and sibling deidentification. *Social Development*, *16*, 642–661. doi: /10.1111/j.1467-9507.2007.00409.x

Wiehe, V. R. (1997). *Sibling abuse: Hidden physical, emotional and sexual trauma*. Thousand Oaks, CA: Sage.

Yu, J. J., & Gamble, W. C. (2008). Pathways of influence: Marital relationships and their association with parenting styles and sibling relationship quality. *Journal of Child and Family Studies*, *17*, 757-778. doi:10.1007/s10826-008-9188-z