CHAPTER 2

Adolescents' Relationships with Siblings

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Sibling relationships are among the most enduring of interpersonal ties and serve as important contexts for individual development. Because siblings share a personal history and often the same parents, as well as the same family and neighborhood and community, they can be affected by the same influences. Moreover, the relationships that children and adolescents share with siblings typically have a profound influence on their development and their experiences within the family. For example, siblings have been known to affect one another's attitudes, behaviors, school success, and even one another's friendships. In fact, sibling relationships often serve as a basis for other, future close adult relational bonds (Conger, Cui, Bryant, & Elder, 2000). Thus, sibling relationships can serve as a window into one's past, as well as a lens through which to better understand one's future. All in all, sibling relationships are fascinating, dynamic, and unique relationships that can help unravel the basic processes of human development.

Most children have at least one sibling, though the number of siblings in a family varies as a function of their age and birth cohort (Rowland, 2007). Several demographic trends in the United States may lend greater relevance of the sibling relationship to individuals'

lives today than in the past. First, family size has diminished to where today the average child in the United States has only one sibling, thus creating the potential for greater intimacy and mutual reliance between siblings (Rowland, 2007). Second, the increasing longevity of the life span has served to elongate sibling bonds, with siblings serving as strong providers of support often up to late adulthood (Geotting, 1986). The recent increases in geographic mobility and in divorce and subsequent remarriage may also cause people to cling to the constancy and permanency a brother or sister can provide. Finally, with more parents absent from the home (due to employment or divorce), children may be more likely to serve as care providers to one another and to band together as a mutual support system (Chappell & Penning, 2005).

However, there is a contradictory nature to this closeness that makes sibling relations so unique. Because siblings are typically nested within the same family, they share common familial resources. Whether implicitly or explicitly acknowledged, siblings often compete for these resources, which include parents' time and attention, as well as the family's financial assets and material possessions (Behrman, 1997; Behrman, Pollack & Taubman,1995).

These forces, in conjunction with the intense closeness siblings experience, can promote strong rivalries that often persist throughout the life course (Cicirelli, 1995).

This chapter reviews sibling relationships, particularly as they occur during adolescence. There has been far less research conducted on sibling relations during adolescence than during childhood or infancy. Recently, however, the work on teenage sibling ties has increased, with many studies showing the importance of sibling relationships during adolescence (Dunn, 2005). In addition, several longitudinal studies have provided compelling evidence of the changes that occur in sibling relationships across adolescence, as well as the strong influence siblings have on youths' health and well-being (Kramer & Bank, 2005).

In this chapter, I first present theories pertinent to sibling relationships. I then focus on the developmental course of sibling relationships, noting the form and functions sibling ties serve during adolescence. Third, I consider the various influences that shape adolescents' relations with siblings, including family factors and qualities of parents' parenting. Fourth, I discuss how sibling relationships influence adolescents' developmental course and adjustment, particularly adolescents' friend and peer relationships and engagement in risky behaviors, such as drug and alcohol use. I next consider the large literature on the nonshared environmental influences on siblings, or the factors that explain why siblings within the same family are so different (Dunn & Plomin, 1990). This research includes studies of parents' differential treatment of siblings and the process of sibling deidentification. Finally, recent studies of siblings from diverse family, cultural, and socioeconomic backgrounds are reviewed, as well as studies that describe the nuances that pertain to step- and half-siblings.

THEORIES PERTAINING TO SIBLING RELATIONSHIPS

Before embarking on a review of the field of sibling research, it is essential to first discuss the various theories that have been applied to the study of sibling relationships. Below I discuss family systems theory, attachment theory, social learning theory, social comparison theory, social provision theory, and the confluence model. Although the confluence model is not considered a theory per se, it was a highly popular and hotly contested model in the social sciences for decades and significantly shaped the face of sibling research. Also, it should be noted that my selection of the theories reviewed is not all encompassing; rather, my emphasis is on perspectives that remain important in the field of sibling research today.

Family Systems Theory

Family systems theory maintains that family members are part of an interdependent, dynamic family system whereby the behavior of each individual or family subsystem has the capacity to affect other individuals or subsystems within the family (Kreppner & Lerner, 1989; Minuchin, 1988). Family subsystems refer to alliances within the family, such as the marital dyad, sibling relationships, and parent–child relationships. Family systems theory contends that change in either the individual or the family unit has an impact on the other. Thus, family relationships are in constant flux, affected by the development of individual family members, the family unit as a whole, and the ever-changing larger social ecology in which the family is embedded. A systems perspective brings attention to the dynamic interdependence of various subsystems within the family, with the presence of a parent altering siblings' interactions, for example (Buhrmester, 1992). Similarly, the presence of an older sibling can alter parents' expectations of a younger child (Whiteman, McHale, & Crouter, 2003). As applied to the study of sibling relationships, a family systems perspective posits that individual family members, family subsystem dyads, as well as the dynamics of the family unit as a whole have the potential to affect the quality and intensity of adolescents' sibling relations and vice versa (Brody, 1998).

Attachment Theory

Attachment theory describes a system of human behaviors that serve to bring an individual into closer proximity to an attachment figure, often the principal caregiver, in times of stress or duress (Bowlby, 1969). The caregiver's responsiveness and sensitivity to a child's affective signals function to provide safety and security which, when experienced over time, helps children develop a sense of trust and the ability to regulate emotional distress. Attachment theory has been applied to sibling relationships in at least three contexts. First, the quality of mother–infant attachment bonds has been compared across siblings, with most studies finding that attachment security is consistent across siblings (Rosen & Burke, 1999; Van Ijzendoorn, Moran, Belsky et al., 2000; Ward, Vaughn, & Robb, 1988), although this link may weaken in adolescence (Kiang & Furman, 2007). Second, a strong attachment bond between mother and child is known to contribute to warm and close sibling relationships (Brody, 1998; Brody, Stoneman, & MacKinnon, 1986). Third, it has been noted that children may develop a strong attachment to a sibling in cases wherein parents do not (or cannot) provide sufficient warmth or security. Such instances were noted by Bank and Kahn (1982) in their description of intense sibling loyalties, and in situations where a sibling provides a child's primary care, such as after a maternal death or when a mother is chronically ill (Sears & Sheppard, 2004; Stein, Riedel & Rotheram-Borus, 1999). In a process known as *parentification,* a child caregiver is responsible for fulfilling siblings' basic needs, and the sibling relationship is forced to renegotiate its traditional roles and functions (Lamorey, 1999).

Social Learning Theory

Social learning theory proposes that observational learning, or modeling, is one of the primary methods by which behavior is acquired (Bandura, 1989). Sibling modeling is believed to be the basis for why siblings engage in similar behaviors, with siblings (especially older siblings) serving as powerful socialization agents. It is known that children readily model a sibling's behavior (Stocker & Youngblade, 1999). Indeed, Patterson's (1984, 1986) research documents that children's aggressiveness is learned or modeled after witnessing a sibling's aggression. Similarly, behaviors observed during parent–child interactions often generalize to children's interactions with their siblings; for example, children and adolescents use conflict resolution patterns with siblings that they have observed or experienced with parents (Cummings, Goeke-Morey & Papp, 2004). Positive interactions between parents and children are also known to generalize to empathetic and prosocial sibling interactions (Stocker, Ahmed & Stall, 1997), and sibling similarity in attitudes, interests, and behaviors have been found to result from siblings' observations of each other (Whiteman, McHale, & Crouter, 2007a, 2007b).

Social Comparison Theory

Social comparison theory is vital to the study of sibling relationships. Social comparison theory contends that there exists a basic human drive to evaluate oneself relative to others (Festinger, 1954). Indeed, without these comparisons, we could not assess our particular strengths, weaknesses, or talents. Siblings are a critical "other" to be compared, as each child in a family is similar but also different in relevant ways. One implication of social comparison processes is that the particular people to whom we compare ourselves can greatly influence how we see ourselves. Social comparison processes are not only central to the quality of sibling relationships, but also to parents' expectations of their various children (Whiteman & Buchanan, 2002). There is, in fact, a large and growing literature on sibling comparison processes and impact on parents' parenting and expectations, and on youth's adjustment (Boyle, Jenkins, Georgiades, et al., 2004; Brody & Stoneman, 1994; Reiss, Plomin, Hetherington et al., 1994). For example, children's individual adjustment has been found

to be more strongly related to how they compare to their siblings than how children behave in an absolute sense (Feinberg, Neiderhiser, Simmens, et al., 2000).

Social Provision Theory

In Sullivan's (1953) social provision theory, he proposed that different social relationships serve different social needs. Weiss (1974) later modified Sullivan's theory and characterized the socioemotional functions, or social provisions, provided by different types of relationships. Both Sullivan and Weiss maintained, though, that individuals have basic needs for "tender" attachments, playful involvement, and emotional intimacy, and that only particular relationships can meet specific needs. Furman and Buhrmester (1985a, 1985b) applied this theory to children's and adolescents' sibling relationships in attempts to discern the various functions that siblings serve. They found, on average, that most siblings provide important sources of companionship, affection, intimacy, nurturance, instrumental help, and support. Through their work, Furman and Buhrmester noted that siblings also fulfill a wide variety of roles, such as friend, playmate, companion, confidante, competitor, agitator, caregiver, teacher, protector, and role model (Buhrmester, 1992; Buhrmester & Furman, 1990; Furman and Buhrmester, 1985a, 1985b, 1992). Goetting (1986) took a similar functional approach in studying sibling relationships and noted that siblings provide one another large amounts of caretaking, companionship, and emotional support throughout the life course.

It is important to note that social provision theory laid the groundwork for the "compensation hypothesis" of sibling relationships, or the notion that siblings can compensate for the provisions of a functionally analogous but absent relationship, such as same-age friends or peers (East & Rook, 1992). Currently, there is a growing literature on the protective effects of supportive sibling ties in the context of absent or unfulfilling relationships with parents, friends, and peers (Jenkins, 1992; Milevsky & Levitt, 2005; Stocker, 1994). Other studies also have shown that affectionate sibling ties can buffer children from stress and depression in the presence of parents' marital conflict and when experiencing stressful life events (Gass, Jenkins, & Dunn, 2007; Milevsky, 2005). These and other studies highlight the functional significance of sibling ties in adolescents' lives and confirm the crucial benefits that can be gained by close and supportive sibling bonds (Lamb & Sutton-Smith, 1982).

The Confluence Model

One of the most widely recognized developmental models applied specifically to siblings is the confluence model (Zajonc & Markus, 1975), which attempted to explain sibling differences in intelligence and achievement in terms of family size and birth order. In trying to account for the generally inverse relationship between intellectual ability and number of siblings, the model held that a family's intellectual environment was the average intelligence of everyone in the family, with children contributing less than parents to the summed average. Later born children, thus, were thought to be exposed to a relatively less intelligent environment, because the family environment included the lower mental ages of succeeding siblings. Children from large families in which siblings were close in age were believed to be most disadvantaged due to the average lower mental ages of their many young siblings. Although the theory adequately explained population-level IQ scores, it was less successful in predicting individuals' achievement and IQ, and generally grew out of favor (Rodgers, 2001). However, an important element of the confluence model is still being tested today, that of various children within a family succeeding to varying extents as a function of their birth order (Conley, 2004), birth spacing (Rosenzweig, 1986), and family constellation, including the gender of one's siblings (Conley, 2000; Conley, Pfeiffer, & Velez, 2007). This line of research on parents' differential investment in

their various children constitutes an important component of siblings' nonshared environment and is reviewed later in this chapter.

The preceding theories have been useful in describing and explaining adolescent sibling relationships and are widely used today to better understand sibling influences on youth development. In the following section, I review the research on the nature and function of sibling relationships from childhood up to young adulthood.

THE DEVELOPMENTAL COURSE OF SIBLING RELATIONSHIPS

During childhood, sibling interaction is a major component of children's social experiences (Dunn & Kendrick, 1982). As noted by sibling researcher Dunn (2007), two characteristics of the sibling relationship that are immediately apparent during childhood are the emotional intensity and intimacy between siblings. The intimacy of siblings' experiences with one another, spending more time together than in any other relationship during childhood, breeds extreme familiarity (Bank & Kahn, 1982). Indeed, it is this intimacy and emotional vulnerability that lends itself to a special closeness and openness that few relationships can match.

However, during childhood, sibling ties are often characterized by a love–hate relationship, with children rating their siblings as supportive and loving, but also as aggressive and antagonistic. Relative to other social relationships, children engage in relatively high rates of physical aggression (hitting, fighting) with their siblings (Furman & Buhrmester, 1985a). In asking 4th and 5th graders to describe their sibling relationships, children characterized them as affectionate, but also rivalrous and hostile (Stocker & McHale, 1992). Using two independent samples of college students, Stocker found that college students also described their sibling relationships as warm and close, but also as conflictual and competitive (Stocker, Lanthier, & Furman, 1997). Thus, there appears to be some longevity to the emotionally ambivalent nature of sibling ties.

As children move into adolescence, significant developmental changes occur in their sibling relationships. Sibling ties typically become less conflictual and more egalitarian, as siblings spend less time with one another and the intensity of the relationship lessens (Buhrmester & Furman, 1990; Kim, McHale, Osgood, & Crouter, 2006). In fact, following a steady increase in sibling conflict up to about age 12, there is a rather abrupt decline in the frequency of conflict starting from grade 7 (Furman & Buhrmester, 1985b). Scharf and colleagues (2005), using an Israeli sample, also found decreases in sibling conflict from middle adolescence to young adulthood.

However, recent research indicates that the change in conflict might be different for different children within a family. In a four-year longitudinal study, Kim and colleagues found that sibling conflict declined after early adolescence at the same time (but at different ages) for firstborns and second-borns (Kim et al., 2006). Among firstborns, reports of sibling conflict began to decline at approximately 14 years of age. Among second-borns, sibling conflict started to decrease at about age 11 years. Given that the average age difference between the siblings in the sample was about three years, the authors concluded that the difference in age at the decline was secondary to an overall decrease in sibling conflict when the older child entered middle adolescence. It is likely that this decline in conflict is due to both an increase in emotional self-control and to youth spending more time with friends and romantic partners and in their own extracurricular activities. These results point to the importance of considering children's ever-widening social worlds when studying their sibling relationships. These findings also underscore the importance of examining the mutuality of sibling conflict, or the interdependence of individual behaviors when studied within a dyad (Hinde, 1979).

Although sibling conflict generally appears to decrease during adolescence, rivalry and competition show signs of increasing.

Specifically, sibling relationships become more polarized from middle childhood to early adolescence, when the relative developmental differences between siblings begin to diminish (Brody & Stoneman, 1994). Thus, different-age siblings become more alike as they get older, as the disparity in relative competencies and abilities between siblings decreases. This situation produces more opportunity for social comparisons (from both self and parents) and sibling rivalry. In fact, parents' social comparisons were found to be linked with increases in negative sibling relationship qualities and decreases in positive sibling relationship qualities across time (Brody, Stoneman, & McCoy, 1994a). (This issue of sibling rivalry and parents' differential treatment is discussed more below in the section "Why Siblings Within the Same Family Are So Different").

Across adolescence, sibling intimacy, or the warmth and closeness of the relationship, also appears to decline. During middle childhood, siblings typically report very high levels of intimacy (or during grades 2 to 4). But by early adolescence, intimacy declines to more moderate levels (at 7th grade), after which it remains fairly stable up to college (or at ages 17 to 19) (Buhrmester, 1992). Despite this decline, adolescents still report more intimacy (personal disclosure, emotional support) with siblings than they do with parents (Furman & Buhrmester, 1992; Hartup, 1983). Thus, siblings appear to remain relatively intimate during adolescence, even in the face of less contact.

However, other research studying roughly the same age periods as those described above indicates that siblings' intimate exchanges follow a curvilinear trend, with intimacy moderate during late childhood, relatively low during early adolescence, and at its highest point during middle adolescence (Cole & Kearns, 2001). Analysis of the gender makeup of the sibling dyad, though, may explain this trend, with an interaction between a change in sibling intimacy and whether the sibling pair is of the same or opposite sex. Specifically, mixed-sex sibling pairs report relatively low intimacy during middle childhood (or from roughly ages 7 to 11 years), but report an increase in intimacy during middle adolescence, or from ages 12 to 19 (Kim et al., 2006). Same-sex sibling dyads, though, show no significant change in intimacy across development. A similar developmental trend was observed among 13- and 15-year-old youth, with intimacy increasing across time for opposite-sex sibling pairs, but remaining stable for same-sex pairs (Updegraff, McHale, & Crouter, 2002). These age-by-gender interactions likely reflect youth's greater interest in heterosexual relationships during adolescence, which may foster more companionship with and advice-seeking from opposite-sex siblings. This trend suggests a unique developmental significance of sister–brother relationships during adolescence, or that of possibly preparing one for a romantic or eventual spousal relationship.

As children enter adolescence, gender also appears to become more significant for sibling ties, with brother–brother pairs becoming less close than sister–sister pairs (Dunn, Slomkowski, & Beardsall, 1994). Older adolescent brothers also report less warmth and closeness with their younger sisters than adolescent girls report with their younger sisters. Consistent with this trend, in a study examining Latino and African American youth, sister pairs reported higher increases in warmth and closeness from early adolescence to middle adolescence than did sister–brother pairs (East & Khoo, 2005). However, boys and girls may operationalize closeness within the sibling relationship differently. Sisters, for example, cite talking and caring for each other as markers of closeness, whereas brothers cited doing activities together as a confirmation of their closeness, a pattern also seen with respect to gender differences in friendships outside the family (Edwards, Hadfield, Lucey, & Mauthner, 2006). Nevertheless, by middle adolescence, older sisters appear to be more likely than older brothers to be in close, confiding relationships with their younger siblings.

There is also evidence that sibling companionship, or the amount of time siblings spend with each another in leisure activities, declines during adolescence (Buhrmester & Furman, 1987). For example, using a home-based time-sampling methodology, siblings were found to spend a vast majority of time together during the preschool and early elementary school years, but by adolescence, they spent a relatively small fraction of their time in direct interaction with one another (Larson & Verma, 1999). In another study of 4th-, 6th-, and 8th-grade students, a generally downward trend was apparent in the amount of time siblings spent in shared recreational activities (Cole & Kearns, 2001). Studying a later age period, Israeli adolescents also reported spending less time with siblings in general and in joint leisure activities from ages 16 to 24 years (Scharf, Schulman, & Avigad-Spitz, 2005).

Continuing into young adulthood, there appear to be further declines in both contact and proximity between siblings, starting roughly at ages 18–23 years (White, 2001). The decline in contact is strongly linked with a decline in proximity, as young adult older siblings are likely to leave home for college, a job, or to be with a spouse or partner. Nevertheless, most siblings still see or speak with one another at least weekly (Stewart, Verbrugge, & Beilfuss, 1998), suggesting an attempt to remain emotionally connected even though they may not live with one another.

Siblings' role structure also changes during adolescence, as the power differential between older and younger siblings narrows. During early and middle childhood, the older sibling is more dominant in the relationship, perceived as having more power and status (Furman & Buhrmester, 1992). But beginning at about age 11 or 12 years, older and younger siblings began to strike a balance in power, with both older and younger siblings able to adopt an authoritative role in the relationship.

Paralleling these developmental changes in power are critical changes in the amount of nurturance given and received from siblings from middle childhood to early adolescence. During middle childhood, there are large asymmetries between the amount of nurturance older siblings provide to younger siblings and the amount of nurturance younger siblings provide to older ones (Buhrmester, 1992). From approximately ages 5 to 12 years, older siblings typically are involved in helping younger siblings through caregiving and with school-related tasks. But when older siblings reached early adolescence (or roughly age 11 or 12 years), the amount of nurturance they provide to younger siblings decreases. Moreover, the amount of help and nurturance younger siblings give to older siblings increases during this time period. This results in a more egalitarian relationship, with both older and younger siblings providing and receiving relatively more equivalent levels of support from one another as the older child moves into adolescence. In a large sample of European adolescents, the amount of support given from older siblings to younger ones, and from younger siblings to older ones, showed a strikingly similar pattern (Branje, van Lieshout, van Aken, & Haselager, 2004).

The more egalitarian role structure of the sibling dyad during adolescence likely represents a critical milestone in the sibling relationship. In this case, the younger sibling might feel emancipated from the oppressive authority of the older sibling, and the older sibling might feel liberated from his or her caregiver role toward the younger sibling (Buhrmester & Furman, 1990; Furman & Buhrmester, 1985b). In all, though, this developmental trend seems to reflect a basic shift in the power and role structure between siblings as they enter adolescence.

Similarly, other research shows that both older and younger adolescent-age siblings are equally likely to go to one another for advice and support about family problems and emotional concerns (Tucker, McHale, & Crouter, 2001). However, younger siblings are more likely than older siblings to turn to their siblings for help with problems concerning school,

peers and pressure to engage in risky behaviors, such as drug or alcohol use. This echoes an earlier trend that showed that younger siblings tend to place greater value on the support they receive from older siblings than vice versa and that youth felt closer with an older rather than a younger sibling during middle adolescence (Buhrmester & Furman, 1990). Both of these trends suggest that older siblings may develop into mentors for younger siblings during adolescence. Starting in early adulthood, though, birth order begins to have no influence on the amount of support given or received from one's siblings (Cicirelli, 1995). This trend toward equality in the sibling relationships continues until the middle and late adulthood years, by which point older and younger siblings give and receive equivalent levels of support (Connidis, 2005).

Cicirelli (1995) conducted an interesting retrospective study in which he asked middle-aged sibling pairs to rate the positive and negative qualities of their sibling relationship from childhood to middle adulthood. Results revealed that individuals' ratings of the positive qualities of their sibling relationship (such as enjoyment, trust, confiding, and understanding) declined sharply in adolescence and then increased in adulthood. This teenage dip was sharpest among sister pairs, whereas pairs of brothers evinced a flatter—albeit still downward—trajectory. Those who were younger siblings also rated their relationship less positively throughout their life course than those who were older siblings. Individuals' ratings of the negative qualities of their sibling relationships (such as arguing, competition, and antagonism) peaked in adolescence and then declined in adulthood. When asked to explain the changes, most respondents attributed them to the mood swings of adolescence and to becoming more engaged with others outside the family during this time. The subsequent improvement in the relationship that had taken place by young adulthood was attributed to increasing maturity and to an increased acceptance of each other. Almost all participants acknowledged, though, that their sibling relationship changed dramatically throughout their lifetime.

One phase of the life course that is perhaps the most understudied in relation to individuals' sibling relationships is the transition to adulthood (Cicirelli, 1995; Stewart et al., 1998). This developmental transition is often accompanied by significant life-course events, such as leaving home to attend college, getting married, and starting full-time employment, all of which can significantly impact sibling ties. Indeed, contact between siblings is likely affected, as are the pattern of behaviors and the nature and dynamic of the relationship. However, findings on the nature of change in sibling relationships during this developmental period are mixed. Riggio (2006) reported decreases in sibling warmth and emotional closeness from adolescence into young adulthood. White (2001), using a large national data set, also found that sibling contact, proximity, and giving and receiving support declined starting at age 16 and continued to drop into middle adulthood. In contrast, Stewart and colleagues found increases in sibling warmth during this period (Stewart et al., 1998), and, Stocker and colleagues (1997) found that most college students still perceived their sibling ties as close and supportive. The Stocker et al. study reported no relation between the geographical distance between siblings and the characteristics of their relationship during young adulthood, whereas White (2001) found strong links between these variables, with greater proximity associated with more sibling support. Certainly, more research should be directed toward better understanding how sibling bonds change as youth transition to adulthood.

In all, the nature of sibling ties changes significantly as adolescents grow and develop. In general, sibling relations become more egalitarian and less conflicted and intense across the adolescent years, although there is some indication that siblings may become more outwardly competitive with one another. Emotional dependency, affection, and intimacy

with siblings also generally wane across adolescence. These trends reveal a separation and individuation from siblings similar to that from parents and family described in the theoretical work of Blos (1979) and reflected in the empirical findings of Collins and colleagues (Collins, Gleason, & Sesma, 1997). Time spent with siblings and time engaged in joint leisure activities also generally decline during adolescence. These developmental trends are invariably linked to youth's increasing autonomy, as well as to changes occurring in other spheres of youth's lives, such as their increased engagement with friends, peers, and romantic partners, and in their own recreational pursuits. Finally, while age spacing and birth order generally decrease in importance across adolescence, gender and gender constellation appear to become more significant influences on sibling ties, with sister pairs and sister–brother pairs increasing in closeness during adolescence, but brother pairs not showing a similar pattern. In general, although the structure and nature of sibling ties change in important ways during the teenage years, youth's overall emotional attachments with siblings remain strong, close, and supportive (Cicirelli, 1995).

Certainly, though, not all sibling relationships are the same. Sibling ties are strongly influenced by family and parenting processes, as well as by each individual's temperament or behavioral disposition. Influences that shape the quality of youth's sibling relationships are reviewed next.

INFLUENCES ON THE SIBLING RELATIONSHIP

Numerous studies have shown that siblings develop different kinds of relationships depending on the family context in which they are embedded and the parenting they receive (Furman, 1995). Because siblings are nested within the same family, it is imperative to understand the sibling relationship in the context of the family system. Indeed, the origins of children's sibling relations are integrally tied to the family processes that precede the formation of the sibling bond, such as parents' marital relationship, parents' parenting, and the parent–child relationship (Brody, 1996, 1998; Hetherington, 1994).

The study of sibling relationships within the larger family context derives from both attachment theory and social learning theory. As discussed above, attachment theory contends that there is a coherence in individuals' close relationships, with children's early interactions with caregivers providing an internal working model that affects their expectations for and interactions with siblings and others (Sroufe & Fleeson, 1988). Similarly, from a social learning perspective, children are known to model the interactions they witness from others within the family (Cummings & Davies, 1994; Patterson, 1984).

Much of the earlier research on sibling relationships also examined how children's temperament, or behavioral style, is linked to the quality of sibling ties (Dunn & Kendrick, 1982; Minnett, Vandell, & Santrock, 1983). A number of studies have also looked at several of the above-mentioned influences simultaneously. When considered jointly, children's temperament, mothers' parenting, and child age account for more of the variance in the quality of the sibling relationship than that explained by birth order or gender constellation (Brody et al., 1994a, 1994b, 1996; Stocker, Dunn, & Plomin, 1989). This suggests that all of these factors (individual child characteristics, sibling constellation factors, family relationships, and family process variables) need to be considered simultaneously to fully account for variations in sibling relationship quality. Such multivariate studies are useful for understanding the full influence of these factors and the relative power of each in shaping youth's sibling bonds.

Associations Between Temperament and Youth's Sibling Ties

Most of the research on the links between individuals' temperament and the nature of

their sibling ties generally indicate that sibling relations are more conflictual and less positive when siblings are temperamentally difficult (Brody, 1996; McHale, Kim, & Whiteman, 2006), and, conversely, that individuals with easy temperaments enjoy more favorable sibling relations (Brody et al., 1994a, 1994b; Stocker et al., 1989). However, interesting longitudinal associations have been found that forecast adolescent sibling relations from their childhood temperamental dispositions. For example, youth who are characterized as temperamentally easy at 7–9 years are likely to report more positive and less conflicted sibling relationships in early adolescence (ages 12–14) (Brody et al., 1994a). Child temperament was actually found to be more consistently associated with sibling relationship quality in early adolescence than in middle childhood, such that the association between temperament and sibling quality became more robust across age.

Other research has considered the temperament of each individual in the sibling dyad and concluded that a difficult temperament has different consequences for the relationship when manifested by older versus younger siblings. For example, an older sibling's difficult temperament was predictive of *less positive* sibling relations, whereas a younger sibling's difficult temperament forecast *more negative* sibling ties (Brody et al., 1994b). It may be that difficult younger children are more likely to initiate conflict, and difficult older children are more likely to withdraw from sibling interaction.

Other research has examined whether the behavioral disposition of one sibling has more influence than the other in shaping the nature of the relationship (Furman & Lanthier, 1996). In a study of college students and their siblings, it was found that individuals' extraversion, agreeableness, conscientiousness, emotional stability, and intellectualism were all significantly associated with sibling warmth, conflict, and rivalry (Lanthier, 2007). However, the older siblings' personality traits were more

strongly associated with sibling warmth and rivalry than were these characteristics of the younger sibling. Thus, while the personality characteristics of both siblings play a large role in how they get along, the behavioral styles of older siblings may have more influence than those of younger siblings in determining the nature of the sibling bond.

The Contributions of Parents' Parenting and the Quality of the Parent–Child Relationship to Sibling Ties

As stated above, positive parent–child relationships are expected to contribute to the development of positive sibling relationships, according to attachment theory (Sroufe & Fleeson, 1986) and social learning theory (Bank, Patterson & Reid, 1996; Patterson, Dishion & Bank, 1984). An impressive consensus of research supports this link, with warm and affectionate parent–child relations consistently associated with positive and prosocial sibling bonds (Brody et al., 1987, 1992a, 1994b; Conger et al., 2000; Howe et al., 2001; Stocker et al. 1989), and with negative, intrusive, and overcontrolling parent–child relationships associated with unsupportive and aggressive sibling ties (Bank et al., 1996; Brody, 1996, 1998). Although conducted largely with preschool children, several studies have also documented that mothers' sensitive and nurturing interactions with a younger child influence how older siblings interact with their younger sibling (Bryant, 1989; Howe & Ross, 1990; Volling, 2005).

Longitudinal associations between parent-child relations and sibling relationships have also been documented. Specifically, as the parent–child relationship improves across age, so, too, do sibling relations (Brody et al., 1996). More time in shared dyadic activities with mothers and fathers predicts more positive sibling relations at a later time point, even after considering the effects of the older and younger siblings' temperament. Similarly, among elementary school-age children, those who had warmer father–child and mother–child

relationships had the most affectionate and least hostile sibling ties during early adolescence (Stocker & McHale, 1992).

Parents' parenting style is also highly significant for the quality of sibling relations. Specifically, parents' attentive monitoring and equitable treatment of their adolescent children have been linked to less sibling conflict and more positive sibling interactions (Boll, Ferring, & Filipp, 2003; Brody, 1996, 1998; Conger et al., 2000). Parents' involved and nurturing parenting has also been associated with an absence of sibling conflict, both concurrently and one year later (Brody, Stoneman, McCoy, & Forehand, 1992). However, lax maternal monitoring during early adolescence has been found to be related to an older sister having more status and power within the sibling dyad during middle adolescence (East & Khoo, 2005). The suggests a scenario wherein an older sister might adopt a parental-supervisory role with younger siblings when the mother is unable (or unwilling) to monitor her children's whereabouts and activities.

Another aspect of parents' parenting that has been examined in studies of sibling relations is parents' mediation of their children's disputes (McHale, Updegraff, Tucker, & Crouter, 2000; Perlman & Ross, 1997; Smith & Ross, 2007). Research with 5- and 10-year-old children shows that when mothers provide guidance and reason, and when they directly discuss youth's emotions, interests, and the conflict negotiation process, siblings are better able to reason and to resolve their disputes (Smith & Ross, 2007). However, during adolescence, when parents directly intervene (by punishing siblings or solving the problem), conflict between siblings escalates (McHale et al., 2000). It may be that younger children's sibling relations profit from parental intervention, but that older adolescent siblings benefit most from parental nonintervention. Indeed, parents typically use different conflict management strategies with different-aged children (Kramer, Perozynski, & Chung, 1999). More developmental studies are needed to clarify the most effective conflict resolution strategies to be used with siblings at different ages.

Influences of Parents' Marital Relations on Youth's Sibling Ties

Most of the research directed at uncovering the influences of parent's marital relations on sibling ties has focused on how marital conflict is related to sibling conflict and negativity (Cummings & Davies, 1994; Stocker & Youngblade, 1999). However, a few studies have focused on the link between positive parental marital relations and affectionate sibling ties (Brody et al., 1992a, 1996; Conger et al., 2000; Stocker et al., 1997), and at least two studies have found that siblings form especially close and supportive ties in the face of excessive marital conflict (Dunn et al., 1994; Jenkins, 1992).

The association between marital conflict and poor sibling relations has been well documented. Dunn and colleagues (1999), using a community sample of families with 7-year-olds living in England, found that mother-partner hostility and lack of affection were related to greater negativity from older to younger sibling four years later. Stocker and colleagues also found that when mothers described their marriages as low in affection, 4th- and 5th-grade children reported more hostile and rivalrous relations with their siblings (Stocker et al., 1997).

In attempting to uncover the processes underlying these associations, a few studies have examined how parents' hostility directed toward their children might mediate the relation between marital conflict and sibling conflict. Indeed, parents who report high marital conflict are more likely to also engage in punitive parenting, and siblings' physical aggression toward one another is related to both (Erel, Margolin, & John, 1998). Results from another study show that parents who fight often with their spouse are more likely to also behave angrily toward their children, and it is the parental hostility directed toward their children that is linked to increases in sibling conflict

(Stocker & Youngblade, 1999). In addition, blaming a sibling for parents' marital conflict was found to be associated with high rivalry between siblings (Stocker & Youngblade, 1999). Thus, poor sibling relations appear to be closely intertwined with both high marital conflict and harsh parenting.

At odds with these trends, however, are reports that in the face of excessive or long-term marital conflict, siblings grow closer and provide large amounts of comfort and support to one another (Dunn et al., 1994; Jenkins, 1992). In these situations, children are likely trying to find solace and cope effectively by securing support from siblings. In fact, in responding to parents' angry exchanges, older siblings have been shown to increase their nurturing and helpful behavior toward their younger siblings, suggesting a protective, shielding role of older siblings in the face of marital conflict (Cummings & Smith, 1989). These results, which appear to contradict those previously cited, suggest that different levels of family conflict may affect children's sibling relationships differently. It may be important to look at the level, duration, and potential abusive patterns of marital conflict, as well as the levels of stress and anxiety experienced by children.

Collectively, the studies reviewed in this section add to theoretical models that emphasize the role of individual, family, and parenting processes in shaping youth's sibling ties. The available evidence supports the interdependent nature of family relationships, with marital relations affecting the parent–child relationship, which in turn affects the quality of sibling relations. However, it has also been shown that hostile and antagonistic sibling relations can exacerbate marital conflict, and a temperamentally difficult child can precipitate poor parent–child relations (Brody, 1998; McHale et al., 2006; Stocker et al., 1989). These family factors are invariably inexplicably linked in complex ways across development (Lerner, 2004; Lerner & Steinberg, 2004). Moreover, family dynamics constantly change as the family unit and family members

age and develop. For example, recent research indicates that having an older adolescent child shapes parents' expectations for their younger children when that child enters adolescence (Whiteman & Buchanan, 2002; Whiteman et al., 2003). Similarly, parent–child conflict has been shown to increase for all children in the family when the oldest child transitions into adolescence (Shanahan, McHale, Osgood, & Crouter, 2007). Certainly, it is important to study adolescents' sibling relationships within a larger and ever-changing family system (Lerner, 2004).

SIBLING INFLUENCES ON ADOLESCENT DEVELOPMENT AND ADJUSTMENT

Much research within the sibling relationship field has focused on how siblings positively and negatively influence each other and, in so doing, affect their adjustment. This area of study has generally taken one of two approaches in describing sibling relationship contributions to adolescent outcomes. The first approach draws from a social modeling perspective, which emphasizes the ability of children to actively shape and reinforce their siblings' attitudes and behaviors (Patterson et al., 1984). In this case, similarity in siblings' adjustment is attributed, in part, to modeling each other's behaviors. Here, the balance of power is important for a socialization influence, with the individual who holds more power or authority more likely to serve as a model or socialization agent (Whiteman et al., 2007a, 2007b).

The second approach to explaining sibling influence derives from a family systems perspective, whereby positive and healthy functioning within the family contributes to the well-being of individual family members (Minuchin, 1988). Here, sibling relationships contribute to developmental outcomes because siblings share the same family context, experience the same parenting, and are exposed to similar family functioning and dynamics.

From a family systems perspective, siblings would share the same vulnerability to internalizing and externalizing problems because of problematic functioning at the family-systemic level (Davies & Ciccetti, 2004). The research on sibling influences for adolescents' positive and maladaptive functioning is reviewed below.

Sibling Influences on Adolescents' Positive Functioning

Sibling Support Linked With an Absence of Adjustment Problems

Guided by the coping and social support literature (Cohen & Smye, 1985; Sandler, Miller, Short, & Wolchik, 1989), several studies have shown that sibling support is associated with adolescents' positive mental health. Specifically, adolescents who have close and supportive sibling ties report less loneliness (Ponzetti & James, 1997), less depression and anxiety (Branje et al., 2004; Kim et al., 2007; Milevsky, 2005), more positive feelings of self-worth (Stocker, 1994), and greater life satisfaction (Oliva & Arranz, 2005). However, such simple main effects assessed from correlational data are vulnerable to important threats to internal validity, or to plausible alternative explanations, mainly, that positive functioning on the part of individuals brings about supportive relations with others, including brothers and sisters (Dooley, 1985).

A more robust test of the benefits of sibling support is the presence of a protective effect, wherein support buffers an individual from harm in the presence of stress or stressful life events (Cohen & Wills, 1985). When this effect is evident, sibling support interacts with risk factors to buffer or offset their impact and thus moderate the effects of risk (Rutter, 1987). At least two studies have documented this more complex link, showing that high sibling support moderates the relationship between exposure to stressful life events and youth's functioning. In the first study, children who experienced many cumulative stressful life events (family deaths, accidents, illnesses,

separations, etc.) and had high sibling affection reported lower internalizing problems than children who had relatively unaffectionate sibling ties (Gass et al., 2007). In the second study, high sister support was found to buffer the relationship between ecological risk (poverty, family stress, poor-quality neighborhood) and adolescents' adjustment in school (Milevsky & Levitt, 2005).

Another support effect discussed in the sibling literature is "compensatory support," which refers to the more or less planned investment in a particular relationship knowing that one has failed in other kinds of relationships. In this way, compensation implies active seeking of social provisions in an effort to substitute or make up for a particular relationship deficiency (East & Rook, 1992). This type of compensation would be evident if those who perceive low support in one type of relationship seek support in another, functionally analogous relationship, or a relational bond that serves similar social functions as described in Weiss's theory of social provisions (Weiss, 1974).

This type of compensatory pattern has been shown in several studies, such that adolescents who have poor relationships with parents, friends, or peers develop especially close ties with siblings (East & Rook, 1992; Milevsky, 2005; Milevsky & Levitt, 2005; Seginer, 1998; Sherman, Lansford, & Volling, 2006; Stocker, 1994). Four of these studies also found that high support from a sibling partially compensated for low support in another social relationship with respect to measures of well-being (East & Rook, 1992; Milevsky, 2005; Milevsky & Levitt, 2005; Stocker, 1994). For example, among college students who reported low support from mothers, fathers, or friends, those who reported high support from a sibling were less depressed and less lonely than those who received low support from a sibling (Milevsky, 2005).

Thus, close sibling relations are an important source of support for adolescents, and such support is associated with positive psychological benefits. More importantly, there is

evidence that sibling support can mitigate the negative effects associated with life stress and with the lack of support in other social ties.

Sibling Relations and Social Competence

There is accumulating evidence that children who grow up with at least one sibling have greater social skills and interpersonal understanding than children who have no siblings (Downey & Condron, 2004; Howe, Aquan-Asse, Bukowski et al., 2001; Tucker, Updegraff, McHale, & Crouter, 1999). Indeed, children learn critical conflict negotiation strategies with siblings, and are able to practice turn taking, compromise, and sharing within their day-to-day sibling interactions (Dunn & Slomkowski, 1992). Having a sibling can also help foster the development of many prosocial behaviors, such as helping, teaching, and nurturing (Brody et al., 1986; Smith, 1993). Although most of this research has focused on young children, some studies have examined the association between adolescents' sibling relationship qualities and the nature of their peer and friendship ties. Generally, these studies indicate that youth who have warm and intimate sibling relationships also have close friendships and are socially competent with peers (Brody & Murry, 2001; Updegraff et al., 2002).

Recent research has attempted to identify the processes underlying this link. It has been suggested, for example, that youth learn specific social skills within their sibling relationships, such as how to share intimate feelings and information with others, how to be emotionally empathetic, and how to understand another's feelings (Howe et al., 2001). Children who have warm and close sibling ties show a greater capacity for empathy and self-disclosure (Howe et al., 2001) and are more sensitive to others' feelings than youth who have less positive sibling relations (Tucker et al., 1999). In addition, in a European sample of adolescents, satisfaction with one's sibling relationship was linked with intimacy with a best friend and strong attachment and trust with one's peers (Oliva & Arranz, 2005). Because all of these studies were correlational, drawing causal inferences is not possible. But the results as a whole are consistent with the notion that youth learn critical socioemotional skills related to emotional intimacy and empathy in the context of their sibling relationships, and that these skills are then used to foster positive, close relations with others.

Other research also has examined whether children learn prosocial and regulatory skills within the context of positive sibling relationships. Studying a sample of aggressive children, Stormshak and colleagues found that the warmth and support children received from siblings were correlated with children's emotional control and prosocial behavior displayed at school (including the inclination to help others and be friendly) (Stormshak, Bellanti, Bierman, et al., 1996). Similar results were found in a longitudinal study of African American sibling pairs, in which results from structural equation modeling indicated that older siblings' competence contributed to younger siblings' self-regulation, which in turn was related to younger siblings' social competence one year later (Brody, Kim, Murry, & Brown, 2003). These findings suggest that younger siblings learn emotional and behavioral control from a competent older sibling, in the form of self-regulatory behaviors, that then help with their friendships. Using the same sample and a similar analytic strategy, these researchers also reported that younger siblings' social and academic competence was linked to the earlier absence of sibling conflict (Brody & Murry, 2001). In this case, the absence of conflict may best allow siblings to interact fully and positively so that the prosocial behavior can be best observed. Frequent and intimate discussions with siblings also have been linked with adolescents' perceived self-competence at school and with peers (Tucker & Winzeler, 2007). It may be that such discussions with siblings provide adolescents a context for learning communication skills, norms for behavior, and how to be emotionally intimate.

Collectively, this literature suggests that essential social skills and prosocial behaviors are learned and practiced with siblings, and that these skills then help youth develop positive relations with friends and peers outside the family (Brody, 2004). Such skills include sharing, cooperating, self-regulation (anger management, conflict negotiation), and increased social understanding, perspective taking, and effective communication.

The Benefits of Successful Resolution of Sibling Conflict

During early childhood, sibling conflict is known to foster social and cognitive development by providing opportunities for children to learn how to discuss and defend their self-interests and negotiate resolutions to disagreements (Dunn & Slomkowski, 1992). However, until recently, not much was known about how sibling conflict might contribute to development in adolescence. It has been suggested that sibling conflict plays a role in adolescents' identity formation, with sibling disputes helping to clarify a sense of self-identity or defining who one is (Raffaelli, 1992). Sibling conflict during adolescence also likely serves to reinforce behavioral rules and norms, as well as teach about the limits of acceptable behavior and personal boundaries, such as defining how much provocation will be tolerated by another (Raffaeli, 1992). Adolescents also can learn important interpersonal skills from successful resolution of sibling conflicts, such as compromise, assertiveness, and peaceful negotiation. In addition, youth can learn the crucial skill of resuming interactions after a dispute has occurred, which likely has ramifications for future close personal relationships over the life course (Katz, Kramer, & Gottman, 1992).

The sibling relationship itself is also likely to benefit from successful resolution of disputes. For example, after a conflict with a brother or sister, individuals report a greater sense of trust, acceptance, and openness with their sibling (Bedford, Volling, & Avioli, 2000). Others report that the conflict with their sibling

was liberating, realizing that it was acceptable to disagree and to continue their relationship despite their disagreements. A study of school-age children found that children's sense of self and their social understanding improved as a result of a sibling conflict (McGuire, Manke, Eftekhari, & Dunn, 2000). Sibling conflict also has been shown to provide children opportunities for persuasive negotiation and to provoke adolescents to state and defend their differing perspectives (Ross, Ross, Stein, & Trabasso, 2006). In addition, the conflictual nature of children's sibling interactions can provide opportunities to learn affect regulation and behavioral control (Stormshak et al., 1996). In all, sibling conflict appears to provide unique opportunities for the development of many social skills that are beneficial to adolescents' other social bonds.

A word of caution is in order lest the preceding findings be interpreted as sibling conflict is optimal for development. Certainly, while some level of conflict between siblings is normative (Dunn & Kendrick, 1982; Dunn & Slomkowski, 1992), prolonged conflict, severe physical aggression, and continued hostile and caustic interactions between siblings is not normative and has a deleterious impact on children's and adolescents' psychological health and well-being (Stocker, Burwell, & Briggs, 2002). It is in only cases in which disputes can be successfully negotiated and resolved that the learning benefits of sibling conflict can be realized.

Sibling Influences on Early Adult Romantic Relationships

A number of researchers have proposed that the social skills learned in sibling relationships can be important for adolescents' romantic relationships (Conger et al., 2001; Rauer & Volling, 2007; Reese-Weber & Kahn, 2005). Because both sibling and romantic relationships share the same intensity, intimacy, and egalitarian structure, the sibling relationship may serve as an essential model for adolescents when they start to initiate romantic

relationships. For example, the social skills discussed immediately above would likely relate to success or failure in one's early adult romantic relationships.

Guided by an observational learning hypothesis, Conger and colleagues (2000) tested a *sibling socialization continuity hypothesis*, or whether sibling interaction patterns observed during middle adolescence are predictive of later interactions with a romantic partner during early adulthood. Their results indicated that there was no relation between sibling affective behaviors during middle adolescence and behaviors with a romantic partner during early adulthood. However, in studying whether sibling conflict resolution patterns were indicative of concurrent conflict resolution patterns with a romantic partner, Reese-Weber and Kahn (2005) found that both positive (e.g., compromise) and negative (e.g., verbal attack, blaming) conflict resolution behaviors employed with siblings were also used with a current romantic partner. These results, which are consistent with social learning theory (Bandura, 1989), suggest that adolescents observe how conflict is handled in their interactions with siblings and reproduce these strategies in their relationships with others. In this case, because links were found for both positive as well as negative resolution strategies, youth who successfully resolve their sibling conflicts appear more able to also competently resolve conflict with romantic partners, whereas those who are unable to resolve sibling conflict appear to have more difficulty in resolving disagreements in their romantic relationships.

In an interesting study of whether sibling jealousy plays a role in young adults' romantic relationships, it was found that experiencing distress in one's romantic relationships was indeed related to retrospective reports of sibling jealousy in childhood (Rauer & Volling, 2007). Here, a preoccupied (insecure) attachment style with parents may spill over to one's later relationships, with a negative internal working model of relationships contributing

to conflict, ambivalence, and jealousy in one's later adult romantic ties. These findings underscore the notion that young adult interpersonal relationships often have familial origins or specifically, that there is consistency from earlier sibling relationships to later adult social bonds.

Sibling Influences on Adolescent Problem Behaviors

Delinquency and Antisocial Behavior

The literature on adolescent delinquent behavior has consistently emphasized the involvement of siblings in the development of antisocial behavior. Patterson (1984, 1986) cogently described how early aggressive exchanges between siblings, accompanied by ineffective parenting, reinforces the use of hostile interpersonal tactics that result in escalating cycles of attacks and counterattacks with siblings. Left unchecked, such exchanges serve as a training ground for developing a predominately aggressive, coercive interaction style (Patterson et al., 1984). Children with such aggressive interpersonal tendencies are most typically rejected by their more socially skilled peers, which leaves them vulnerable to developing associations with deviant peers, or those who are similarly aggressive and unskilled (Snyder & Stoolmiller, 2002). Indeed, many studies have shown that adolescents whose sibling relationships are characterized by elevated levels of aggression and conflict display high levels of antisocial behavior with peers (Bank, Burraston, & Snyder, 2004; Conger, Conger, & Scaramella, 1997; Criss & Shaw, 2005).

While earlier research on childhood aggression has focused on young children's hostile interactions with siblings and peers, more recent research has examined how continued exposure to a deviant model in the form of an older sibling is a significant risk factor in the development of antisocial behavior during adolescence (Shortt, Capaldi, Dishion, et al., 2003; Slomkowski, Rende, Conger, et al., 2001; Williams, Conger, & Blozis, 2007). This area primarily has utilized a social modeling

perspective and focused on how propensity for delinquency is promoted through direct interaction with and modeling of a deviant sibling. For example, Slomkowski and colleagues (2001) found that the frequency of hostile interactions with an older delinquent sibling was directly related to the development of delinquency in an adolescent younger sibling, among both boys and girls (e.g., delinquency was operationalized as serious legal offenses, such as damaging property, breaking and entering, and physical assault). Similarly, extensive involvement with a coercive sibling at 6 years of age has been shown to predict highly antisocial behavior 10 years later (Compton, Snyder, Schrepferman, et al., 2003). In addition, adolescents who strongly identify with a deviant older brother are more negatively affected by exposure to their antisocial sibling than those who do not have as intense an identification (Ardelt & Day, 2002). Thus, intensive interactions with a coercive sibling can have powerful long-term effects on one's tendency to engage in delinquent behavior.

There is also evidence that a warm and close relationship with a delinquent older sibling is associated with a younger sibling's antisocial behavior. Criss and Shaw (2005) found this effect for both brother–brother and sister–sister dyads, and Slomkowski and colleagues (2001) found this effect for brothers only. In the latter study, warmth and closeness with a delinquent older brother was predictive of younger brother's delinquency 4 years later. It may be that receptivity to antisocial behavior and the modeling of deviant acts is more likely when siblings are close. It is also possible that brothers engage in deviant acts together, and thus a warm and close relationship reflects a "partners in crime" scenario (Slomkowski et al., 2001).

Further research in this area has examined how involvement with and exposure to an older sibling's deviant peers may exacerbate a younger sibling's early initiation into and progression toward antisocial behavior (Snyder, Bank, & Burraston, 2005). For example, sharing the same friendship network with a delinquent older sibling strongly predicts younger siblings' engagement in delinquent behavior, even after controlling for older siblings' delinquency (Rowe & Gulley, 1992). There appears to be a synergistic effect of being exposed to both a deviant older sibling and his (or her) older peer group, which can escalate the younger sibling's involvement in deviant activities.

Along these lines, Snyder and colleagues (2005) conducted a unique study that examined sibling influence on youth's involvement in delinquent activities across development. They found that sibling conflict during early childhood predicted older brothers' association with deviant peers during middle adolescence, which in turn was linked to younger brothers' coparticipation in deviant activities with the older brother at age 16. These findings point to a sequential progression of deviance training by both the older brother and his delinquent peers, with both sets of risks synergistically increasing a younger sibling's likelihood for delinquency.

As a whole, this research strongly points to the socialization role of siblings in the development of antisocial behavior. Specifically, sibling conflict during childhood provides the context for observing, developing, and practicing aggressive and antisocial behaviors, which generalize to interactions with others outside the family. Such behavior leads to association with deviant peers, which further reinforces coercive interaction styles. As delinquent acts escalate in seriousness, as is often the case during adolescence, the younger siblings of delinquent older siblings appear to be vulnerable not only to influences of the older sibling, but also to influences of the older siblings' deviant friends.

Sibling Influences on Drug and Alcohol

Use   Similar to studies of adolescent delinquent and antisocial behavior, there is a large literature that shows a high concordance between siblings' substance use (Ary, Tildesley, Hops,

& Andrews, 1993; Conger & Ruteer, 1996; Duncan, Duncan, & Hops, 1996). Unlike the literature on sibling effects on youth's antisocial behavior, though, slightly different processes have been used to explain sibling similarity in alcohol and drug use. For example, there is some evidence that siblings are equally susceptible to alcohol use during adolescence as a result of witnessing their parents' alcohol use or abuse (Ary et al., 1993; Duncan et al., 1996; McGue, Sharma, & Benson, 1996). Studies of twins and adopted siblings also have established sibling similarity in smoking and drinking during adolescence while controlling for genetic relatedness (McGue et al., 1996; Rende, Slomkowski, Lloyd-Richardson, & Niaura, 2005; Slomkowski, Rende, Novak, et al., 2005).

Siblings' similarity in substance use also has been conceptualized within a problem behavior framework, which postulates that proneness to problem behaviors is a function of ineffective social controls against such behaviors, particularly weak parental controls (Jessor & Jessor, 1977). According to this approach, siblings would be equally likely to use or not use substances because they perceive ineffective sanctions against such behavior. This has been substantiated by findings showing that sibling similarity in substance use is related to parents' permissive alcohol use norms (Brody, Flor, Hollett-Wright, & McCoy, 1998) and parents' actual alcohol use (Duncan et al., 1996) and abuse (Conger & Ruteer, 1996). In this case, high parental use and accepting attitudes about alcohol are related to the drinking behavior of both siblings.

There is also some suggestion that adolescent substance use can result from conflicted sibling relations, with substances used as a means to cope with or find solace from the high arousal generated by interacting with a hostile sibling. At least two studies have found that sibling conflict is associated with a younger sibling's use of substances as a coping mechanism (Hall, Henggeler, Ferreira, & East, 1992; Windle, 2000). The study by Windle (2000) also found evidence implicating possible role-modeling effects, or younger siblings imitating older siblings drinking when under stressful circumstances.

Several studies also have explored siblings as socialization agents who have direct influences on adolescents' substance and alcohol use. These studies have generally focused on older sibling use accelerating that of younger siblings. For example, it is known that adolescent sibling pairs follow a similar developmental trajectory of substance use across time (Duncan et al., 1996). But increases in an older sibling's substance use have been shown to significantly escalate a younger sibling's rate of use 3 years later (Duncan et al., 1996). In this case, older siblings may be encouraging and reinforcing a younger sibling's use by providing the substances or by using substances together. Similar results were reported by Khoo and Muthen (2000), who studied the heavy drinking patterns of over 1,600 adolescent sibling pairs from ages 18 to 32 from the National Longitudinal Survey of Youth. Results indicated that heavy drinking tended to peak around 21 years of age for both siblings, but younger siblings initiated heavy drinking earlier than older siblings, and younger siblings' rate of heavy drinking during early adulthood tended to increase faster than that of older siblings. Thus, the trajectory of an older sibling's adolescent alcohol use (age of onset, rate, linear incline) may accelerate the trajectory of younger siblings' alcohol use.

Further investigations of sibling socialization effects on adolescent substance use have shown that sibling contact and mutual friendships increase siblings' similarity of adolescent smoking and drinking (Rende et al., 2005). The predictive value of mutual contact is consistent with the notion that siblings who choose to spend time together likely share a proclivity for deviant activities, such as smoking and drinking. Shared friendships also likely underlie sibling similarity in drug use due to social connectedness, or to deviant friends exerting like pressure for both siblings to use substances (Slomkowski et al., 2005).

Sibling Influences on Sexual Activity and Pregnancy During Adolescence

Numerous studies have documented that adolescentswho have sexually active older siblings are likely to have sex early (Haurin & Mott, 1990; Rodgers, Rowe, & Harris, 1992; Widmer, 1997). As in studies of delinquency and drug use, research on adolescent sexuality has pointed to two primary processes that explain sibling similarity in sexual behavior: sibling socialization and permissive family norms, or the lack of parental control that discourages norm-breaking and deviance (Crockett, Bingham, Chopak & Vicary, 1996; Haurin & Mott, 1990). When examining sibling similarity in adolescent sexual behavior, though, research to date has focused almost exclusively on sibling socialization effects as explanatory variables. Very little research has examined a link between siblings' similarity in sexual behavior attributable to exposure to common family norms. However, a few studies have examined an older sibling's sexual behavior and family or parenting processes simultaneously as predictors of youth's sexual onset. Results of these studies generally indicate that both an older sibling's age at first sex and parent's are significant predictors of adolescent sexual activity (Crockett et al., 1996; Whitbeck, Yoder, Hoyt & Conger, 1999; Widmer, 1997).

Research testing a sibling socialization hypothesis has examined effects related to sibling relationship factors, such as the closeness of the relationship (East & Shi, 1997), the dominance of the older sibling (East & Khoo, 2005), sibling pressure to be sexually active (East, Khoo & Reyes, 2006), the amount of time siblings spend together (Whiteman et al., 2007b), and whether siblings share a friendship network (East, Felice, & Morgan, 1993). In all of these studies, a sibling socialization hypothesis was supported, such that younger siblings are likely to engage in early sexual activity if they are close with, spend a lot of time with, and share similar friends with an older sibling who is sexually active. In the latter case, of siblings sharing the same friendship network, older siblings might be actively accelerating the sexual experiences of their younger siblings by exposing them to an older peer group, one that is likely to be sexually experienced or function as potential sexual partners for the younger adolescent (East & Shi, 1997). This type of facilitative process has been examined in several studies (Rodgers & Rowe, 1988; Rodgers et al., 1992; Rowe, Rodgers, Meseck-Bushey & St. John, 1989). An additional study that used a socialization framework also found that older siblings influence their younger siblings' sexual behavior primarily through altering their attitudes about when it is best to start having sexual relations (Widmer, 1997).

Investigating whether older siblings' socialization role might be harnessed for discussions about safe sexual practices, one study found that discussions about safe sex with an older, early adult sibling was associated with more positive attitudes toward safe sexual practices among adolescent younger siblings (Kowal & Blinn-Pike, 2004). In this study, girls who had older sisters were more likely to talk about these issues than either girls who had only older brothers or boys who had older sisters. Sibling discussions about sex were also more likely to occur when adolescents reported a positive relationship with their older sibling.

There is also strong evidence that adolescent girls who have a teenage childbearing older sister are at very elevated risk of adolescent childbearing themselves (Cox, Emans, & Bithoney, 1993; East, 1996a; East & Felice, 1992). The younger sisters of childbearing adolescents have also been shown to start having sex earlier (East, 1996b; East et al., 1993) and are five times more likely to become pregnant by age 18 than other girls their same race and socioeconomic status (East & Jacobson, 2001; East, Reyes, & Horn, 2007). Moreover, as the number of sisters who are teenage parents increases, so does younger siblings' (both younger brothers' and younger sisters') risk of involvement in teenage pregnancy (East & Kiernan, 2001).

This cycle of repeated early pregnancy and childbearing across siblings is likely due to two primary sets of factors: the risks that derive from siblings' shared background and the effects that stem from the older sister's pregnancy and birth on the teen's family and siblings. In addition, both of these factors may operate concurrently, thereby intensifying their effects. Regarding the former effect, of shared within-family risk factors, because siblings receive similar parenting, are exposed to the same neighborhood and community norms, and share a common biological predisposition for early puberty (which is linked to teenage pregnancy; Newcomer & Udry, 1984), they are equally likely to become or not become pregnant as adolescents.

Regarding the latter effect, or the impact of an older sister's pregnancy and birth on families and siblings, there is evidence that family stress levels increase and mothers' diligent parenting declines as a result of an older sister's early childbearing (East, 1999; East & Jacobson, 2003). Specifically, mothers are less strict, less communicative, and less watchful of their adolescent children after an older daughter has a child (East, 1999). In addition, within teenage childbearing families, mothers' harsh and punitive treatment toward their children increases in line with increases in family stress and the time mothers spend looking after their older daughter's child (East & Jacobson, 2003). Mothers' punitive treatment of their children within such families has also been associated with adolescents' substance use and sexual behavior. One could easily imagine a scenario wherein a teenager's childbearing creates a host of stressful circumstances that cause family strain and compromised parenting, which in turn contributes to the problem behavior of the other children within the household. This type of family-level process may precipitate repeated early pregnancies across children within the family and could explain the disproportionately high teenage birth rates among the sisters of childbearing teens (East, 1998; East & Jacobson, 2001, 2003).

Taken together, this research clearly demonstrates that older siblings have the potential to set standards of conduct and norms concerning sexual and childbearing behavior. Older siblings' sexual activity can exert a strong influence on when younger siblings start to engage in sexual relations, and an older sister's teenage pregnancy and birth can have profound effects on younger siblings, both by presenting a role model of early parenting and by increasing family stress and diminishing the quality of parents' parenting.

WHY SIBLINGS WITHIN THE SAME FAMILY ARE SO DIFFERENT

Developmental psychologists have long known that parents treat different children within a family differently (Baumrind, 1980). Much research across multiple fields shows that parents expend different levels of investment, in the form of time, attention, money, and emotional investment, on their individual children (Draper & Harpending, 1987; Foster, 2002; Kalil & DeLeire, 2004; Yeung, Linver, & Brooks-Gunn, 2002). Such differential investments are thought to account for disparities in siblings' achievement, adjustment, and life outcomes (Anderson, Hetherington, Reiss, & Howe, 1994; Blake, 1987; Conley et al., 2007).

Differential parental treatment of siblings constitutes an important component of siblings' nonshared environment within the family (Daniels & Plomin, 1985; Plomin & Daniels, 1987). Indeed, it is important to understand how siblings' experiences within the family differ if we are to clarify the environmental influences that make siblings within the same family so different (Dunn & Plomin, 1990; Hetherington, Reiss, & Plomin, 1994). In addition to being critical to the study of larger family dynamics, the study of differential parenting is useful for understanding the patterns of parental investment *across* children, and how such patterns matter for siblings' unique adjustment and developmental course (Bradley & Corwyn, 2004).

Almost all studies conducted to date have indicated that parents do in fact show different levels of warmth and negativity to their various children (Atzaba-Poria & Pike, 2008; Feinberg & Hetherington, 2001; Shanahan, McHale, Crouter & Osgood, 2007; Shanahan, McHale, Osgood & Crouter, 2007). Longitudinal studies indicate that differential parenting starts in infancy and continues all the way through early adulthood (Shanahan, McHale, Crouter et al., 2007; Shanahan, McHale, Osgood et al., 2007; Volling & Elins, 1998; Volling, McElwain & Miller, 2002). Recent studies have examined how parents' differential treatment of their various children shifts throughout development, such that one child receives more or less of the available resources at different points in development. For example, firstborns have been shown to experience warmer relationships with their mothers compared to second-borns throughout middle childhood and adolescence (Shanahan, McHale, Crouter, et al., 2007). Using this same sample, it was further found that firstborns experience elevated levels of conflict with parents between middle childhood and middle adolescence, whereas second-borns experience high conflict with parents in the later part of childhood (Shanahan, McHale, Osgood, et al., 2007). Had a within-family comparison approach not been used, these patterns pertaining to sibling-specific experiences would not have emerged.

It is important to recognize, though, that parents' differential treatment not only *contributes* to differences in sibling outcomes, but also likely *results from* siblings' unique physical and behavioral traits and aptitudes. Consistent evidence from the family economics field shows that families distribute available resources based on the unique qualities and potential of each individual child (Behrman, 1997; Foster, 2002; Mayer, 1997). In addition, several studies by developmental psychologists show that individual differences in sibling adjustment and intelligence play a key role in eliciting different responses from parents and others

outside the family (Feinberg & Hetherington, 2000; Plomin & Daniels, 1987; Scarr & McCartney, 1983). In all, this area of sibling research has provided a welcome departure from the study of single parent–child relationships *between* families and allowed for comparisons of different parent–child dyads *within* families and the importance these family subsystems have for individuals' development (Boyle, Jenkins, Georgiades, et al., 2004; East & Jacobson, 2000; Feinberg & Hetherington, 2001).

The study of differential treatment as it pertains to sibling relationships has had three primary foci. First, it has examined the implications of parents' differential treatment for youth's sibling relationships. Second, it has sought to determine the impact of differential parenting on siblings' adjustment. Third, there has been interest in the area of sibling deidentification, or the process of actively differentiating oneself from one's sibling so as to increase one's uniqueness and individuality. Each of these areas is reviewed here.

Parents' Differential Treatment and Sibling Relationships

Rooted in the writings of neo-Freudian Arthur Adler (1927) and the later experimental work on social comparison theory (Suls & Miller, 1977), several studies have documented that parental favoritism and preference gives rise to sibling rivalry and jealousy (Rauer & Volling, 2007; Volling et al., 2002). Indeed, much evidence has accumulated showing that if parents show more affection, attention, or warmth in their relationship with one sibling than the other, the siblings are likely to get along less well than the siblings in families in which parents and siblings do not describe such differential treatment (Brody & Stoneman, 1994; Feinberg & Hetherington, 2001; McHale, Updegraff, Jackson-Newsom, et al., 2000).

Brody and colleagues (1992a), for example, found that the degree of fathers' differential negative behavior predicted low rates of positive relational behaviors among both older and

younger siblings (such as smiling, laughing, praising). Similarly, high levels of negative relational behavior by siblings (threats, insults, and sarcasm) were most characteristic of sibling dyads in families where differential paternal treatment was high. Differential paternal behavior accounted for more unique variance in sibling relationship quality than did mothers' differential behavior. The authors proposed that the greater impact of differential paternal behavior on negative sibling interactions may arise from the relative scarcity of fathers' attention compared to that of mothers.

Adolescent interpretations of their parents' differential treatment are also crucial for its impact on the sibling relationship. When children attribute such differential treatment as parents' lesser concern or love, the sibling relationship is likely to be less positive (Kowal & Kramer, 1997). Similarly, when adolescents perceive their parents' differential treatment as unfair and unjust, they are more likely to feel jealous and rivlarous of their sibling (McHale et al., 2000). Sibling jealousy is highest when youth perceive their disfavored status as unfair. However, when adolescents perceive their parents' differential treatment as equitable and fair, there are no apparent consequences for the sibling relationship (Kowal, Kramer, Krull, & Crick, 2002).

Parents' Differential Treatment and Adolescents' Adjustment

Consistent evidence across numerous studies has shown that parents' differential negative treatment is related to adjustment difficulties of the slighted child (Brody, Stoneman, & McCoy, 1992b; McGuire, Dunn, & Plomin, 1995; Richmond, Stocker, & Rienks, 2005; Volling & Elins, 1998). Low self-esteem (McHale et al., 2000), low self-worth (Shebloski, Conger, & Widaman, 2005), anxiety (Sheehan & Noller, 2002), externalizing behaviors, and problem behaviors (McGuire et al., 1995; Stocker, 1993, 1995; Tamrouti-Makkink, Dubas, Gerris, &

van Aken, 2004) have all been associated with differential negative parenting, that is, when parents are more harsh, critical, or punitive toward one child than another.

Because of the likely possibility that a child's poor functioning could precipitate differentially negative treatment, longitudinal studies are necessary to tease apart this association. At least four studies have used longitudinal analyses and concluded that changing patterns of parents' differential treatment are linked to across-time fluctuations in adolescents' adjustment (McGuire et al., 1995; McHale et al., 2000; Richmond et al., 2005; Shebloski et al., 2005). For example, as siblings became less favored by parents over time, their externalizing problems increase (Richmond et al., 2005). Declines in adolescents' self-worth were also found to be related to across-time changes in perceptions of parents' partiality (Shebloski et al., 2005). This effect was found for later born siblings only, though, with younger and less emotionally mature youth possibly more reactive to changes in parents' favoritism than older age youth (Shebloski et al., 2005).

Recently, investigators have attempted to study *the degree* of differences in mothers' and, separately, fathers' differential parenting and the implications for youth's adjustment (Boyle et al., 2004; Feinberg & Hetherington, 2001). Using data from three national longitudinal studies, Boyle and colleagues (2004) tested the hypothesis that highly incongruent levels of mothers' positive behaviors (praising) and negative behaviors (spanking) would be related to increased levels of children's emotional–behavioral problems after controlling for average levels of mothers' positive and negative behaviors. Their results were consistent with expectations, such that high levels of incongruency in maternal behaviors were associated with children's poor adjustment over and above the direct effect of mothers' parenting. This effect was stronger for negative maternal behaviors, such as spanking and disciplining, than positive maternal behaviors.

Similarly, other results indicate that the magnitude of differences in parents' differential parenting (in warmth/support and conflict/negativity) has a unique impact on youth's adjustment over and above the effect of the level of parenting directed toward each child separately (Feinberg & Hetherington, 2001). Like the Boyle et al. study cited above, Feinberg and Hetherington (2001) found that differential treatment was more strongly linked to poor youth adjustment when overall parenting was low in warmth and high in negativity. The relation between parents' differential treatment and adolescent adjustment was weak among youth whose parents treated them well, even when their siblings received warmer and more positive treatment. Thus, when one is exposed to both high levels of parental negativity, as well as *differentially higher* levels of negativity than one's siblings, one is more likely to exhibit poorer adjustment than when experiencing comparably high parental negativity without experiencing differentially more negative treatment.

Finally, some research has shown that siblings' perceptions of their parents' differential treatment is more consistently related to their well-being than is the actual level of differential parenting (Kowal et al., 2002). This suggests that the negative effects of parents' inequitable treatment are mediated through children's subjective appraisal of the situation, thus differential treatment that is perceived as fair (e.g., when a sibling who is having problems in school receives more parental assistance with homework than one who is doing well, or when a sibling who is older is granted more freedom) has a less deleterious impact on youth's adjustment than differential treatment that is seen as unjustified (Kowal et al., 2002)

Sibling Differentiation

There are numerous theories that posit that siblings develop specific roles and personality characteristics to purposively distinguish themselves from each another. These include role differentiation theory (Bossard & Boll, 1956), sibling deidentification theory (Schacter, 1982; Schacter, Shore, Feldman-Rotman, et al., 1976), and, in the genetics literature, contrast effects theory (Carey, 1986). Indeed, active sibling differentiation is thought to have originated in part as a survival function, whereby each child's individuality is maximized so as to increase the likelihood of child survival under different environmental conditions (Draper & Harpending, 1987; Lerner, 1984; Scarr & Grajek, 1982). More recently, however, sibling differentiation has been discussed as a defense mechanism to reduce social comparisons, and therefore the potential of sibling rivalry and competition (Feinberg, McHale, Crouter, & Cumsille, 2003). That is, sibling deidentification may serve a protective function against social comparisons, and may be motivated by siblings wishing to establish their own unique role and identity within the family (Brody & Stoneman, 1994; Whiteman et al., 2007a).

Although it is a fascinating concept, finding evidence that active sibling differentiation has occurred is difficult in part because the process is not always a conscious one. A few studies have tested this notion by proposing that sibling pairs most similar in age and gender would be most likely to differentiate (Schacter, 1982; Whiteman et al., 2007a). Schacter (1982), in fact, was able to demonstrate that consecutive-born sibling pairs were more different from each other than "jump pairs" (firstborns and third-borns), and that same-sex sibling dyads were more different from each other than opposite-sex dyads. However, Whiteman and colleagues (2007a) were unable to corroborate these findings.

In trying to understand the process of sibling deidentification, researchers have asked adolescents if they try to be like or different from their sibling in areas of athletics, academics, and conduct. Findings indicate that less than one-third of older siblings purposively try to distinguish themselves from their younger sibling, but that 40% of younger

siblings report purposely differentiating themselves from their older sibling (Whiteman & Christiansen, 2008; Whiteman et al., 2007a). In supporting the notion that active differentiation is motivated to reduce sibling rivalry (or the potential for rivalry), those who deidentified with their sibling reported lower sibling hostility than youth who tried to be the same as their older sibling (Whiteman et al., 2007a). This effect was particularly strong for same-sex sibling pairs, such that girl–girl and boy–boy sibling pairs who differentiated from each other reported especially low levels of sibling negativity (Whiteman & Christiansen, 2008). Feinberg and colleagues (2003) also found that siblings who became more different over time in their relationships with their parents became closer to one another across a 2-year period.

Other research has shown that sibling deidentification tends to become more pronounced as individuals reach adolescence. Specifically, older adolescent-age siblings become more different from their younger siblings over time, in terms of sex-typed qualities (McHale, Updegraff, Helms-Erikson, et al., 2001). The authors speculated that sibling deidentification may be more likely to occur during adolescence, when youth are striving to establish their own unique identity.

In general, the research reviewed in this section highlights how nonshared environmental forces—such as parents' differential treatment and youth's active sibling differentiation—operate to reduce sibling similarity and accentuate sibling differences. These within-family processes are thought to be triggered by siblings' own unique individual traits, and have ramifications for the sibling relationship and adolescents' adjustment. Given that heterogeneity surely exists across siblings, with all siblings varying in their endowments, motivations, and physical traits (Scarr & Grajek, 1982), how families, parents, and the siblings themselves react to these differences is crucial for understanding the developmental course of sibling relationships. The work within this area also serves to highlight how sibling experiences are embedded within a larger family system of relationships and are best understood within that larger context (McHale et al., 2006).

SIBLINGS FROM DIVERSE FAMILY, CULTURAL, AND SOCIOECONOMIC BACKGROUNDS

The large scope of this chapter has precluded specific attention to the different dynamics of sibling relationships among adolescents from diverse family, cultural, and socioeconomic backgrounds. This is largely a function of the literature on siblings, which is comprised predominantly of studies on full biological siblings from White, middle-class families living in the United States. The knowledge of sibling relationships in other cultures and different socioeconomic backgrounds is sorely lacking. Some notable exceptions along these lines include the study of sibling interactions and caregiving within a cross-cultural perspective (Maynard, 2004; Rabain-Jamin, Maynard, & Greenfield, 2003; Zukow, 1989, Zukow-Goldring, 2002) and on sibling influences in low-income families (Criss & Shaw, 2005). This chapter also did not review the literature pertaining to the broad range of sibling relationships, such as the nuances that differentiate step-siblings, half-siblings, and adopted siblings. Recently, work within this area has highlighted the significance of the family context for shaping the nature of these sibling ties and for creating similarities or differences in siblings' adjustment (Deater-Deckard, Dunn, & Lussier, 2002; Kim, Hetherington, & Reiss, 1999; O'Connor, Dunn, Jenkins, et al., 2001).

Only recently have researchers begun to focus on Mexican American siblings (McHale, Updegraff, Shanahan, et al., 2005; Updegraff, McHale, Whiteman, et al., 2005) and siblings within African American families (Brody, Kim, Murry & Brown, 2003, 2004; Brody & Murry, 2001; McHale, Whiteman, Kim, & Crouter, 2007). The former work on Latino siblings suggests that the strong family ties characteristic to Latino families extend to adolescents' sibling bonds. Specifically,

Mexican American siblings describe themselves as more loyal and supportive of one another than non-Latino youth, and Latino adolescents place a greater value on sibling assistance, support, and future obligation than non-Latino youth (Fuligni, Tseng & Lam, 1999). Latino adolescents' familistic values (or sense of family obligations) also have been associated with more harmonious and involved sibling ties (Updegraff et al., 2005). Other research has pointed to a greater disparity of restrictions placed on daughters versus sons within Mexican American families than within other families, with such gender-specific differential restrictions related to differences in boys' and girls' adjustment (McHale, Updegraff, Shanahan, et al., 2005).

Other work has focused on sibling socialization processes within rural African American families. This research has shown that older siblings' competence is linked to younger siblings' competence by way of involved and supportive parenting (Brody et al., 2003; Brody & Murry, 2001). Another study sought to simply describe the sibling relationships of adolescents in two-parent, middle-class African American families. Results indicated the presence of positive, negative, and distant relationship types, with each type correlated in important ways to youth's ethnic identity, mothers' parenting, and the family's experiences of discrimination (McHale et al., 2005). In all, these studies highlight how sociocultural experiences are integral to the study of sibling ties, and they broaden the field in ways that have meaningful implications for today's adolescents and families. Given the changing demography of the American population, and given cultural differences in expectations governing family relationships, more research on sibling relationships in non-White populations is sorely needed.

CONCLUSIONS

Sibling relationships play a critical and formative role in human development. Indeed, sibling ties serve as a model for other social relationships,

with essential social skills learned and practiced with siblings. However, the functional significance of the sibling bond changes across development. From childhood to adolescence, sibling relations become less intense, less close and more egalitarian. Although the nature of sibling ties changes in important ways throughout the life course, youth's overall emotional attachments with siblings remain strong, connected, and supportive. Indeed, support from a sibling can have far-reaching importance to one's well-being, with close and supportive sibling ties able to mitigate the negative effects associated with life stressors and deficiencies in other social bonds. However, adolescents' sibling relationships also make significant contributions to many health-risk behaviors, such that the propensity for delinquency, substance use, and adolescent sexual activity and pregnancy is promoted through direct interaction with and modeling of a high-risk sibling.

Collectively, the research reviewed in this chapter adds to theoretical models and extant research that emphasize the role of the individual, the family, and parenting processes in shaping youth's sibling ties. Indeed, the study of sibling relationships allows for a clearer understanding of family processes and of the environmental influences that make individuals unique. For example, within-family comparisons of parents' treatment and expectations of their various children reveal how parents differentially invest in siblings, and how these differences channel siblings along quite disparate pathways. Yet, we know that parents' differential treatment of siblings can shift across development. In addition, family dynamics are constantly changing, as the family unit and family members age and develop. Certainly, it is important to study the sibling relationship within this type of developmental systems framework. This broader perspective allows for a more comprehensive understanding of the nature and function of adolescents' sibling ties, as well as the mechanisms through which siblings directly and indirectly influence one another's lives and development.

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