## Sibling Relationships

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The majority of individuals (around 80% in Europe and the United States) grow up with siblings, and for many, their relationships with their brothers and sisters are the longest lasting in their lives. While siblings have had a key place in folk stories, legends, history, and literature all over the world, the scientific study of the psychology and relationships of brothers and sisters is relatively recent. Clinicians and family theorists have since early in the twentieth century argued that siblings play an important role in family relationships, and influence individual adjustment. However, with the notable exception of the classic studies of siblings conducted by Koch in the 1950s and 1960s (1954, 1960), systematic research on siblings was relatively rare until the 1980s. In the last two decades, research interest in siblings has broadened and increased greatly; it has centered chiefly on studies of childhood and adolescence (Boer & Dunn, 1990; Brody, 1996; Hetherington, Reiss, & Plomin, 1994; for a useful review of research on adult siblings see Cicirelli, 1996). Studies of siblings in childhood have focused on three general domains which we consider here: first, the nature of sibling relationships and why they differ; second, their developmental influence and the illuminating perspective they provide on key developmental issues; and third, the challenge they provide to our understanding of how families influence individual development - why siblings differ notably in personality and adjustment even though they grow up within the same family.

## The Nature of Sibling Relationships

#### Characteristics of sibling relationships

Three characteristics of sibling relationships stand out, from the findings of systematic research. The first is that sibling relationships are from infancy through adolescence

notable for their emotional power and for the uninhibited expression of these emotions. One observational study reported that around 20% of interactions between siblings of the preschool and toddler age group were characterized by intense negative emotions (Dunn, Creps, & Brown, 1996) – a far higher percentage than was found for children's interactions with their parents or friends; intense positive emotions expressed in sibling interaction were also notably high. For many siblings, the relationship is one of mixed emotional color – both positive and hostile emotions are freely expressed (Dunn, 1993).

A second characteristic of siblings' relationships is their intimacy. Most children spend more time in interaction with siblings than with parents (Larson & Richards, 1994; McHale & Crouter, 1996). They know each other extremely well, and this intimacy means the relationship can be a source of support or of conflict. Teasing, for example, depends on knowing an individual well enough to be able to gauge what will upset and annoy; teasing by siblings is observed early in the second year of life, and increases rapidly over the next months, showing considerable sophistication, thus reflecting considerable understanding of the other child (Dunn, 1988). The familiarity of siblings, coupled with the emotional power of the relationship, means that the potential for siblings' influence on one another is high.

A third characteristic of the relationship is the great range of individual differences which is evident from early infancy through to adolescence, in both observational and interview studies. Some siblings show affection, interest, cooperation, and support in the great majority of their interactions; when interviewed they describe their affection and positive feelings vividly. Other siblings show hostility, irritation, and aggressive behavior, and describe their dislike very clearly. Yet other children are ambivalent about their relations with their siblings, and show both hostility and positive interest in one another (for siblings' perceptions of their relationship, see for instance, Dunn & Plomin, 1990; McGuire, Manke, Eftekhari, & Dunn, 2000). This notable range of differences raises questions for both psychologists and parents: Why should some siblings get along so well and be important sources of support and comfort for one another, while others are so hostile?

## Individual differences in sibling relationships

The answer to the question of why siblings differ markedly in their relationship quality was, until relatively recently, answered in terms of birth order, sex of siblings, and the age gap between the siblings (e.g., Ernst & Angst, 1983; Sutton-Smith & Rosenberg, 1970; for a recent approach see Sulloway, 1996). These family constellation variables were thought to affect the children's relationships through effects on the children's personalities or temperaments, their intelligence, or motivation. Since the 1980s the framework has broadened, with models that incorporate, in addition to the family constellation variables, the personality characteristics of the children themselves, the quality of relationships within the family, and the social adversities or risks faced by the family (e.g., Furman & Lanthier, 1996; Stoneman & Brody, 1993).

Temperament and personality. Links between the temperamental characteristics of both individuals in a sibling dyad and the quality of their relationship have been reported for

siblings in the preschool period, middle childhood, and early adolescence (Brody, Stoneman, & Burke, 1987; Furman & Lanthier, 1996; Munn & Dunn, 1989; Stocker, Dunn, & Plomin, 1989). However, the precise findings vary across studies, the various projects are based on very different populations, and they vary in the age of siblings studied, and in the methodologies employed. Furman and Lanthier point out one general pattern, however: The personality and temperamental characteristics are more clearly related to conflict in the sibling relationship than to the positive aspects of the relationship. This may reflect the problems of measuring the positive features, such as feelings of warmth and affection, which tend to be less evident when parents are present. In contrast, conflict between siblings is all too evident in a range of settings! The match in siblings' temperaments was found to be important in relation to the frequency of conflict and affection that they show one another, both in early and middle childhood (Brody, 1996; Munn & Dunn, 1989). This finding parallels the evidence from the adult relationship literature for the significance of *similarity* in attraction between people: "like me" attracts (Hinde, 1979).

Gender and age gap Evidence for the significance of gender and age gap for individual differences in sibling relationship quality varies with the age of the siblings under scrutiny. For young siblings, the findings are inconsistent. During middle childhood, it appears that gender may increase in importance as an influence on the sibling relationship (Dunn, Slomkowski, & Beardsall, 1994a). Boys become increasingly less likely to report warmth and intimacy in their relationships with their siblings. Among older adults, relationships with sisters appear to be particularly important; this is generally attributed to women's emotional expressiveness and their traditional role as nurturers. While findings on gender and children's sibling relationships are mixed and inconsistent, clear associations are reported between the quality of sibling relationships and other family relationships; these are considered next.

## Connections with Other Family Relationships

How far and in what ways are individual differences in sibling relationships linked to the children's relationships with their parents, or to the quality of the parents' own relationships with each other? There is some inconsistency in the research findings, and much current debate about the extent of parental influence on sibling relationships. A number of general developmental points stand out from the research.

First, there is evidence that the security of young children's attachments to their parents is correlated with individual differences in the quality of later sibling relationships. Children who were secure in their attachments to their parents were reported to have more positive sibling relationships than those who were insecure in their parent—child relationships (Teti & Ablard, 1989; Volling & Belsky, 1992). There is also an impressive consensus of evidence from research focusing on a broader range of dimensions of parent—child relationships that positive parent—child relations are associated with positive, prosocial sibling relationships (for review, see Brody, 1998). In a parallel fashion, negativity, punitiveness, and overcontrol in the parent—child relationship are correlated with aggressiveness

and hostility in the sibling relationship. It is important to note that these studies are correlational, and conclusions cannot be drawn about the direction of causal influence, or the family processes that might be implicated in the links. While such connections are often interpreted as reflecting *parental influence* on siblings, it could well be that children's temperamental characteristics or other individual qualities contribute to difficult relationships with both siblings and parents. It could also be that in families in which the siblings are particularly hostile and aggressive with one another, this in turn affects the relationships of the children with their parents. In commonsense terms it appears plausible that all of these processes may contribute to the interconnections between family relationships.

Second, there are also research findings that, in contrast to the links between positivity in parent—child and sibling relationships, indicate that intense supportive sibling relationships can develop in families in which the parent—child relationships are distant or uninvolved (Bank & Kahn, 1982; Boer & Dunn, 1990). Such patterns of findings, which fit with a "compensatory" model of family relationships, may be more characteristic of families at the extremes of stress and social problems than of families within the normal range.

Third, there is consistent evidence that more conflicted, hostile sibling relationships are associated with differential relations between parents and their various children. That is, in families in which more affection, attention, and less discipline and control are evident in a parent's relationship with one sibling than with another, the siblings are likely to get along less well than in families in which parents and siblings do not report such differential relationships (Brody, 1998; Hetherington et al., 1994; Reiss, Neiderheiser, Hetherington, & Plomin, 2000; Stocker et al., 1989; Volling & Belsky, 1992). Such patterns are particularly evident in families that are under stress (Bank, Patterson, & Reid, 1996), such as those who have recently experienced parental separation, those with steprelationships, and those with disabled or sick siblings. It is important to note, again, that the evidence for these links is correlational and inferences about the direction of causal influence are not justified. Children's interpretation of their parents' differential behavior has been seen as key: Sibling relationships are thought to be compromised particularly when children interpret their parents' differential behavior as an indication that their parents are less concerned about them, or that they are less worthy of love than their siblings (Kowal & Kramer, 1997). Children monitor with vigilance the interactions between their parents and siblings, from a surprisingly early age: During the second year of life, one observational study showed, they ignore relatively few of the exchanges between their siblings and parents (Dunn & Munn, 1985).

Differential parent—child relationships are often associated with conflict or distress between the parents: Increased levels of differential treatment have been linked with such marital problems, and in turn both contemporaneously and longitudinally with higher levels of sibling conflict (Brody, Stoneman, & McCoy, 1992; Brody, Stoneman, & McCoy, 1994; Hetherington, Henderson, & Reiss, 1999; McHale & Crouter, 1996). More generally, several research programs report that the quality of the relationship between parents was linked to that of the sibling relationship (Brody, Stoneman, McCoy, & Forehand, 1992b; Erel, Margolin, & John, 1998; MacKinnon, 1989; Stocker, Ahmed, & Stall, 1997). Both direct pathways between marital and sibling relationships, and indirect pathways (via the parent—child relationships) are implicated (Dunn, Deater-Deckard, Pickering, Beveridge, & the ALSPAC Study Team, 1999). Interestingly, these patterns of association appear to

differ in stepfamilies from those in families with two biological parents. Thus Hetherington and her colleagues (1992) reported that positive relations between mothers and their "new" partners were associated with high levels of negativity in parent—child relationships in stepfather families — in direct contrast to the patterns found in nonstepfamilies. In the study by Dunn and colleagues, mother—partner hostility showed no significant relation to the hostility siblings showed one another — a pattern quite different from that of nonstep families.

Finally, it should be noted that the changes in parent—child relationships that accompany the arrival of a sibling are linked to the quality of the relationship that develops between the siblings. Both relatively small-scale intensive research (Dunn & Kendrick, 1982; Stewart, 1990; Stewart, Mobley, Van Tuyl, & Salvador, 1987) and large-scale survey studies (such as those based on the National Longitudinal Survey of Youth in the United States (Baydar, Greek, & Brooks-Gunn, 1997a; Baydar, Hyle, & Brooks-Gunn, 1997b) report consistent findings — that the birth of a sibling is accompanied by a decline in positive mother—child interactions, an increase in controlling, negative interactions, and an increase in behavioral problems in the "displaced" child. These changes are accompanied by a decline in material resources for families, which may be implicated in the sequelae for the children's adjustment and relationships — an issue we return to below. The general developmental point highlighted by these findings is that *indirect* links between parent—child and sibling relationships are likely to be important as influences on individual differences in the siblings' relationships.

# Developmental change and continuities in individual differences in sibling relationships

Developmental changes in sibling relationships have been documented in studies following siblings through early and middle childhood. During the preschool years, the younger siblings in a dyad play an increasingly active role in the relationship, as their powers of understanding and communicative skills develop. They begin to initiate more games, and their ability to cooperate makes them more interesting companions in play for their older siblings (Dunn et al., 1996). The welcome recent increase in studies of siblings in middle childhood and adolescence has clarified some of the developmental changes in this period, though it should be noted that with the exception of the research of Brody and his colleagues (Brody et al., 1992a, 1992b, 1994), much of the research is cross-sectional in design. It has been concerned with charting normative changes, rather than continuities in individual differences. Such research reports changes in the balance of power between siblings as they reach middle childhood: the relationship between siblings becomes more egalitarian (Buhrmester, 1992; Buhrmester & Furman, 1990; Vandell, Minnett, & Santrock, 1987). There is some disagreement about the extent to which this reflects an increase in the power that the younger sibling is able to exert, or a decrease in the dominance that both older and younger attempt to exert. During adolescence, there tends to be a decrease in the warmth that siblings feel and express toward each other. This parallels the patterns of change reported for parent-child relationships over this period, as adolescents become increasingly involved with peers outside the family.

To what extent do the striking individual differences in sibling relationships evident in

early childhood show continuity over time? One relatively small study that followed sibling pairs for over 7 years reported evidence for considerable stability in children's behavior and feelings toward their siblings, particularly for the older siblings during the period from 5 years to 12–13 years of age (Dunn et al., 1994a). However, many sibling pairs also changed in the relative friendliness or hostility that they felt toward each other. Increases in friendliness and support were found, for example, to follow life events with negative impact that the children faced together. In contrast, in many of the families, negative changes in the sibling relationship were attributed by both siblings and their mothers to the new friendships that the children had formed outside the family, particularly after the school transition that in the UK takes place around 8 years of age. Siblings also attributed increases in coolness or distance between them to the development of different interests by the two siblings during middle childhood, and to developmental changes in the younger siblings' powers of argument.

#### Developmental Influence of Sibling Relationships

The emotional intensity of siblings' interactions, their familiarity and frequent interaction during childhood, and the significance of their competitiveness over parental attention and love, all combine to suggest that they may well exert developmental influence upon one another. Two particular domains of development have been studied in relation to children's experiences with their siblings: children's adjustment, and their social understanding.

#### Siblings and children's adjustment

There is evidence for associations between the quality of siblings' relationships and their externalizing (aggressive, oppositional, rule-breaking) and internalizing (worrying, anxious) behavior, links found both contemporaneously and over time. Patterson and his colleagues established in the 1980s in their research with both community samples and clinical samples of conduct-disordered children, employing direct observations of the children at home, that siblings reinforce each other's aggressive behavior by fighting back, teasing, and escalating the level of conflict (Patterson, 1986). As Patterson points out, children whose family relational experiences train them to select coercive behavior are doubly handicapped: not only have they learned to be coercive, they have also not learned the prosocial actions required for supportive relationships (Snyder & Patterson, 1995). Longitudinal research following children from the preschool period to early adolescence has demonstrated that not only externalizing behavior but also internalizing problems in middle childhood and adolescence were more common among children whose siblings had been very negative and hostile to them during the preschool years (Dunn, Slomkowski, Beardsall, & Rende, 1994b). This pattern of associations was significant even when the mothers' current mental state was controlled for. A large-scale community study with crosssectional data on 4 and 7 year olds found that negativity between siblings contributed to adjustment problems, and negatively to levels of prosocial behavior, beyond the contribution of poor parent—child relationships (Dunn et al., 1999). A substantial body of research findings employing cross-lagged models of analyses suggest that *younger* siblings are more influenced by their older siblings' behavior and adjustment than vice versa (e.g. Hetherington et al., 1999); longitudinal analyses in the Hetherington study of adolescents indicates that the impact of the sibling's adjustment — rather than the quality of the relationship per se—is important in predicting long-term adjustment.

The issue of how far siblings' hostile relationships contribute to the development of behavior problems independently of the parent—child relationship has been addressed recently in a number of studies. Garcia and colleagues for example in a study of conduct problems in a low-income sample of 5-year-old boys found that the interaction between destructive sibling conflict and rejecting parenting predicted aggressive behavior problems across time and informants: A rise in aggression scores was evident for children who had both high levels of sibling conflict and rejecting parent—child relationships. Sibling conflict was also directly related to later delinquency (Garcia, Shaw, Winslow, & Yaggi, 2000).

These studies implicate *direct* effects of sibling interaction on behavioral adjustment outcome. However, it should be noted that while the experience of sibling aggression not only increases the risk of aggression in other social contexts, but also leaves adolescent siblings with a sense of inadequacy and incompetence (Bank et al., 1996), these associations are not likely to develop in isolation from other sources of stress, and for many of the reported findings we have to be cautious about attributing causal effects to the siblings alone. A number of lines of evidence do indicate that *indirect* effects involving siblings are implicated in later behavioral adjustment problems. Two of these sets of evidence are noted briefly next: first, differential parent—child relationships, and second the impact of the arrival of a sibling.

Many of the studies of differential parent—child relationships have focused on the siblings' adjustment as outcome, and in particular the differences in siblings' adjustment (Conger & Conger, 1994; McGuire, Dunn, & Plomin, 1995; Reiss et al., 2000; Stocker, 1993, 1995). The least "favored" sibling was found in such studies to show greater adjustment difficulties. Differential paternal treatment has also been included in several studies, and found to be also related to adjustment outcome (Brody et al., 1992; Stocker, 1993, 1995; Volling & Elins, 1998). Volling and Elins, for instance, found that preschool aged siblings showed greater internalizing and externalizing symptoms when both mothers and fathers disciplined them more than their younger siblings. The findings indicate that the correlates of differential treatment with such very young siblings differ in some respects from those with older children, and that future studies need to examine differential parental treatment as a developmental process across childhood. It should also be noted that most studies of differential parental treatment and adjustment do not examine whether the effect of differential experiences is significant beyond the effect of the "absolute" level of parent—child interaction.

A second line of evidence suggesting indirect effects of siblings on children's adjustment comes from the research on the arrival of a sibling. The birth of a sibling is consistently found to be linked to increased problems of adjustment in firstborn children: Disturbance in bodily functions, withdrawal, aggressiveness, dependency, and anxiety have been reported in detailed home observations (Dunn & Kendrick, 1982; Stewart et al., 1987), and

in large-scale surveys (Baydar et al., 1997a). The changes in children's adjustment that follow the arrival of a sibling are correlated with parallel changes in the interactions between the "displaced" older sibling and his or her parents. There is a notable increase in critical negative behavior from mothers, an increase in demanding difficult firstborn behavior to mothers, and a decrease in positive joint activities shared by parents and firstborn (Dunn & Kendrick, 1982). Baydar and colleagues reported similar changes in family interaction patterns, and described negative effects on adjustment, achievement, and self-perception about 2.5 years after the sibling birth, and makes two further, important points. The first is that these effects are stronger among the children of economically disadvantaged children, and the second, that there is a significant decrease in the income-to-poverty ratio with the birth of a child, and the accompanying loss of maternal employment income (Baydar et al., 1997b).

#### Siblings as sources of support

Siblings can also be an important source of support to children faced with stressful experiences. For example, Jenkins (Jenkins, 1992; Jenkins & Smith, 1990) reported that children growing up in disharmonious homes have fewer problems if they have a good sibling relationship. It seems that both offering comfort to, and receiving comfort from, a sibling are associated with benefits for children. Note that other studies of parental separation and family reconstitution report that siblings are relatively infrequent confidants for children (Dunn, Davies, O'Connor, & Sturgess, 2001). But children faced with other negative life events report becoming more intimate and close with their siblings following the stressful event (Dunn et al., 1994a). This is a growing area for clinical research, as in the research with siblings involved as therapists for children with eating disorders (Vandereyken & Van Vrecken, 1992), and as donors for children undergoing bone-marrow transplants.

#### Siblings and the development of social understanding

The study of siblings has played an important role in changing our views of the nature and development of children's discovery of the mind – their understanding of others' emotions, thoughts, beliefs, and their grasp of the links between such inner states and people's behavior. In standard experimental settings, young preschool children show limited understanding of "other minds" and feelings; in contrast, in the context of the emotional drama and the familiarity of interactions with siblings, they reveal remarkable powers of manipulating others' emotions, anticipating intentions, and of understanding the significance of inner states for human action (Dunn, 1999). Their ability to tease, deceive, manage conflict by anticipating the other's intentions and perspective, share an imaginative world in joint pretend play, and engage in conversations about why people behave the way they do, with reference to mental states as causes and consequences of action – all these are seen in their daily interactions with their siblings in the second, third, and fourth years of life. All reflect a growing sophistication about inner states and social behavior. Sibling research thus has offered a new perspective on a central aspect of early sociocognitive development.

It has also alerted us to the range of individual differences in young children's abilities in these domains, which are striking, and until very recently, little studied. Research addressing the question of what experiences contribute to these striking individual differences in understanding has clearly implicated experiences with siblings.

For example, children who have engaged in frequent shared pretend play with an older sibling, and talked about mental states (knowing, remembering, thinking, believing, and so on) with a sibling are, over time, especially successful on the standard assessments of understanding emotions and mental states (Dunn, 1999; Howe, Petrakos, & Rinaldi, 1998). Children with older siblings, in some studies, perform better on such tasks than those without siblings (Perner, Ruffman, & Leekham, 1994). Other research indicates that it is interaction with familiar others (kin or friends) that is linked to individual differences in performances on understanding of inner states – rather than interaction with siblings per se (Lewis, Freeman, Kyriakidou, Maridaki-Kassotaki, & Berridge, 1996). In general these studies demonstrate associations, and do not directly test causes, so again, we should be wary of inferring the causal contribution of experiences with siblings to social understanding. The children who are good at understanding emotions and at mind-reading are likely to be particularly effective play companions: their early sophistication at reading minds and emotions may well contribute to the development of shared imaginative play with their siblings, and this in itself is likely to foster further developments in understanding others' inner states (Howe et al., 1998).

But though direction of effects is still an intractable issue to be addressed, the sibling research has established firmly the potential significance of certain social processes within the family, for the development of the marked individual differences in the core developmental domain of understanding others.

#### Siblings and peer relationships

The notion that the quality of sibling relationships will be associated with, and possibly influence, children's relationships with other children outside the family is one that would be supported by a number of different developmental theories: attachment theory, social learning theory, and by those who propose that an individual's characteristics will elicit similar responses from different people (e.g., Caspi & Elder, 1988). The mechanisms suggested to underlie such links differ in these various theoretical frameworks, but each would predict positive associations between sibling and peer relationships. Within a social learning framework, it would be expected that what is learned through interaction with a sibling would generalize to interactions with familiar peers outside the family.

In contrast, it can also be argued that the clear differences between sibling and peer relationships mean that simple positive associations should not be expected. Although both are intimate, dyadic relationships with other children, friendships involve a commitment of trust and support that not all siblings feel about each other, and friendships do not involve rivalry for parental love and attention, or resentment about differential treatment. Children do not choose their siblings, but they do select their friends. The evidence for positive links between individual differences in sibling and peer relations is inconsistent. With young children, studies of conflict management, and of connected communication

show some associations across the two relationships (Slomkowski & Dunn, 1992), and some correlations have been reported for aggression with siblings and with peers (Vandell et al., 1987), but other research reports no links (Abramovitch, Corter, Pepler, & Stanhope, 1986). One study of slightly older children reports links in controlling and positive behavior between sibling and friend relationships (Stocker & Mantz-Simmons, unpublished), but also notes that children who were particularly cooperative with their siblings reported lower levels of companionship with their friends. Two other studies also report evidence for "compensatory" patterns – rather than evidence for consistency across the relationships (Mendelson, Aboud, & Lanthier, 1994; Stocker & Dunn, 1990). Studies of popularity with peers also report very few associations with children's sibling relationships, either as preschoolers or as 5–10 year olds (Stocker & Dunn, 1990).

The lack of consistency across the two relationships could be interpreted in various ways. "Compensatory" mechanisms could be invoked; alternatively (or in addition) it could be that the experience of conflict and competitive interactions with siblings fosters children's capacities in social understanding – and this understanding helps children to form particularly close relationships with friends. There is some evidence that frequency of sibling arguments in the preschool period are associated with later successful performance on sociocognitive tasks (Slomkowski & Dunn, 1992), but we are very far from being able to draw conclusions about the mechanisms underlying such correlational data. Internal working models, social understanding as a mediator, and temperamental characteristics have all been invoked to explain connections across relationships.

#### Siblings and the Nature of Family Influence

The third aspect of sibling research that has notable implications for psychology concerns the ways in which family experiences influence individual development. One of the striking findings of recent research has been the documentation of the differences in personality, adjustment, and psychopathology between siblings growing up in the same family (Dunn & Plomin, 1990). These differences, which have been reported in a wide range of studies, present a considerable challenge to those who study family influence. The aspects of family life that have been seen as key influences on children's development, such as mothers' and fathers' educational and occupational level, the parents' mental health and the quality of their spousal relationship, the neighborhood in which the family lives, the social adversities faced by the family, are all apparently shared by the siblings. Yet these siblings grow up to be very different from one another. Answers to this puzzle, suggested by the findings of extensive studies by behavior geneticists, include the proposal that experiences within the family differ markedly for siblings, and are key to their developmental differences. It is these experiences specific to each sibling that need to be studied, rather than the betweenfamily differences that have been chiefly studied. The message is not that family influences are unimportant, but that families are experienced very differently by the children who are members of those families (Hetherington et al., 1994).

The evidence for the significance of differential parental treatment, described above, and for the vigilance with which children monitor such differences from early childhood

support this new perspective on family processes. Of course, individual differences in the temperament, adjustment, and other characteristics of each sibling are likely to play a major part in eliciting different responses from other family members, as well as in contributing to differences in their responses to others both within and outside the family, and in their responses to "shared" stresses and difficulties that the family faces.

#### Growing Points and Gaps in Sibling Research

Recent research on siblings has opened up a series of exciting questions about both normative development, and individual differences in development. If we include siblings in studies of the growth of social understanding, of social competence, in research on family influences on adjustment, on the nature and individual differences in peer relations, we gain a powerful new perspective on these areas of development. There is growing interest in siblings in the clinical literature, as in the research on the effects of children's response to illness, disability, or injury in their siblings (Stallard, Mastroyannopoulou, Lewis, & Lenton, 1997), and of traumatic experiences on siblings (Newman, Black, & Harris-Hendriks, 1997). A lively new area of study is investigation into the relationships of step- and half-siblings, and individual differences in their development; with the marked increase in the numbers of families that do not conform to the traditional pattern of two biological parents and their biological children, this is a growth area of considerable practical significance (Hetherington et al., 1999; O'Connor, Dunn, Jenkins, Pickering, & Rasbash, 2001). Comparison of full, half, and stepsiblings provides a useful strategy for discovering the role of genetics in the development of individual differences (Deater-Deckard et al., in press).

However, although the inclusion of siblings in research strategies represents a major opportunity to learn more about not only their relationships, but also about key issues in developmental psychology more broadly considered, there are still notable gaps in the research on siblings. Most studies focus on young or middle-childhood children, though interest in research on adolescent siblings is rapidly growing (e.g., Hetherington et al., 1999), but there is little longitudinal research in adulthood, or studies that take a lifecourse perspective. We are left comparatively ignorant of the long-term significance of early experiences with siblings.

Studies of siblings from minority communities are notably lacking, as are cross-cultural studies, and studies of non-Western cultures more generally. These gaps are especially striking, given that ethnographic studies have shown that siblings play important roles as caregivers for children from a very early age in many cultures (Weisner, 1989; Weisner & Gallimore, 1977). Weisner's (1989) reviews make clear siblings are key figures in children's lives in many non-Western communities, and he considers these experiences play an important role in "socialization for parenthood." Anthropological research has documented that siblings are also key in adults' lives in such communities (e.g., Nuckolls, 1993). Little research in the United States, or the UK, has focused specifically on ethnic differences in sibling relations. In a national sample in the United States, the relationships between siblings in African American, Hispanic, non-Hispanic White and Asian American adults

were compared. The conclusion was that the similarities across the groups in terms of contact and social support far outweighed the differences (Riedmann & White, 1996). Parallel research on childhood and adolescence is needed.

These gaps in what we know about siblings represent opportunities for studies that are likely to prove both theoretically and practically important; the study of siblings is providing a novel perspective on widely differing domains of psychology – clinical, developmental, on family processes, on the contribution of genetics to individual differences in development.

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