IIE 366, Developmental Psychology Summer 2008

Professor: Gregory Francis

Applying Child-Development Research (due 5 August 2008)

Worth 35 points; minimum length = 1.5 pages; maximum = 2 pages.

In this assignment you apply your knowledge of child-development research by writing a letter to a friend who is confronting a problem concerning children. In your letter, provide your friend with information from an assigned reading that will help the friend understand the problem. In preparing your letter, use an article in *Current Directions in Psychological Science* listed below that summarizes relevant research.

Choose from one of these two problems:

(a) Your friend Terri believes that her 8-year-old son is lonely and she wonders why he feels that way. In your letter, tell Terri about some of the factors that contribute to a child's feelings of loneliness.

Article: Asher & Paquette (2003). Loneliness and peer relations in childhood. Vol. 12, pages 75-78.

(b) Jenny is pregnant; her 5-year-old son, Seth, is excited and looking forward to being someone's "big brother." In your letter, describe to Jenny the ways in which Seth may influence his sibling's development. And explain to Jenny what she can do to help Seth and his new sib get along better.

Article: Brody (2004). Siblings' direct and indirect contributions to child development. Vol. 13, pages 124-126.

Format: Each assignment has an explicit minimum and maximum length. The paper must be double-spaced in Times New Roman 12 point font on A4 paper, with left and right margins of 3 centimeters and top and bottom margins of 2.5 centimeters inch. Papers must conform to this format so that we can quickly verify that your paper is an acceptable length. (Note.—Minimum and maximum lengths do not include the title page.) Papers that are too short or too long or that do not conform to the stated format are unacceptable.

Submitting your paper: Do not submit the paper electronically. Submit it directly to the professor at the start of class on August 5.

Penalty for late papers: When papers are submitted after the start of class on the due date, 2 points will be deducted for each day or part of a day (including Saturdays and Sundays) that the paper is late (e.g., 4 points for 2 days late). *Note*: this means that you immediately lose 2 points if you hand in your paper after the lecture for the day has started.

Grading: The grade on the paper will reflect two components: the quality of the information presented and the quality of the writing per se. Excellent papers will present all relevant information in a coherent, well-organized manner and will be free of spelling and grammatical errors.

Loneliness and Peer Relations in Childhood

Steven R. Asher¹ and Julie A. Paquette

Department of Psychology, Duke University, Durham, North Carolina

Abstract

Although loneliness is a normative experience, there is reason to be concerned about children who are chronically lonely in school. Research indicates that children have a fundamental understanding of what it means to be lonely, and that loneliness can be reliably measured in children. Most of the research on loneliness in children has focused on the contributions of children's peer relations to their feelings of wellbeing at school. Loneliness in children is influenced by how well accepted they are by peers, whether they are overtly victimized, whether they have friends, and the durability and quality of their best friendships. Findings from this emerging area of research provide a differentiated picture of how children's peer experiences come to influence their emotional well-being.

Keywords

loneliness; peer acceptance; friendship

The study of children's peer-relationship difficulties has become a major focus of contemporary developmental and child-clinical psychology (see Rubin, Bukowski, & Parker, 1998). As part of this focus, increasing attention is being given to the internal, subjective, and emotional sides of children's social lives. Human beings have fundamental needs for inclusion in group life and for close relationships (e.g., Baumeister

& Leary, 1995), so it is fitting to examine what happens when social needs go unmet. It is clear that a variety of strong affective consequences can result. In this article, we focus on one such emotional reaction, loneliness, and we describe what has been learned about the association between loneliness and various indicators of the quality of children's social lives with peers.

PERSPECTIVES ON LONELINESS

Loneliness is typically defined by researchers as involving the cognitive awareness of a deficiency in one's social and personal relationships, and the ensuing affective reactions of sadness, emptiness, or longing. For example, Parkhurst and Hopmeyer (1999) described loneliness as "a sad or aching sense of isolation, that is, of being alone, cutoff, or distanced from others . . . associated with a felt deprivation of, or longing for, association, contact, or closeness" (p. 58). Likewise, many other authors emphasize the perceived deficiencies in the qualitative or quantitative aspects of social relationships and the accompanying emotional discomfort or distress that results.

The subjective experience of loneliness should not be viewed as interchangeable with more objective features of children's peer experiences, such as how well accepted they are by peers, whether they have friends, and what their friendships are like. So, for example, it is possible to have many

friends and still feel lonely. Likewise, it is possible to be poorly accepted by the peer group or to lack friends and yet to not feel lonely. Loneliness is an internal emotional state that can be strongly influenced by features of one's social life, but it is not to be confused with any particular external condition.

It is also important to note that loneliness in itself is not pathological. Loneliness is actually quite normative in that most people feel lonely at some point during their lives. As social animals who participate extensively in social relationships, humans open themselves up to the possibility of loneliness. This can occur not only when people lack ongoing relationships with others, but even when they have meaningful relationships that take negative turns. For example, loneliness can be a response to separations, such as when a friend is unavailable to play or moves away. These situational or short-term experiences of loneliness are typically not causes for concern. Chronic loneliness. however, is associated with various indices of maladjustment in adolescents and adults, such as dropping out of school, depression, alcoholism, and medical problems. At least 10% of elementary schoolaged children report feeling lonely either always or most of the time (Asher, Hymel, & Renshaw, 1984), which suggests a level of loneliness that places children at risk for poor outcomes.

Systematic research on children's loneliness partially grew out of an earlier line of research on the effects of teaching social-relationship skills to children who were highly rejected by their peers. The question that emerged was whether the children who were the focus of these intensive intervention efforts were themselves unhappy with their situation in school. The research was also inspired by very interesting work on adults' loneliness. The study of loneliness in

childhood offers unique opportunities that are typically not available to researchers who explore loneliness in adulthood. Much of children's social lives takes place in a "closed" full-time environment, the school, so it is much easier to capture children's peer world. The presence of a child's "colleagues" makes it possible to learn about a child not just by studying that child, but also by querying his or her interactive partners or directly observing the social interactions the child has with peers. By contrast, adults' relationships take place over more contexts, making it harder to get access to most of their social network. Furthermore, it is usually easier to gain research access to schools than the adult workplace.

CAN LONELINESS BE MEANINGFULLY STUDIED WITH CHILDREN?

Some people might think that the concept of loneliness does not have much meaning to children or that they cannot give reliable information about their subjective well-being in this regard. Indeed, Harry Stack Sullivan (the famous American psychiatrist who wrote eloquently about the role of "chumship" in middle childhood) argued that children cannot experience true loneliness until early adolescence, when they develop a need for intimacy within the context of close friendships. However, research indicates that children as young as 5 or 6 years of age have at least a rudimentary understanding of the concept of loneliness (Cassidy & Asher, 1992). Their understanding that loneliness involves having no one to play with and feeling sad corresponds fairly well to typical definitions of loneliness in the literature in that children grasp that loneliness involves a combination of solitude and depressed affect. We call this a rudimentary understanding because young children do not yet appreciate that one can be "lonely in a crowd" or even when with a significant other.

Children's basic understanding of loneliness is accompanied by the ability to respond in meaningful ways to formal assessments of loneliness. The most widely used measures have children respond to some items that assess their feelings of loneliness and other items that involve appraisals of whether they have friends, whether they are good at making friends and getting along with others, and whether their basic relationship needs are being met. Because most of these self-report measures for children contain diverse item content that goes beyond loneliness per se (as does the widely used UCLA Loneliness Scale for adults), caution must be used when interpreting results. Some investigators (e.g., Asher, Gorman, Gabriel, & Guerra, 2003; Ladd, Kochenderfer, & Coleman, 1997; Parker & Asher, 1993) have therefore calculated "pure loneliness" scores by using only items that directly assess feelings of loneliness (e.g., "I am lonely at school"; "I feel left out of things at school"; "I feel alone at school").

Researchers in the field have examined whether, within a particular measure, children respond in an internally consistent manner from one loneliness item to another (e.g., Asher et al., 1984). They have also examined whether there is stability in children's reports of loneliness from one time of assessment to another (e.g., Renshaw & Brown, 1993). Several studies indicate that children's reports of loneliness are highly reliable by both of these criteria. Accordingly, researchers have used these methodologically sound measures to examine whether acceptance by peers and friendships influence children's feelings of loneliness.

PEER ACCEPTANCE AND LONELINESS

The preponderance of research on children's loneliness has focused on the influence of acceptance versus rejection by peers. Peer acceptance in school is typically assessed using sociometric measures in which children either nominate schoolmates they like most and like least or use a rating scale to indicate how much they like each of their peers. Regardless of method, there is a consistent association between acceptance by peers and loneliness. Children who are poorly accepted report experiencing greater loneliness. This finding holds whether loneliness is measured in classroom, lunchroom, playground, or physical education contexts (Asher et al., 2003), suggesting that there is no safe haven at school for poorly accepted children. The finding that rejected children experience more loneliness than other children holds for age groups ranging from kindergartners to elementary-school children to middle schoolers. Furthermore, these associations have been found in research in many different countries and for both genders (with mean differences in loneliness between boys and girls rarely significant).

Although rejected children report the most loneliness, there is considerable within-group variability. Researchers have found that there are distinct subgroups of rejected children. Withdrawn-rejected children consistently report greater loneliness than aggressive-rejected children, although in the elementaryschool years both groups report more loneliness than children with an average degree of acceptance by their peers. One factor that may account for variability in rejected children's feelings of loneliness is overt victimization. Not all highly disliked children are overtly victimized, but those who are victimized are more likely than others to report elevated loneliness (for relevant research, see Boivin & Hymel, 1997; Ladd et al., 1997).

FRIENDSHIP AND LONELINESS

Variability in loneliness among children rejected by their peers also arises from the partial independence of acceptance and friendship. One way researchers assess whether children have friends is by giving them a roster of the names of their classmates and asking them to circle the names of their friends. Researchers typically consider that a friendship exists when two children identify one another as friends. With this mutual-nomination criterion, half of the children who are poorly accepted by their peers prove to have friends, making it possible to learn whether friendship has a buffering effect on the influence of low peer acceptance.

In studies of the connection between friendship and loneliness, children without friends report experiencing more loneliness than children with friends (Parker & Asher, 1993; Renshaw & Brown, 1993). This beneficial effect of friendship occurs for children at all levels of peer acceptance and for both boys and girls. Even children with deviant friends (i.e., friends who participate in delinquent behavior) report less loneliness than friendless children (Brendgen, Vitaro, & Bukowski, 2000).

There is no evidence to date that the number of friends children have (beyond one friend!) relates to loneliness; however, it is important for children to have friendships that endure. In a camp-based study, Parker and Seal (1996) found that children's ability to maintain, as well as form, friendships was related to loneliness. Children who frequently made new friends but who did not

maintain their friendships experienced higher levels of loneliness than other children.

The quality of children's friendships also plays an important role in children's feelings of loneliness. Features such as the degree of companionship, help and guidance, intimacy, conflict, and ease of conflict resolution can all be reliably measured among elementary-school children. Children who participate in high-quality friendships experience less loneliness than other children (Parker & Asher, 1993); this result is found even in analyses that statistically control for level of peer acceptance. Furthermore, the effects of friendship quality on loneliness are comparable for boys and girls. One indicator of friendship quality is whether friends engage in relational aggression toward one another. Crick and Nelson (2002) recently found that among both boys and girls, having friends who ignored them when angry or tried to influence them by threatening termination of the friendship was associated with increased loneliness.

There is a need for research on how the influence of specific qualities of friendship might differ for children of different ages. As discussed by Parkhurst and Hopmeyer (1999), the experience of loneliness at different ages might be influenced by cognitive-developmental changes, changes in the kinds of closeness or associations that are meaningful, and changes in the value that children place on certain kinds of relationships. Thus, what causes a 5- or 6-yearold child to feel lonely will likely be different from what causes an adolescent to feel lonely. For example, kindergartners might feel lonely if there is no one to play with, whereas older youth might feel lonely if they do not have someone with whom to discuss personal thoughts and feelings. These types of developmental predictions need direct tests.

FUTURE DIRECTIONS

Research to date consistently indicates that both acceptance by peers and friendship processes influence children's feelings of loneliness at school. However, acceptance and friendship variables, as typically measured, still leave much of the variance in loneliness unexplained. Partly this is because of the frequent reliance on singleshot assessments of key constructs. When repeated assessments of rejection or victimization are conducted, the associations with loneliness become stronger. Children who chronically experience negative peer relations are unquestionably at greater risk than children whose adverse circumstances are more short term (e.g., Kochenderfer-Ladd & Wardrop, 2001). Repeated assessments help to account for more of the variance in children's loneliness.

At the same time, psychologists will never fully understand the dynamics of loneliness if they look only at objective indicators of children's adjustment and ignore children's subjective representations of their experiences. Little is known about the role of beliefs and expectations in children's loneliness. For example, children who have idealized views that friends will always "be there for them," will never fail to keep a commitment, or will never hurt their feelings are likely to experience disappointments in their friendships even when other people with different beliefs and expectations might think those friendships are going well. Likewise, children who believe that conflict is a sign of impending dissolution of a friendship are likely to experience higher levels of loneliness than other children because some level of conflict is virtually inevitable in all close relationships. Examining children's beliefs and expectations may shed light on why some children who are highly accepted and have what seem to be high-quality friendships nevertheless are lonely.

Finally, there is a need for intervention research aimed at helping children who experience chronic loneliness. An earlier generation of intervention studies found that teaching children social-relationship skills had beneficial effects on children's peer acceptance (see Asher, Parker, & Walker, 1996, for a review). However, these studies generally predated the more recent research on loneliness in children and therefore did not assess whether the interventions had positive effects on loneliness. Intervention research not only would offer a potential aid to children, but also could be useful for testing specific hypotheses about the processes that lead particular kinds of children to become lonely. For example, intervention research is a way to learn whether increasing the social skills of poorly accepted children who lack friends leads to parallel increases in acceptance and friendship that in turn result in reductions in loneliness. Likewise, for children who are well accepted and have friends yet are lonely, interventions aimed at modifying their thoughts and beliefs about relationships can experimentally test hypothesized linkages between particular representations and loneliness.

Recommended Reading

- Asher, S.R., Rose, A.J., & Gabriel, S.W. (2001). Peer rejection in everyday life. In M.R. Leary (Ed.), *Interpersonal rejection* (pp. 105–142). New York: Oxford University Press.
- Ernst, J.M., & Cacioppo, J.T. (1999). Lonely hearts: Psychological perspectives on loneliness. *Applied & Preventive Psychology*, 8, 1–22.
- Peplau, L.A., & Perlman, D. (Eds.). (1982). Loneliness: A sourcebook of current theory, research, and therapy. New York: Wiley.
- Rotenberg, K.J., & Hymel, S. (Eds.). (1999). Loneliness in childhood and adolescence. New York: Cambridge University Press.

Note

1. Address correspondence to Steven R. Asher, Department of Psychology: Social and Health Sciences, Duke University, Box 90085, Durham, NC 27708-0085; e-mail: asher@duke.edu.

References

- Asher, S.R., Gorman, A.H., Gabriel, S.W., & Guerra, V.S. (2003). *Children's loneliness in dif-ferent school contexts*. Manuscript submitted for publication.
- Asher, S.R., Hymel, S., & Renshaw, R.D. (1984). Loneliness in childhood. *Child Development*, 55, 1456–1464.
- Asher, S.R., Parker, J.G., & Walker, D.L. (1996).
 Distinguishing friendship from acceptance: Implications for intervention and assessment. In W.M. Bukowski, A.F. Newcomb, & W.W. Hartup (Eds.), The company they keep: Friendship during childhood and adolescence (pp. 366–405). New York: Cambridge University Press.

- Baumeister, R.F., & Leary, M.R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Boivin, M., & Hymel, S. (1997). Peer experiences and social self-perceptions: A sequential model. *Developmental Psychology*, 33, 135–145.
- Brendgen, M., Vitaro, F., & Bukowski, W.M. (2000). Deviant friends and early adolescents' emotional and behavioral adjustment. *Journal of Research on Adolescence*, 10, 172–189.
- Cassidy, J., & Asher, S.R. (1992). Loneliness and peer relations in young children. *Child Development*, 63, 350–365.
- Crick, N.R., & Nelson, D.A. (2002). Relational and physical victimization within friendships: Nobody told me there'd be friends like these. *Jour*nal of Abnormal Child Psychology, 30, 599–607.
- Kochenderfer-Ladd, B.J., & Wardrop, J.L. (2001). Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories. *Child Development*, 72, 134–151.
- Ladd, G.W., Kochenderfer, B.J., & Coleman, C.C. (1997). Classroom peer acceptance, friendship, and victimization: Distinct relational systems that contribute uniquely to children's school adjustment? Child Development, 68, 1181–1197.
- Parker, J.G., & Asher, S.R. (1993). Friendship and friendship quality in middle childhood: Links with peer group acceptance and feelings of loneliness and social dissatisfaction. *Develop*mental Psychology, 29, 611–621.
- Parker, J.G., & Seal, J. (1996). Forming, losing, renewing, and replacing friendships: Applying temporal parameters to the assessment of children's friendship experiences. *Child Develop*ment, 67, 2248–2268.
- Parkhurst, J.T., & Hopmeyer, A. (1999). Developmental change in the source of loneliness in childhood and adolescence: Constructing a theoretical model. In K.J. Rotenberg & S. Hymel (Eds.), Loneliness in childhood and adolescence (pp. 56–79). New York: Cambridge University Press.
- Renshaw, P.D., & Brown, P.J. (1993). Loneliness in middle childhood: Concurrent and longitudinal predictors. *Child Development*, 64, 1271–
- Rubin, K.H., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships, and groups. In W. Damon (Editor-in-Chief) & N. Eisenberg (Vol. Ed.), Handbook of child psychology: Vol. 3. Social, emotional, and personality development (pp. 619–700). New York: Wiley.

Siblings' Direct and Indirect Contributions to Child Development

Gene H. Brody

Department of Child and Family Development and Center for Family Research, University of Georgia

ABSTRACT—Since the early 1980s, a growing body of research has described the contributions of sibling relationships to child and adolescent development. Interactions with older siblings promote young children's language and cognitive development, their understanding of other people's emotions and perspectives, and, conversely, their development of antisocial behavior. Studies address the ways in which parents' experiences with older children contribute to their rearing of younger children, which in turn contributes to the younger children's development. Finally, by virtue of having a sibling, children may receive differential treatment from their parents. Under some conditions, differential treatment is associated with emotional and behavioral problems in children.

 ${\bf KEYWORDS-} siblings; interaction; development; differential\ treatment$

The first studies of the contributions that older siblings make to their younger brothers' and sisters' development were conducted in Britain around the turn of the 20th century by Sir Francis Galton, a cousin of Charles Darwin. Sibling research, however, only recently has begun to address many of the issues that concern families. Parents, clinicians, and now researchers in developmental psychology recognize the significance of the sibling relationship as a contributor to family harmony or discord and to individual children's development. Since the early 1980s, a growing interest in the family has prompted research on those aspects of sibling relationships that contribute to children's cognitive, social, and emotional adjustment. These contributions can be direct, occurring as a result of siblings' encounters with one another, or indirect, occurring through a child's impact on parents that influences the care that other brothers and sisters receive. Differential treatment by parents is a third way in which having a sibling may contribute to child development. Children may be treated differently by their parents than their siblings are, or at least believe that they are treated differently. The development of this belief has implications for

Address correspondence to Gene H. Brody, University of Georgia, Center for Family Research, 1095 College Station Rd., Athens, GA 30602-4527.

children's and adolescents' mental health. In this article, I present an overview of the ways in which siblings' direct and indirect influences and parental differential treatment contribute to child development.

SIBLINGS' DIRECT CONTRIBUTIONS TO DEVELOPMENT

Currently, research suggests that naturally occurring teaching and caregiving experiences benefit cognitive, language, and psychosocial development in both older and younger siblings. Studies conducted in children's homes and in laboratories show that older siblings in middle childhood can teach new cognitive concepts and language skills to their younger siblings in early childhood. Across the middle childhood years, older siblings become better teachers as they learn how to simplify tasks for their younger siblings. The ability to adjust their teaching behaviors to their younger siblings' capacities increases as older siblings develop the ability to take other people's perspectives (Maynard, 2002). Older siblings who assume teaching and caregiving roles earn higher reading and language achievement scores, gain a greater sense of competence in the caregiving role, and learn more quickly to balance their self-concerns with others' needs than do older siblings who do not assume these roles with their younger siblings (Zukow-Goldring, 1995). When caregiving demands on the older sibling become excessive, however, they may interfere with the older child's time spent on homework or involvement in school activities. Caregiving responsibilities during middle childhood and adolescence can compromise older siblings' school performance and behavioral adjustment (Marshall et al., 1997).

Children who are nurtured by their older siblings become sensitive to other people's feelings and beliefs (Dunn, 1988). As in all relationships, though, nurturance does not occur in isolation from conflict. Sibling relationships that are characterized by a balance of nurturance and conflict can provide a unique opportunity for children to develop the ability to understand other people's emotions and viewpoints, to learn to manage anger and resolve conflict, and to provide nurturance themselves. Indeed, younger siblings who experience a balance of nurturance and conflict in their sibling relationships have been found to be more socially skilled and have more positive peer relationships compared with children who lack this experience (Hetherington, 1988).

Sibling relationships also have the potential to affect children's development negatively. Younger siblings growing up with aggressive older siblings are at considerable risk for developing conduct problems, performing poorly in school, and having few positive experiences in their relationships with their peers (Bank, Patterson, & Reid, 1996). The links between older siblings' antisocial behavior and younger siblings' conduct problems are stronger for children living in disadvantaged neighborhoods characterized by high unemployment rates and pervasive poverty than for children living in more advantaged neighborhoods (Brody, Ge, et al., 2003). Younger siblings who live in disadvantaged neighborhoods have more opportunities than do children living in more affluent areas to practice the problematic conduct that they learn during sibling interactions as they interact with peers who encourage antisocial behavior.

The importance of the sibling relationship is probably best demonstrated by older siblings' ability to buffer younger siblings from the negative effects of family turmoil. Younger siblings whose older siblings provide them with emotional support (caring, acceptance, and bolstering of self-esteem) during bouts of intense, angry interparental conflict show fewer signs of behavioral or emotional problems than do children whose older siblings are less supportive (Jenkins, 1992).

SIBLINGS' INDIRECT CONTRIBUTIONS

Conventional wisdom suggests that parents' experiences with older children influence their expectations of subsequent children and the child-rearing strategies that parents consider effective. Similarly, the experiences that other adults, particularly teachers, have with older siblings may influence their expectations and treatment of younger siblings. Research has confirmed the operation of these indirect effects on younger siblings' development. Whiteman and Buchanan (2002) found that experiences with earlier-born children contributed to parents' expectations about their younger children's likelihood of experiencing conduct problems, using drugs, displaying rebellious behavior, or being helpful and showing concern for others. Teachers are not immune from the predisposing effects of experiences with older siblings. As a result of having an older sibling in class or hearing about his or her accomplishments or escapades, teachers develop expectations regarding the younger sibling's academic ability and conduct even before the younger child becomes their student (Bronfenbrenner, 1977). Some parents and teachers translate these expectations into parenting and teaching practices they subsequently use with younger siblings that influence the younger children's beliefs about their academic abilities, interests, and choice of friends; children often choose friends whom they perceive to be similar to themselves.

Rather than viewing behavioral influence as flowing in one direction, from parents to children, developmental psychologists now recognize that these influences are reciprocal. The behaviors that children use during everyday interactions with their parents partially determine the behaviors that the parents direct toward their children. Children with active or emotionally intense personalities receive different, usually more negative, parenting than do children with calm and easygoing personalities. Some studies suggest that older siblings' individual characteristics may contribute indirectly to the quality of parenting that younger siblings receive. For example, East (1998) discovered that negative experiences with an earlier-born child lead

parents to question their ability to provide good care for their younger children and to lower their expectations for their younger children's behavior.

In our research, my colleagues and I explored the specific ways in which older siblings' characteristics contribute to the quality of parenting that younger siblings receive, which in turn contributes to younger siblings' development of conduct problems and depressive symptoms. The premise of the study was simple. Rearing older siblings who are doing well in school and are well liked by other children provides parents with opportunities for basking in their children's achievements. (Basking is a phenomenon in which one's psychological well-being increases because of the accomplishments of persons to whom one is close.) Using a longitudinal research design in which we collected data from families for 4 years, we found that academically and socially competent older siblings contributed to an increase in their mothers' self-esteem and a decrease in their mothers' depressive symptoms. Positive changes in mothers' psychological functioning forecast their use of adjustment-promoting parenting practices with younger siblings. Over time, these practices forecast high levels of self-control and low levels of behavior problems and depressive symptoms in the younger siblings (Brody, Kim, Murry, & Brown, 2003). We expect future research to clarify further the indirect pathways through which siblings influence one another's development, including the processes by which children's negative characteristics affect their parents' child-rearing practices. A difficult-to-rear older sibling, for example, may contribute over time to decreases in his or her parents' psychological well-being, resulting in increased tension in the family. Under these circumstances, the parents' negativity and distraction decrease the likelihood that a younger sibling will experience parenting that promotes self-worth, academic achievement, and social skills.

PARENTAL DIFFERENTIAL TREATMENT

Any discussion of siblings' contributions to development would be incomplete without acknowledging parental differential treatment. Having a sibling creates a context in which parental behavior assumes symbolic value, as children use it as a barometer indicating the extent to which they are loved, rejected, included, or excluded by their parents. Children's and adolescents' beliefs that they receive less warmth and more negative treatment from their parents than do their siblings is associated with poor emotional and behavioral functioning (Reiss, Neiderhiser, Hetherington, & Plomin, 2000).

Not all children who perceive differential treatment develop these problems, however. Differential parental treatment is associated with poor adjustment in a child only when the quality of the child's individual relationship with his or her parents is distant and negative. The association between differential treatment and adjustment is weak for children whose parents treat them well, even when their siblings receive even warmer and more positive treatment (Feinberg & Hetherington, 2001). Children's perceptions of the legitimacy of differential treatment also help determine its contribution to their adjustment. Children who perceive their parents' differential behavior to be justified report fewer behavior problems than do children who consider it to be unjust, even under conditions of relatively high levels of differential treatment. Children and adolescents who perceive differential treatment as unfair experience low levels of self-worth and have

Volume 13—Number 3 125

high levels of behavior problems (Kowal, Kramer, Krull, & Crick, 2002). Children justify differential treatment by citing ways in which they and their siblings differ in age, personality, and special needs. Sensitive parenting entails treating children as their individual temperaments and developmental needs require. Nevertheless, it is important that children understand why parents treat siblings differently from one another so that they will be protected from interpreting the differences as evidence that they are not valued or worthy of love.

FUTURE DIRECTIONS

Considerable work is needed to provide a comprehensive understanding of the processes through which siblings influence one another's cognitive development, language development, psychological adjustment, and social skills. Current studies can best be considered "first generation" research. They describe associations between older and younger siblings' behaviors and characteristics. Some studies have demonstrated that the prediction of younger siblings' outcomes is more accurate if it is based on older siblings' characteristics plus parenting, rather than parenting alone (Brody, Kim, et al., 2003). More research is needed to isolate influences other than parenting, such as shared genetics, shared environments, and social learning, before siblings' unique contributions to development can be specified. The next generation of research will address the ways in which sibling relationships contribute to children's self-images and personal identities, emotion regulation and coping skills, explanations of positive and negative events that occur in family and peer relationships, use of aggression, and involvement in high-risk behaviors.

Recommended Reading

Brody, G.H. (1998). Sibling relationship quality: Its causes and consequences. Annual Review of Psychology, 49, 1–24.

Feinberg, M., & Hetherington, E.M. (2001). (See References)

Kowal, A., Kramer, L., Krull, J.L., & Crick, N.R. (2002). (See References) Maynard, A.E. (2002). (See References)

Whiteman, S.D., & Buchanan, C.M. (2002). (See References)

Acknowledgments—I would like to thank Eileen Neubaum-Carlan for helpful comments. Preparation of this article was partly supported by grants from the National Institute of Child Health and Human Development, the National Institute of Mental Health, and the National Institute on Alcohol Abuse and Alcoholism.

REFERENCES

- Bank, L., Patterson, G.R., & Reid, J.B. (1996). Negative sibling interaction patterns as predictors of later adjustment problems in adolescent and young adult males. In G.H. Brody (Ed.), Sibling relationships: Their causes and consequences (pp. 197–229). Norwood, NJ: Ablex.
- Brody, G.H., Ge, X., Kim, S.Y., Murry, V.M., Simons, R.L., Gibbons, F.X., Gerrard, M., & Conger, R. (2003). Neighborhood disadvantage moderates associations of parenting and older sibling problem attitudes and behavior with conduct disorders in African American children. *Journal of Consulting and Clinical Psychology*, 71, 211–222.
- Brody, G.H., Kim, S., Murry, V.M., & Brown, A.C. (2003). Longitudinal direct and indirect pathways linking older sibling competence to the development of younger sibling competence. *Developmental Psychology*, 39, 618–628
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513–531.
- Dunn, J. (1988). Connections between relationships: Implications of research on mothers and siblings. In R.A. Hinde & J. Stevenson-Hinde (Eds.), Relationships within families: Mutual influences (pp. 168–180). New York: Oxford University Press.
- East, P.L. (1998). Impact of adolescent childbearing on families and younger siblings: Effects that increase younger siblings' risk for early pregnancy. Applied Developmental Science, 2, 62–74.
- Feinberg, M., & Hetherington, E.M. (2001). Differential parenting as a withinfamily variable. *Journal of Family Psychology*, 15, 22–37.
- Hetherington, E.M. (1988). Parents, children, and siblings: Six years after divorce. In R.A. Hinde & J. Stevenson-Hinde (Eds.), Relationships within families: Mutual influences (pp. 311–331). New York: Oxford University Press.
- Jenkins, J. (1992). Sibling relationships in disharmonious homes: Potential difficulties and protective effects. In F. Boer & J. Dunn (Eds.), Children's sibling relationships: Developmental and clinical issues (pp. 125–138). Hillsdale, NJ: Erlbaum.
- Kowal, A., Kramer, L., Krull, J.L., & Crick, N.R. (2002). Children's perceptions of the fairness of parental preferential treatment and their socioemotional well-being. *Journal of Family Psychology*, 16, 297–306.
- Marshall, N.L., Garcia-Coll, C., Marx, F., McCartney, K., Keefe, N., & Ruh, J. (1997). After-school time and children's behavioral adjustment. Merrill-Palmer Quarterly, 43, 497–514.
- Maynard, A.E. (2002). Cultural teaching: The development of teaching skills in Maya sibling interactions. Child Development, 73, 969–982.
- Reiss, D., Neiderhiser, J.M., Hetherington, E.M., & Plomin, R. (2000). The relationship code: Deciphering genetic and social influences on adolescent development. Cambridge, MA: Harvard University Press.
- Whiteman, S.D., & Buchanan, C.M. (2002). Mothers' and children's expectations for adolescence: The impact of perceptions of an older sibling's experience. *Journal of Family Psychology*, 16, 157–171.
- Zukow-Goldring, P.G. (1995). Sibling caregiving. In M.H. Bornstein (Ed.), Handbook of parenting: Vol. 3. Status and social conditions of parenting (pp. 177–208). Mahwah, NJ: Erlbaum.

126 Volume 13—Number 3