

Advice Given to Parents on Welcoming a Second Child: A Critical Review

Author(s): Laurie Kramer and Dawn Ramsburg

Source: *Family Relations*, Jan., 2002, Vol. 51, No. 1 (Jan., 2002), pp. 2-14

Published by: National Council on Family Relations

Stable URL: <https://www.jstor.org/stable/3700293>

## REFERENCES

Linked references are available on JSTOR for this article:

[https://www.jstor.org/stable/3700293?seq=1&cid=pdf-reference#references\\_tab\\_contents](https://www.jstor.org/stable/3700293?seq=1&cid=pdf-reference#references_tab_contents)

You may need to log in to JSTOR to access the linked references.

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

National Council on Family Relations is collaborating with JSTOR to digitize, preserve and extend access to *Family Relations*

## Advice Given to Parents on Welcoming a Second Child: A Critical Review\*

Laurie Kramer\*\* and Dawn Ramsburg

*A review of popular press books and articles for parents published between 1975 and 2000 was conducted to delineate the areas in which the advice given to parents about the transition to a second child is consistent with or diverges from the results of relevant research. Although popular advice reflects available research in certain areas (e.g., encouraging sibling caregiving), research to substantiate other directives (e.g., sibling preparation classes) is lacking. Key research findings about how to promote harmonious sibling relationships often are not represented in popular writings. These results highlight the need for researchers and popular press writers to acknowledge their complementary roles in disseminating information.*

Babies do not come with instruction manuals. This oversight has led many professionals concerned with child development and family life to create their own treatises on how to raise children. These enterprises have been quite successful, and popular press books are key resources to which parents turn when they are concerned about child-rearing issues. The quality of the advice given in parenting books has not been systematically evaluated, however. This is a critical limitation because it is essential that consumers of this information receive accurate information and recommendations that represent current best practices. In particular, family life educators and other practitioners need to know which types of publications they should consult and recommend, and researchers need feedback about parents' unanswered questions to help guide their future investigations.

In this review, we focus on a subset of the literature intended to help parents deal with the challenging tasks associated with welcoming a second child into the family and the initial establishment of a sibling relationship. Our purpose is to systematically delineate the areas in which the advice given to parents on this topic is consistent with or diverges from the results of empirical research. Our goals are to (a) promote the dissemination of accurate, empirically based information through popular literature, (b) help family life educators and other practitioners discriminate between substantiated and unsubstantiated advice and identify effective resources for parents, (c) alert researchers to the critical gaps between research and application, and (d) make specific suggestions about the types of studies needed to advance practice.

Schacter and Stone (1987) first raised concerns about the degree to which research-based information about sibling rela-

tionships is represented in popular materials. They wrote of the need to help consumers "distinguish between fact and fiction in the advice offered by parent manuals" (p. xiv). Their volume illustrated that even though the number of empirical studies on children's sibling relationships had dramatically increased during the 1980s, the implications of this research for practice had yet to be delineated and disseminated.

Research on children's sibling relationships has grown exponentially since Schacter and Stone (1987). Although sibling relationships continue to be an understudied topic relative to other family relationships, we now have a reasonable body of research-based information on which to draw.

### Considering Advice in Socio-Cultural-Historical Context

In considering the correspondence between research findings and popular advice, we restrict ourselves to parenting volumes and chapters published during the past 25 years (1975–2000). Admittedly, this is a broad time frame. However, the use of this period allows us to include some "classic" parenting manuals that parents continue to consult (e.g., Dodson, 1978; White, 1975). Many sociological, cultural, and historical changes have occurred during this period, and many of these changes have implications for the types of advice parents need and have been given for raising siblings. One prominent change is the increasing numbers of mothers in the workforce. Whereas only 31% of U.S. women with infants worked outside the home in 1976, this figure had increased to 59% in 1998 (Bachu & O'Connell, 2000). Mothers who juggle the often-competing demands of paid work and family need different kinds of advice about welcoming a second child than do mothers who are full-time homemakers. Furthermore, women in the labor force often rely on child care, and providers also need information about how to help children adjust to a new sibling. The extent to which popular writers tailor advice to dual working couples is unknown.

In addition, men's involvement in child rearing has grown (Pleck, 1997). In a comprehensive review of the literature, Pleck concluded that paternal caregiving offers numerous benefits to children, fathers, and mothers (particularly those who are employed). In recognition of this change, we would expect more

\*This research was supported through a cooperative agreement with the U.S. Department of Agriculture. We gratefully appreciate the contributions of Cyndy Loula and Debbie Pfisterer. Portions of this article were presented at the annual conference of the National Council of Family Relations, November 2001, Minneapolis, MN.

\*\*Department of Human and Community Development, University of Illinois at Urbana-Champaign, 1105 W. Nevada, Urbana IL 61801(l-kramer@uiuc.edu).

Key Words: child rearing, parenting, sibling relationships.

recent parenting manuals to frame advice to fathers as well as to mothers.

## Theoretical Factors

Theories about effective child-rearing practices also have changed over the past 25 years. As popular authors may base their parenting suggestions on the theoretical perspectives about child rearing that are currently in vogue, it is important to consider the types of theoretical models popular during this time. Psychodynamic, behavioral, social learning, attachment, and family systems theories represent some of the more influential theories.

Psychodynamic (Freud, 1920) and neo-Freudian theories (Adler, 1959; Dreikurs, 1964/1991; Levy, 1934) have had a long-standing influence on conventional wisdom about children's sibling relationships. Psychodynamic concepts such as displacement, jealousy, and sibling rivalry are accepted parts of our vernacular and have perpetuated the view that difficulties in children's sibling relationships often stem from resentment about the loss of parental attention accompanying a new child. Similarly, sibling rivalry often is considered to be universal, an unavoidable part of life with a sibling (Levy). The publication of Toman's (1961) theory on birth order reinforced Adler's earlier theory on the ways that children's position in the family may influence both their personality and their relationships with others. Thus, popular authors who follow a psychodynamic framework are likely to stress the ways that parents can minimize their child's distress by understanding their feelings about their position in the family.

More modern theoretical perspectives on child development (e.g., Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988; Brazelton, 1992) stressed the importance of the quality of parent-child interaction, attachment, and emotional responsiveness for building children's social and emotional competencies. Children, who are secure in their attachment to parents and who experience responsive parenting, are likely to get along more positively with their sibling. Thus, popular authors who adopt these theoretical perspectives are more likely to emphasize the importance of maintaining positive parent-child relationships during the transition to a second child.

In a different vein, Stewart (1990) followed a family systems theoretical paradigm to understand how the introduction of a second child creates stressors in the family system that affect both individual members of the family and family subsystems (e.g., the parental marital relationship). These stressors are considered to be normative—all families undergoing this transition are likely to experience profound changes in their organization to accommodate the new relationships that are introduced with a new child. Brought on by the entrance of a sibling, child behavior problems are understood in terms of their function or how they impact family dynamics. Thus, popular writers who follow a family systems approach may be more likely to emphasize ways to preserve marital harmony or to suggest methods for gaining support from extended family members or friends to meet the demands of stressors.

Finally, behavioral and social learning formulations (e.g., Bandura & Walters, 1963; Patterson, 1975) focus on the factors that lead children to acquire and perform various types of behavior. Advice on sibling-related issues following these theoretical perspectives are likely to focus on ways that parents may model, shape, and reinforce desired sibling-directed behaviors and extinguish or punish undesirable ones.

The degree to which popular writers base their suggestions on established theory is unknown. Although many writers may indeed draw on a theoretical approach when formulating their advice, they may not be explicit about this for fear that this information will not be of interest to their readers. It also is possible that popular writers lack a theoretical framework, however, basing their suggestions on their own clinical or personal experiences. We address this issue here by reporting the authors' stated theoretical base or rationale when given and by indicating when a theoretical stance appears implicit.

## Overview of the Study

After summarizing the procedures by which we reviewed the popular press literature, we provide an overview of the types of advice generally advanced through this medium about how families best adjust to a second child. We defined this adjustment period as stemming from the mothers' pregnancy to the younger child's second birthday. Following a description of each type of advice, we review the results of relevant empirical studies, compare and contrast findings, and speak to the appropriateness of the advice. Finally, we provide suggestions for enhancing the helpfulness of the popular press literature, make recommendations as to how researchers can assist by performing well-designed action-oriented research, and explain how consumers, practitioners, and educators may best use this literature.

## Data Collection and Analysis

To locate popular literature on siblings, multiple computer searches were conducted using online catalogs at local university and public libraries and retail catalogs from major book-sellers (e.g., Amazon.com). Subject headings included sibling, siblings, sibling relations/relationships, sibling rivalry, sibling conflict, brothers and sisters, parenting, parenting handbooks/manuals, and child rearing. This search was limited to literature published in books and book chapters between 1975 and 2000. The reference lists and bibliographies of these books and chapters were systematically examined to identify additional parenting resources.

To obtain relevant and current research about parenting siblings, the following databases were searched: CARL, ERIC, Psyclit, and Psychinfo. Subject headings were sibling, siblings, sibling relations/relationships, brothers and sisters, sibling rivalry, and sibling conflict.

Forty-seven parent resources were located. Of these, 16 were books entirely devoted to sibling relationships, and 31 were chapters in parenting or child-care books that focused on sibling relations. Each was then reviewed for the types of advice given, whether expressed either explicitly or implicitly. Explicit advice was defined as any direct suggestions made to parents about how to approach issues in children's sibling relationships. These suggestions involved clear directives (e.g., "Parents should tell children that they will become siblings in the second trimester of the mothers' pregnancy") and appeared as part of the text or in a table or list. Implicit advice was defined as the presentation of any information about effective or ineffective parenting strategies that parents may choose to use but that were not stated as clear directives. For example, the statement "Older children are less resentful when parents make changes in their sleeping arrangements long before their sibling's arrival" was considered to be implicit advice. Most of this advice was one to two sen-



tences that represented a meaningful and complete idea about how to promote optimal outcomes.

As we reviewed the parenting literature, a running list of advice was generated that included (a) publication information (e.g., title, author, date of publication), (b) the specific advice offered, and, when available, (c) the authors' theoretical perspective or rationale as to why this advice was appropriate. A content analysis was performed in which three research assistants worked independently to identify common themes. A grounded theory approach (Murphy, 1992; Strauss & Corbin, 1990) was followed in which the theoretical concepts and hypotheses used to describe a phenomenon were derived from the data itself through an iterative process. In this case, the thematic framework for describing the types of advice that appeared in the literature evolved from the systematic and repeated scrutiny of the raw data independently and collaboratively. Following Murphy, the drawing of comparisons between the advice offered by different writers helped to refine the underlying conceptual framework for organizing the data into categories.

This process of open coding (Strauss & Corbin, 1990) led to the identification of seven thematic categories. Each category reflected a basic question that parents may have about rearing siblings: "When should we have a second child?" "How should we prepare our firstborn child for the arrival of a sibling?" "How should we help our firstborn child to not feel resentful or displaced by the new baby?" "How much disorganization or regression should we expect in our firstborn child's behavior?" "How should we respond to our older child's expressions of frustration about the new baby?" "Should we encourage our firstborn child to help with the baby?" "How should we help our children accept and like each other?" Two additional categories were identified but were excluded from the final coding strategy because of their low occurrence: "When is it best for mothers to return to work?" "What are the best ways to arrange the home environment when parenting two or more children?"

The data were then coded using the final set of seven categories. To determine whether the particular passages of advice were accurately coded, two independent reviewers examined the same 25% of the data. A comparison of their coding indicated 93% agreement in identifying particular passages as advice and 100% agreement in categorizing the advice into the categories.

## Results

Table 1 provides citations for popular publications that were classified according to the category of advice with relevant research publications. The list of research publications is intended to be representative rather than exhaustive.

### *When Should We Have a Second Child?*

Parents often seek advice on when they should have their second child and 10 of the 47 popular writers (21%) spoke to this concern. White (1975) was quite direct on the issue of spacing: "Try not to have your children closer than three years apart" (p. 236, original emphasis). According to White, children younger than age 3 (and particularly those in the 2nd year of life) are likely to respond to the loss of parental attention with hostility and aggression, much of which will be directed to their new siblings. Infants who are faced with such "abusive early social experiences" (p. 236) will eventually adopt these behaviors themselves. White went on to explain,

the wider the gap, the more delightful the experience. The

five- or six-year old is much more inclined to genuinely enjoy the new baby. Bear in mind that grief or delight between young children plays a large role in determining how much pleasure a mother gets each day. In turn, how happy or distressed a mother is plays a large role in determining how rewarding a marriage will be. (p. 236)

Although not explicit, White's advice reflects the psychodynamic assumption that sibling rivalry is expected, particularly for children in the earliest stages of development. Also, he spoke to mothers rather than to both parents.

The popular literature also includes slightly different opinions about how to best space siblings: Schmitt (1991) wrote that "the ideal spacing between children is 2 or more years" (p. 325), whereas Schaefer and Millman (1982) urged parents to have a 3.5- to 5-year span between children. They reasoned that older firstborn children are more likely to "accept" a new sibling because of their advanced developmental capabilities. However, they are concerned that too large an interval can lead to a distant relationship.

More recent publications avoid specifying an ideal interval for spacing children. For example, Dunn (1995), Leonard (2000), and Wagner (1998) each recommended that parents consider the relative advantages and disadvantages of different age spacings and decide which is best for their family. They advise parents to consider their work situations, finances, age, health, energy level, and personal preferences.

*Relevant research.* There is some consensus that younger children are more likely than older children to experience negative reactions to the birth of a sibling. For instance, Nadelman and Begun (1982) found that mothers reported higher levels of immature behaviors, frustration and aggression, and apathy for children under 40 months of age compared with older children. Similarly, in their sample of firstborn children ranging in age from 18 to 43 months, Dunn and Kendrick (1982) found that older children adjusted more favorably to siblinghood than younger children. Kramer and Gottman (1992) observed 4-year-old children to respond more positively to their infant siblings than 3-year-old children. Thus, these findings support the assumption that relatively older firstborn children have more well-developed social cognitive abilities, allowing them to better understand and tolerate some of the changes in the family that result from the introduction of the new child. Furthermore, Teti, Bond, and Gibbs (1986) found that preschool-age older siblings in widely spaced dyads (more than 3 years apart) were more likely to create intellectually and socially stimulating environments for interaction that offered younger siblings opportunities to develop vocabulary, language comprehension, concrete reasoning, and problem-solving abilities than their counterparts in closely spaced dyads. These results are consistent with Zajonc's (1976) confluence model advancing that the intellectual climate for a given child in a family becomes diluted as more children are born into the family, particularly when births occur at close intervals.

Despite these associations between age and children's reactions to becoming a sibling, Dunn (1983) made a strong case in her review that age spacing (as well as other family structure variables such as birth order and gender constellation) play a relatively minor role in predicting the quality of children's sibling relationships. She pointed to a variety of social and affective dimensions of family life that account for larger proportions of variance in explaining sibling relationship quality, such as the

*Family Relations*

Table 1  
*Types of Advice Given to Parents on Welcoming a Second Child and Related Research*

Question	Popular Press Publications	Relevant Research
1. When should we have a second child?	Dunn, 1995; Leman, 1998; Leonard, 2000; McDermott, 1980; Schaefer & Millman, 1982; Schmitt, 1991; Tamony, 1995; Wagner, 1998; Weiss, 1981; White, 1975	Baydar, Greek, & Brooks-Gunn, 1997; Dunn, 1983; Grotevant, Scarr, & Weinberg, 1977; Klebanoff, 1999; Koch, 1954, 1955; Lewis & Kreitzberg, 1979; Minnett, Vandell, & Santrock, 1983; Nadelman & Begun, 1982; Pepler, Abramovitch, & Corter, 1981; Stewart, 1990; Sutton-Smith & Rosenberg, 1970; Teti, 1992; Teti, Bond, & Gibbs, 1986; Teti, Gibbs, & Bond, 1989; Zajonc, 1976; Zajonc & Markus, 1975; Zhu, Rolfs, Nangle, & Horan, 1999
2. How should we prepare our firstborn child for the arrival of a sibling?	Davis & Keyser, 1997; Eisenberg, Murkoff, & Hathaway, 1996; Goldenthal, 1999; Gookin, 1995; Lansky, 1990; Leach, 1997; Leonard, 2000; Reit, 1985; Samalin, 1996; Schor, 1999; Schmitt, 1991; Schaefer & Millman, 1982; Tamony, 1995; Wagner, 1998; Weiss, 1981	Dunn, 1983; Dunn & Kendrick, 1982; Gottlieb & Mendelson, 1990; Jalongo & Renck, 1985; Legg, Sherick, & Wadland, 1974; Thomas, Birch, Chess, & Robbins, 1961; Trause, 1978; Wilford & Andrews, 1986
3. How should we help our firstborn child to not feel resentful or displaced by the new baby?	Ames & Haber, 1982; Balter, 1988; Brazelton, 1992; Caplan & Caplan, 1977; Chess & Thomas, 1987; Davis & Keyser, 1997; Dodson, 1978; Dunn, 1995; Goldenthal, 1999; Goldstein, 1990; Guarendi, 1990; Heins & Seiden, 1987; Ilg, Ames, & Baker, 1981; Lansky, 1980, 1990; Leach, 1997; Leman, 1993; Leonard, 2000; Maguire, 1993; McDermott, 1980; Reit, 1985; Rubenstein, 1988; Samalin, 1996; Schaefer & Millman, 1982; Schmitt, 1991; Schwartzman, 1990; Sears, 1982; Spock, 1985/1969; Wagner, 1998; Weiss, 1981; White, 1975	Brody, Stoneman, & McCoy, 1992; Dunn & Kenrick, 1982; Gottlieb & Mendelson, 1990; Kendrick & Dunn, 1980; McHale & Pawletko, 1992; Reikauf & Trause, 1987; Ross, Filyer, Lollis, Perlman, & Martin, 1994; Thomas et al., 1961; Trause et al., 1981; Volling, 1997
4. How much disorganization or regression should we expect in our firstborn child's behavior?	Canter & Canter, 1993; Caplan & Caplan, 1977; Davis & Keyser, 1997; Dodson, 1978; Dunn, 1995; Eisenberg et al., 1996; Gookin, 1995; Lansky, 1990; Leach, 1997; Leonard, 2000; Reit, 1985; Rubenstein, 1988; Samalin, 1996; Sears, 1982; Spock, 1985/1969; Wagner, 1998; Weiss, 1981; Welch, 1988	Baydar, Hyle, & Brooks-Gunn, 1997; Dunn & Kenrick, 1982; Dunn, Kendrick, & MacNamee, 1981; Field & Reite, 1984; Kramer & Gottman, 1992; Legg, Sherick, & Wadland, 1974; Nadelman & Begun, 1982; Stewart, Mobley, Van Tuyl, & Salvador, 1987; Taylor & Kogan, 1973; Thomas et al., 1961; Trause et al., 1981
5. How should we respond to our older child's expressions of frustrations about the new baby?	Ames & Haber, 1982; Balter, 1988; Beebe, 1983; Canter & Canter, 1993; Caplan & Caplan, 1977; Davis & Keyser, 1997; Dodson, 1978; Dreikurs, 1991/1964; Dunn, 1995; Eisenberg et al., 1998; Faber & Mazlish, 1998; Ginott, 1985/1969; Goldstein, 1990; Ilg et al., 1981; Lansky, 1990; McDermott, 1980; McEwan, 1996; Neifert, 1991; Reit, 1985; Rubenstein, 1988; Samalin, 1996; Schaefer & Millman, 1982; Sears, 1982; Spock, 1985/1969; Thomson, 1994; Wagner, 1998; Weiss, 1981; Welch, 1988; Zweiback, 1991	Dunn & Kendrick, 1982; Field & Reite, 1984; Kramer, 1996; Kramer & Schaefer-Hernan, 1994
6. Should we encourage our firstborn child to help with the baby?	Balter, 1988; Beebe, 1983; Brazelton, 1992; Canter & Canter, 1993; Caplan & Caplan, 1977; Chess & Thomas, 1987; Dunn, 1995; Guarendi, 1990; Heins & Seiden, 1987; Ilg et al., 1981; Lansky, 1980, 1990; Leman, 1993, 1998; Leonard, 2000; Reit, 1985; Rubenstein, 1988; Samalin, 1996; Schmitt, 1991; Sears, 1982; Spock, 1985/1969; Wagner, 1998; Weiss, 1981; Zweiback, 1991	Bryant, 1989; Cicirelli, 1972; Dunn, 1988; Dunn & Slomkowski, 1992; Howe & Ross, 1990; Kramer & Noorman, 1993; Murphy, 1992; Stewart, 1983; Stewart & Marvin, 1984; Teti & Ablard, 1989; Weisner & Gallimore, 1977; Werner & Smith, 1979; Whiting & Whiting, 1975; Zukow-Goldring, 1995
7. How should we help our children accept and like each other?	Beebe, 1983; Davis & Keyser, 1997; Dunn, 1995; Goldenthal, 1999; Gookin, 1995; Lansky, 1990; Maguire, 1993; McDermott, 1980; Schor, 1999	Bryant & Crockenberg, 1980; Dunn & Munn, 1986; Kramer & Baron, 1995; Kramer & Radey, 1997; Kramer & Washo, 1990; Murphy, 1992; Tiedemann & Johnston, 1992

child's relationship with his or her parents. Various dimensions of parent-child relationship quality have been shown to be an important correlate of sibling relationship quality (e.g., Brody & Stoneman, 1987; Gottlieb & Mendelson, 1990). Additional factors that may influence the quality of the developing sibling relationship include the quality of the parents' marital relationship and support from extended family (Brody, Stoneman, & Burke, 1987), child characteristics such as temperament (Brody, Stoneman, & McCoy, 1994), and social factors such as the quality of the children's friendship relationships (Kramer & Gottman, 1992).

Health and medical issues also are important to consider when making decisions about spacing siblings. In a study of 173,205 infants born in Utah between 1989 and 1996, Zhu, Rolfs, Nangle, and Horan (1999) found that infants conceived less than 6 months after the birth of a previous child were more likely to be premature or to have a low birth weight than infants conceived 18 to 23 months after their closest sibling. Zhu and

colleagues believed that poor outcomes occurred because at 6 months mothers were still recovering from vitamin depletion, blood loss, reproductive system damage, and fatigue from the earlier pregnancy. It also is possible, however, that such effects are due to other medical and social conditions that may place women at risk for poor perinatal outcomes (Klebanoff, 1999), such as poverty, poor prenatal care, and stress.

In summary, there is evidence to suggest that a wider age spacing may facilitate older children's personal adjustment when becoming a sibling. Later-born siblings may also benefit from a wide age span because their older siblings are more likely to provide them with an intellectually stimulating context for interaction. However, other factors, such as the quality of children's relationships with family members and friends, may be more strongly associated with sibling relationship quality, at least during early childhood. These results argue against presenting parents with an "ideal" interval. As seen with the more recent parenting books, parents should be advised to plan their children

in ways that best meet their families' needs (Dunn, 1995; Wagner, 1998), with the caveat to wait 6 months after the birth of a child to conceive again (Leonard, 2000). Parents should be informed about the many other factors shown to influence the development of prosocial sibling relationships, however, such as quality relationships with other family members and friends.

### *How Should We Prepare Our Firstborn Child for the Arrival of a Sibling?*

Preparation for siblinghood is considered by many writers (32%) to be essential for enhancing children's adjustment and avoiding some of the most common negative reactions to siblinghood that include direct aggression toward the baby, attention-seeking behavior, and regression (Legg, Sherick, & Wadland, 1974). A host of preparation techniques are suggested by popular writers that relate to when and how to tell elder children that a new baby is expected, how to help children cope with separation from their mother during hospitalization, how to encourage the formation of realistic expectations about how family life will change, and how to maximize the possibility that children will accept their new sibling.

Authors agree that children should be told about the new sibling's arrival well before the due date. Goldenthal (1999) stated that even a 1-year-old child will sense some changes in his or her mothers' behavior or the family due to pregnancy and should be told in simple language about the new baby. The information should be presented in a positive light, for example, "This baby will be so lucky because you're going to be his/her big sister." However, authors concur that children should not be told too early in the pregnancy, because of the increased risk of miscarriage during the first trimester (Leach, 1997) and the child's impatience with expecting the baby to arrive soon after being told (Dunn, 1995; Faber & Mazlish, 1998). On the other hand, parents should not wait too long to inform their child because they run a risk that the child may learn about the pregnancy from someone else (Samalin, 1996). Forecasting the baby's arrival to a time that has meaning to the child (e.g., "the baby will arrive soon after Halloween") may help children adopt a more realistic time frame (Dunn, 1995).

Writers often advise parents to be sure that their child has information about what will happen to them when the mother goes to the hospital for delivery (e.g., where will s/he stay, who will look after him or her, for how long, etc.). In addition, authors such as Brazelton (1992), Balter (1988), and Schmitt (1991) suggest enrolling elder children in a sibling preparation class. Because many of these classes are conducted in hospitals or family birthing centers, children can see where their mother will be while learning about how they can help their parents care for their new sibling (Bliss, 1980; Sweet, 1979).

Phone calls and visits with the elder child often are recommended during the mother's hospitalization (Dunn, 1995). Parents should be aware that the child may be anxious during postnatal hospital visits, however. Although a prenatal visit may reduce their concerns, parents should not be surprised if children do show signs of regression or anger during the visit (Dunn, 1995). Dunn suggested that mothers give the elder child a present when he visits the hospital, both to "make him feel special" and to "be a connection with *you* that stays with him when he has to leave you and go home" (p. 59). Furthermore, Wagner (1998) recommended that children be prepared for the fact that their mother may be physically restricted after giving birth. Da-

vis and Keyser (1997) emphasized that parents should provide their elder children with a "support" person who can attend to their emotional needs during the mothers' hospitalization.

Parents often are advised to help their child develop realistic expectations about some of the changes that are about to occur in the family. For example, Samalin (1996) recommended that parents and children read stories together that depict the arrival of a new sibling. Having the child accompany the mother to doctor's visits and introducing him or her to other families who recently welcomed a new baby also are suggested to promote more realistic expectations (Dunn, 1995; Wagner, 1998). Wagner advised parents to be careful about promising their child a new baby "brother" or "sister" unless they are confident of the baby's gender. Parents are warned to avoid giving children the expectation that having a new sibling will bring "instant fun" (Gookin, 1995, p. 294) and will be an immediate playmate (Wagner). Furthermore, children should not be given the impression that the baby is for them; rather, parents should refer to the baby as "our baby" who is "joining the family" (Wagner).

In terms of preparation techniques that maximize the likelihood that the elder child will accept his or her sibling, writers agree that parents should emphasize to their child that their love will not be lessened by the new baby (e.g., Goldenthal, 1999; Wagner, 1998). Lansky (1990) proposed that parents use the lighting of candles to show an elder child how their love (represented by the flame of the "parent" candle) will not be diminished even when it is shared among children (demonstrated by the lighting of two "child" candles from the "parent" candle). Parents often are also advised to maintain the child's routines as much as possible. According to Dunn (1995), the arrival of a new sibling is not the time to persuade a child to give up their crib, bottle, or diaper, or try a new day-care program. Instead, Dunn advised parents to "keep on cuddling" (p. 49) to provide reassurance and support. Wagner emphasized that parents should not tell the child how to feel; for example, a child should not be told that she will love the new baby because love may not be her most salient emotion. Finally, involving the child in some of the preparations, such as selecting a new blanket for the crib or suggesting a name for the baby, also is recommended (Brazelton, 1992; Samalin, 1996; Wagner).

*Relevant research.* Little research has explored the efficacy of commonly prescribed preparation techniques. From parental interviews, Legg, Sherick, and Wadland (1974) identified a range of methods that parents tend to use. These include introducing the child to other babies, explaining to the child how the new baby is growing inside the mother (often accompanied by invitations to feel fetal movements), including the child in visits to the obstetrician or hospital, reading books about new babies, moving the child out of a crib and into a bed well before the sibling's arrival, and having fathers provide extra attention and support. Mothers reported that children adjusted best when they were prepared early, when alterations in their sleeping arrangements were introduced well beforehand, when children had contact with their mother during her hospital stay and when fathers were actively involved in their care. Children were reported to respond more negatively when they were unaware of who would be caring for them in their mother's absence, when the family moved to a new house before or after the birth, or when the child's routine was significantly disrupted.

Despite their popularity, only one study (Wilford & Andrews, 1986) investigated the efficacy of sibling preparation



classes, and these results are not impressive. Wilford and Andrews examined mothers' perceptions ( $n = 17$ ) of their preschool child's behavior in four domains (eating, sleeping, toileting, and general behavior, including sibling-directed behaviors) before their enrollment in a hospital-based sibling preparation class and 4 weeks following the birth. A no-treatment control group ( $n = 16$ ) served as a comparison group. No differences were found between the two groups; however, the small sample may have hampered the detection of effects. Thus, additional research is needed to establish the efficacy of sibling preparation classes. Such research should include a wide variety of outcome measures that are sensitive to variations in children's personal self-care behaviors and sibling-directed and parent-directed behaviors because it is possible that these classes are useful in ways not yet identified.

Similarly, little research has been conducted on the utility of reading books to young children about babies or becoming a sibling (Jalongo & Renck, 1985; Kramer, Noorman, & Brockman, 1999). Kramer and Radey (1997) included books and videotapes as part of a control condition in their evaluation of a social skills training program designed to help 4- to 7-year-old children interact more positively with their younger siblings. They found that children who had been shown books and videotapes on sibling relationships (without social skills training) engaged in more negative sibling interaction. Parents' spontaneous comments suggested that books and videotapes that included even brief portrayals of sibling animosity might heighten (or even create) children's awareness of such sibling interactions. Thus, parents may be best advised to select books that emphasize ways to achieve prosocial sibling relationships, even though such books are rare.

The value of having a child visit his or her mother and new sibling in the hospital is empirically supported. Trause (1978) observed mother-child reunions following separation for childbirth. Children who had not visited the hospital were more likely to either ignore or avoid their mothers upon reunion and to either ignore or respond negatively to their parents' question of whether they liked the new baby compared with children who had visited.

There is evidence to support the recommendation that parents offer high levels of support to their elder children. Gottlieb and Mendelson (1990) also found that maternal support, offered prenatally to preschool-age girls, perceived by their mothers to be distressed about the changes that would occur with the arrival of the new baby, was associated with enhanced adjustment during the initial postpartum period. Paternal support offered to firstborn children before the arrival also helps children adapt. For example, Thomas, Birch, Chess, and Robbins (1961) reported that the birth of a sibling was "not an especially disturbing event" (p. 802) for preschoolers whose fathers were actively involved in their care both before and after the birth.

Although rarely discussed in popular press books, longitudinal studies of the transition to the birth of a sibling have identified some key ways that parents may promote a positive adjustment among their firstborn children and encourage the development of prosocial sibling relations. In their landmark longitudinal study of 40 British families who were expecting a second child, Dunn and Kendrick (1982) demonstrated that mothers who talked to their older child before the baby's arrival about the new child as a person—with his or her unique set of needs, feelings, and desires—had children who interacted more positively with their sibling at 8 and 14 months postbirth.

Follow-up assessments revealed that such mother-child communications may promote children's social and emotional development and help them form a sense of themselves as individuals, who are separate but related to their sibling (Dunn, 1983). Another longitudinal study (Kramer & Gottman, 1992) extended these findings to show that preschool-age children, who before the birth of their sibling had interactions with their best friends that involved the ability to coordinate communication and play, engage in sustained fantasy play, and avoid unmanaged conflicts and a negative play environment, later interacted more positively with their 6- and 14-month-old siblings. Kramer and Gottman suggested that the best-friend relationship may help children to develop the social competencies needed to establish a positive relationship with a younger sibling.

In summary, more research is needed to evaluate the methods that parents are commonly advised to use to prepare their children for siblinghood. In addition, more work is needed to translate the results of research into practice.

### *How Should We Help Our Firstborn Child to Not Feel Resentful or Displaced by the New Baby?*

Popular press writings often warn parents that children are likely to feel jealous or displaced once a new baby arrives; 31 (66%) of the popular authors addressed this issue. As Leach (1997) described, "Things will probably go more smoothly if you can face the truth: you are asking your child to put up with feeling supplanted, and however you dress the facts up, she is going to mind" (p. 422).

Although not explicit, the psychodynamic notion of displacement is apparent here. Authors suggest that parents work to reduce feelings of resentment by reassuring the child that he or she still holds a special place in the family, spending time alone with the elder child, deemphasizing the significance of the new baby, upholding children's individual rights and property, pointing out similarities between the siblings, and not exposing the elder child to breast-feeding.

Parents often are advised to encourage their elder children to take pride in the role of the older sibling, a role that the new child can never hold (Caplan & Caplan, 1977). Goldenthal (1999) stressed that parents should tell their older children how important they will be to their younger sibling. The idea that with maturity comes rewards is prominent; in this regard are suggestions that parents assign more prestige to older children in the family by giving them new privileges such as a later bedtime, a higher allowance, or special activities with a parent (Lansky, 1980; Leman, 1993). Parents should praise children for demonstrating more independent, self-reliant behaviors but be careful not to raise their expectations for their older children to developmentally inappropriate levels (Wagner, 1998). For example, Rubinstein (1988) suggested that parents tell older children that they do not always need to be the mature one.

Many authors cite the importance of parents spending time alone with each child. Because most firstborn children never regain the level of parental attention they had before the baby's birth, Dunn (1995) suggested that parents routinely hire a babysitter for the infant so they can spend some special time with their elder child. Weiss (1981) reasoned that children will be less begrudging when they have to share parental attention if they are assured of receiving their own time with parents.

One intriguing suggestion made to reduce older children's

feelings of displacement is to de-emphasize the significance of the new baby. For example, Spock (1985/1969) wrote:

"It's tactful to play down the new baby in the early weeks. Don't act too excited about her. Don't gloat over her. Don't talk a lot about her. As far as is convenient, take care of her while the older one is not around" (p. 308).

Spock also cautioned parents not to go overboard ignoring the baby to protect the older sibling, however. He reasoned that if parents are too apologetic about the new baby, older children may develop the idea that their sibling is not worthy of kind treatment.

Parents are encouraged to protect each child's rights and see that possessions are apportioned fairly (Reit, 1985). Goldenthal (1999) stressed that children should not be forced to share their prized possessions and advised that some toys be designated as family property. Older children can be given a separate room or a chest with a lock to protect their things as a way to teach respect for each other (Spock, 1985/1969). Reminding elder children of the unilateral attention they received as a baby may deter complaints that the baby receives preferred treatment (Reit; Weiss, 1981).

One way to reduce feelings of jealousy is to point out similarities between the older child and sibling (Dunn, 1995). Discussions about the new baby that highlight what the elder child was like when he was born and how he grew are thought to heighten an older child's empathy for and acceptance of a new sibling. Having the child review baby pictures can foster such discussions.

Although this advice has changed substantially over time, historically mothers were advised to avoid breast-feeding in the presence of older children because, according to psychoanalytic theory (e.g., Levy, 1934), this practice may invoke feelings of displacement and sibling rivalry. For example, Spock (1985/1969) wrote, "Many young children feel the greatest jealousy when they see their mothers feeding the baby, especially at the breast" (p. 309). Recent authors suggest the opposite. This is in line with recent evidence that breast-feeding is the most desirable source of nutrition for newborns and greater cultural acceptance of the practice of breast-feeding. For example, Ilg et al. (1981) stated that mothers should allow the child to watch them breast-feed so they can learn in a safe, nurturing environment about a natural process of life. Weiss (1981) and Dunn (1995) advised mothers not to hide themselves when nursing because older children will sense embarrassment and guilt, or they will feel left out, confused, or possibly betrayed. Dunn recommended that mothers make nursing a special time with the older sibling by reading a book or cuddling, whereas Goldenthal (1999) suggested creating a "nursing box" so children can access their own toys and snacks.

*Relevant research.* Little empirical research evaluated the effectiveness of strategies to reduce children's feelings of resentment, jealousy, and displacement. As discussed, the provision of parental support, both before and after the arrival of a sibling, helps children adjust more favorably to siblinghood (Dunn & Kendrick, 1982; Gottlieb & Mendelson, 1990; Thomas et al., 1961). However, no research was found that assessed the value of scheduling parent-child "alone times."

Suggestions about treating children fairly are supported from research with children in middle childhood and adolescence. These studies highlight the importance of sibling's perceptions

of fair and differential treatment from parents affecting sibling relationship quality (Kowal & Kramer, 1997; McHale & Pawletko, 1992) and individual well-being (McHale, Crouter, McGuire, & Updegraff, 1995). Unfortunately, few studies have investigated these processes with younger children. Volling (1997) studied parents' reports of differential treatment with sibling dyads composed of a 7-year-old firstborn child and a preschool-age second born. Whereas both mothers and fathers reported directing affection to their two children equally, the older child was subjected to more parental discipline. Mothers reported that siblings were more positively involved and less hostile in their interactions when the two siblings were favored equally. These results suggest that children as young as 3 years of age may be sensitive to parental differential treatment. Rather than trying to diminish the significance of the new sibling, which may lead children to perceive parental favoritism toward the elder child, parents should be advised to try to treat children as equitably as is reasonable. The practice of treating siblings differently in particular areas, in accordance with children's unique needs, is supported by research that shows that adolescent siblings often view this form of differential treatment as justified (Kowal & Kramer).

Empirical research has not identified adverse effects of children's exposure to breast-feeding. In their observational study of mother-sibling interaction during the second-child transition, Kendrick and Dunn (1980) reported that there was a significant increase in mother-firstborn confrontations and deliberate naughty behavior by the firstborn children from pre- to postbirth intervals when mothers fed their infants in the older child's presence. This was more common among families in which bottle rather than breast-feeding was performed, however. In contrast, there was more positive involvement between mothers and first-born children when infants were breast-fed. Although it is not clear whether the characteristics that lead some families to chose breast-feeding over bottle-feeding may account for the observed differences, breast-feeding does not appear to exacerbate older children's immediate experience of stress.

No research is available to substantiate the advice that children's feelings of displacement are reduced when parents point out similarities between siblings, give older siblings greater privileges, or de-emphasize the significance of the new baby.

### *How Much Disorganization or Regression Should We Expect in Our Firstborn Child's Behavior?*

Eighteen (38%) authors advised parents to expect some regressive behavior in their older child after the sibling arrives (e.g., Dunn, 1995; Reit, 1985; Samalin, 1996; Weiss, 1981). According to Wagner (1998), regressive behaviors occur because infant behaviors reap parental rewards: "All of these behaviors are your child's way of reminding you that he or she still needs your care and attention. So don't brush them off, and don't scold or criticize him for being human" (p. 140). Similarly, Weiss suggested that parents should be reassuring, nonjudgmental, and patient in the face of regressive or immature behaviors. She reasoned that by allowing the child to temporarily regress to a former stage, parents are providing the child with a secure, accepting environment that will bolster his or her coping efforts. Reit reminded parents that with time, sympathy, and patience, regressive behaviors will disappear. Until they do, parents should relax their expectations for their older child (Canter & Canter, 1993; Samalin). In fact, Leach (1997) suggested that parents may



want to deliberately offer opportunities for their child to behave in an immature way to “make it clear that far from having to be ‘grown-up’ to keep your approval, you love her devotedly even if she decides to be more babyish than the newcomer” (p. 426). Welch (1988) concurred that children should not be “talked out of their distress” (p. 95) and suggested that the behavior will end once their needs for attention are met. Welch, a psychiatrist who follows an attachment theoretical perspective, advocated the use of physical holding to strengthen mother–child bonding throughout the transition. The intense physical and emotional contact that results from this type of holding and exchange of feelings is believed to provide an effective outlet for upset feelings. “Deep communication” (p. 41) between the mother and child further bolsters the child’s (as well as the mother’s) self-esteem and well-being, which leads to fewer negative behaviors being directed to the sibling. It is notable that Welch did not address strategies for enhancing father–child attachments.

Interestingly, none of the popular press writers tailored their advice about tolerating regressive behaviors to children of different developmental levels. For example, parents are not advised to treat the regressive behaviors performed by a 7 year old any differently than those performed by a 3 year old.

*Relevant research.* Several studies found that regressive or imitative behaviors increase soon after the birth of the second child but dissipate by the end of the 1st year. For example, Dunn and Kendrick (1982) observed that firstborn children demonstrated more immature and demanding behaviors immediately following the arrival of their sibling and that these behaviors sharply declined by 14 months. Similarly, Stewart, Mobley, Van Tuyl, and Salvador (1987) observed decreases in imitative, anxious, and confrontational behaviors from 1 to 12 months following the birth. Baydar, Hyle, and Brooks-Gunn (1997) found that negative effects associated with the transition, in terms of both the child’s personal well-being and interactions with mothers, substantially improved by 1 year postbirth. In some cases, recovery may be even swifter (Kramer & Gottman, 1992). In many of these studies (e.g., Dunn & Kendrick; Kramer & Gottman; Nadelman & Begun, 1982), the same children who demonstrated developmental setbacks also exhibited developmental advances in other areas.

Taken together, these results support the advice given in the popular literature to tolerate the appearance of immature behaviors following the arrival of a new sibling because these disruptions in self-care appear to be temporary and typically are resolved without formal intervention. The research does not address the issue of whether parents should actively provide children with opportunities to behave immaturely as suggested, however. Furthermore, the strategy of offering elder children “holding time” has not been validated by empirical research beyond case studies.

### *How Should We Respond to Our Child’s Frustrations About the New Baby?*

Twenty-nine (62%) authors suggested allowing older children to express their emotions concerning the events surrounding the entrance of the new baby. For example, Faber and Mazlish (1998) advised parents to acknowledge rather than dismiss their older child’s feelings about siblinghood particularly when these feelings are negative. According to Neifert (1991), young children may need help to articulate their feelings, so parents should try to put their feelings into words by asking questions such as,

“You don’t like me to spend so much time feeding the new baby, do you?” (p. 82). Reit (1985) instructed parents to let children talk about their feelings “in moderation” (p. 83), so hidden feelings of guilt are eliminated and a sense of trust and open communication is fostered. Ames and Haber (1982) and Rubenstein (1988) qualified this advice, stating that parents should not use the opportunity of their child’s expression of negative feelings to moralize or admonish them about their jealousy. Samalin (1996) suggested that parents let their child know that it is safe for them to express their anger about the new baby as long as they do not hurt him or her. Authors recognized that children hold a combination of positive and negative emotions (Davis & Keyser, 1997) and feelings of ambivalence (Dunn, 1995).

Authors suggested that parents help children find appropriate ways to release tension. For example, Dodson (1978) suggested giving children an opportunity to vent angry feelings, and others recommended instructing children to vent frustration by hitting a doll or stuffed toy (Reit, 1985), a punching bag (Beebe, 1983; Weiss, 1981), or by drawing pictures to represent their feelings (Ginott, 1969/1985). Still other authors suggested such expressions with the use of symbols (e.g., McEwan, 1996; Samalin, 1996; Welch, 1988). For example, Wagner (1998) suggested the use of puppets, and Weiss proposed play acting with a doll family.

*Relevant research.* Few studies directly evaluated the notion that children be allowed to express their negative emotions about siblinghood with the underlying assumption that such expressions will not translate into direct aggressive behaviors. Results from a longitudinal study show that an initial reaction of anger or antagonistic behavior to the sibling does not necessarily foreshadow poor sibling relations (Dunn & Kendrick, 1982). Instead, a reaction of withdrawal or apathy was more closely linked with later problems in the sibling relationship.

In addition, limited research has examined the significance of negative feelings about siblings as expressed through the medium of pretend or fantasy play. Kramer (1996) found that children who acted out negative concerns about the new baby in their fantasy play with a best friend, before the birth of the sibling, did not behave aggressively toward their younger sibling when this child was 6 and 14 months of age. Thus, the spontaneous expression of negative feelings through symbolic play may be a useful coping strategy for some children. It is not known, however, whether the suggestions of providing children with opportunities to express negative feelings (e.g., by encouraging them to hit a doll or drawing a pictures of their feelings) actually promotes adjustment to a sibling.

### *Should We Encourage Our Firstborn Child to Help With the Baby?*

Twenty-four (51%) authors suggested that parents provide their older child with opportunities to adopt a caregiving role. Wagner (1998) listed several caregiving tasks for elder siblings, including fetching diapers, soothing, playing with the baby, and serving as a teacher when the sibling is older. Helping to take care of the infant may enhance children’s sense of pride and pleasure while potentially reducing the workload of overburdened parents and increasing the amount of time that parents can spend with both children (Brazelton, 1992; Canter & Canter, 1993; Caplan & Caplan, 1977; Heins & Seiden, 1987; Reit, 1985; Samalin, 1996). However, some authors (e.g., Leach,

1997; Reit; Weiss, 1981) cautioned parents to not press children to perform child care duties if there is no interest.

*Relevant research.* Several studies have confirmed that children often provide caregiving to younger siblings and that such practices occur in a multitude of cultural contexts (e. g., Werner & Smith, 1979; Zukow-Goldring, 1995). However, little is known empirically about the benefits of sibling caregiving—especially when it involves infants—and how the process of caregiving affects the developing relationship between siblings. Nonetheless, sibling caregiving is assumed to benefit both the child receiving care and the child giving care. For example, from cross-cultural observations, Zukow-Goldring concluded that children serve as “culture brokers” as they socialize one another about specific family and cultural values and practices.

Furthermore, early experience with caregiving may promote elder children’s social understanding because they receive repeated opportunities to decode and respond to the emotional experiences of another (Dunn, 1988). The opportunity to become concerned with the needs and welfare of someone other than oneself may contribute to the development of perspective-taking abilities (Howe & Ross, 1990) and social understanding (Dunn & Slomkowski, 1992). Furthermore, these experiences may foster closer sibling relationships. For example, in a qualitative study of 17 school-age children’s reactions to the birth of a new sibling, Murphy (1992) reported that children whose parents invited them to help care for the infant tended to develop a relationship with this child that was characterized by mutual and empathic responding. Older children were observed to become “especially sensitive in reading infant cues and in responding contingently and empathically to the infant” (p. 158). In addition, Stewart and Marvin (1984) showed that older siblings can serve as sources of support for infants who are distressed by maternal separation, and others have demonstrated the positive contributions that siblings make as teachers for younger siblings (Cicirelli, 1972; Stewart, 1983).

Not all firstborn children are encouraged to become involved in the care of their infant siblings. Kramer and Noorman (1993) found that mothers who expected their older child to have problems adjusting to siblinghood (assessed during the last trimester of pregnancy) generally planned to avoid including the firstborn in infant caregiving activities. Instead, these mothers planned to provide their child with more individual parental attention. However, this gatekeeping process was negatively correlated with maternal perceptions of sibling relationship quality when the second child was 6 and 14 months of age. Whereas the restricted opportunity to participate in sibling caregiving may have contributed to poorer sibling relationship quality, it also is possible that mothers’ decisions to limit caregiving opportunities reflected the presence of child behavior problems or other characteristics associated with poorer sibling interaction. In either case, recognizing that parents’ prenatal expectations for how their older children will behave tends to be more negative than their actual behavior (Gullicks & Crase, 1993), parents should be advised to carefully consider the degree to which they gatekeep.

In summary, although little is known about how experiences with sibling caregiving contribute to sibling relationship quality, research findings that link firstborn involvement in infant care with later prosocial sibling interaction support the recommendations of popular press writers to offer children supervised opportunities to help with caregiving.

## *How Should We Help Our Children Accept and Like One Another?*

Surprisingly, relatively few authors ( $n = 9$ ; 19%) suggested specific techniques to promote positive affect and interaction between siblings. In one rare comment, Beebe (1983) advised parents to highlight to their older children that their younger sibling likes them, reasoning that it is easier to like someone who likes you. Similarly, Dunn (1995) counseled parents not to hesitate in pointing out to their older child how their younger sibling adores them. Statements such as “Look how you can make him laugh!” (p. 115) can do a great deal to strengthen positive feelings between siblings.

Similarly, few recommendations are given in popular press books about how parents should encourage prosocial sibling interactions. Gookin (1995) told parents to teach siblings how to play together but provided no specific advice as to how to accomplish this. Schor (1999) instructed parents to compliment their older child when he or she is gentle and loving toward the baby and Goldenthal (1999) proposed that children be given developmentally appropriate opportunities to help their sibling and that these efforts should be generously rewarded by parents. According to Goldenthal, children’s self-esteem is enhanced when they feel that they have something to contribute to the family, which increases their interest in helping their sibling on future occasions. Davis and Keyser (1997) offered concrete recommendations in their list of sibling “relationship builders”: encouraging siblings to nurture one another, share accomplishments, spend time together, make gifts for one another, make sibling books in which they honor one another, and participate in family meetings.

*Relevant research.* Although many parents complain about fighting and animosity between their children, they often do not recognize the degree to which they also are concerned about a lack of closeness and warmth between their children. Kramer and Baron (1995) studied 144 parents who reported about their standards or expectations for a “good” sibling relationship and their perceptions of their children’s actual interactions. Although a substantial proportion of mothers and fathers reported that sibling conflict was a problem in their family, the largest discrepancy between parents’ standards and their perceptions of their children’s actual relationship was warmth and closeness. Parents indicated that they wanted their children to behave more prosocially with one another, reinforcing the importance of providing parents with suggestions for encouraging positive affect and interaction.

The early stages of siblinghood may be a particularly important time for parents to promote positive affect and behavior. For example, a qualitative study of school-age children revealed that mutuality between siblings was more likely to develop when children were given “generous opportunities for uninterrupted, uncensored interaction” (Murphy, 1992, p.164) with their newborn siblings. The ability of parents to refrain from correcting or criticizing the elder child’s behavior was essential for promoting mutuality. Furthermore, Kramer and Washo (1990) identified several strategies that mothers were observed to use to promote prosocial sibling interactions between their preschool-age children and infant siblings. These behaviors included highlighting the activities and abilities of one child to the other, encouraging the older child to perform a caregiving task for the infant, including the two children in a common activity, and



praising prosocial sibling interaction. Higher levels of prosocial sibling interaction occurred in accordance with mothers' use of these facilitating behaviors; however, siblings were not able to sustain positive interaction when their mothers were absent. Thus, preschool-age children may need additional types of support and instruction (beyond those typically mentioned in the popular press) to achieve prolonged positive interaction with a sibling. Approaches that teach social skills relevant to sibling interactions may be most effective (Kramer & Radey, 1997).

## Discussion

Providing parents with accurate, recent information about child rearing is a significant challenge. Research results can be technical and complicated, qualities that make them difficult to communicate to parents especially if one wishes to avoid oversimplifying or ignoring inconsistent or contradictory findings (Griffore, 1980). Although writers of popular materials are generally skilled in disseminating information to parents, it is important to ensure that the information being conveyed is accurate (i.e., consistent with available research). It is equally important to ensure that researchers conduct well-designed studies that address parents' main child-rearing concerns from which popular writers can draw.

Our results highlight the areas in which the recommendations of popular writings are consistent with research findings, are not substantiated by research findings, or fail to fully incorporate the results of relevant research studies that have clear ramifications for prevention and intervention. We describe the implications of these findings for practice and research.

### *Areas of Consistency*

A notable area of consistency between the popular and research literatures includes advice about including firstborn children in the care of younger siblings. This advice is supported by research that illuminates the benefits of sibling caregiving, helping, and teaching. Similarly, recommendations made in popular books about tolerating the developmental setbacks that can accompany the arrival of a sibling are consistent with research that indicates that immature behaviors typically decrease without intervention soon afterward. Furthermore, the suggestion of recent writers (e.g., Leonard, 2000; Wagner, 1998) that parents not worry about identifying the ideal interval with which to space their children and to select an interval that will work best for their family is supported by research indicating that spacing plays a relatively minor role in shaping the quality of children's sibling relationships (Dunn, 1983). Finally, recommendations to breast-feed newborns, even if elder children are present, are consistent with recent research about the benefits of this form of nutrition and mother-infant interaction. Thus, family life educators and practitioners should feel confident in relaying these suggestions to families.

### *Areas of Inconsistency: Advice Given in Popular Literature Not Substantiated by Research*

Relatively little of the advice found in the popular writings was explicitly contraindicated by available research. Rather, a lack of research to support many of the stated recommendations was more common. For example, the effectiveness of various preparation techniques, such as hospital-based sibling preparation classes or including children in activities to welcome the baby, have yet to be thoroughly investigated. Similarly, there is

insufficient research on the effectiveness of methods advocated for minimizing children's feelings of being displaced and for encouraging children to express their feelings about their new sibling. This is not to say that these recommendations are ineffective; in most cases, the advice appears to be reasonable and benign. Nonetheless, without research support we cannot be confident that parents are receiving the most appropriate guidance.

We are reminded that the value of popular press materials is only as good as the research on which it is based, and the research that explicitly addresses how to best promote harmonious sibling relations is limited. Although basic research on sibling relationships has grown dramatically over the study period, only a handful of studies were designed to yield specific recommendations for practice. Furthermore, many of the studies that hold interesting implications for practice do not outline specific strategies for prevention or intervention in sufficient detail.

### *Areas of Inconsistency: Potentially Helpful Research Results Not Represented in Popular Literature*

Perhaps the most critical inconsistency between the research results and popular advice is that key findings on the factors that facilitate the development of harmonious sibling relationships are not communicated to parents in the popular literature. For example, rarely conveyed in popular works is Dunn and Kendrick's (1982) seminal finding that mothers who talked with their elder children about the new baby as a person with his or her own thoughts, feelings, needs, and desires had children who interacted more positively at postnatal observations.

Engaging in play with the younger sibling is a complicated task for preschool-age children (Kramer & Radey, 1997), and parents may need substantial guidance in learning how to scaffold prosocial sibling interactions (Kramer & Washo, 1990). Given the growing evidence that the quality of sibling relationships is consistent over time (Dunn, Slomkowski, & Beardsall, 1994; Stillwell & Dunn, 1985), it is critical that parents receive clear guidance about ways to promote prosocial interaction early to set the relationship on a positive trajectory. The types of relationship-building experiences that may be most helpful for parents include engaging children in supportive communications in which the feeling states, motivations, and intentions of the sibling are considered (Dunn & Kendrick, 1982) and promoting interactions with friends that involve the coordination of play and communication and the regulation of negative affect and conflict (Kramer & Gottman, 1992). The popular press could be an excellent venue for articulating how parents can provide such relationship-building experiences. In addition, the popular press can direct parents to the few programs that exist to help children develop sibling-relevant social skills (e.g., Kramer & Radey).

### *Socio-Cultural-Historical Factors*

The review of advice provides an interesting illustration of how advice and popular thinking may change over time with new social trends and the availability of new research and theoretical approaches. The types of advice found in parenting books has remained relatively consistent, however, with a few notable exceptions. For example, recent popular publications are less likely to dictate particular age spacings and more likely to encourage breast-feeding and broach how marriage may be affected by the introduction of another child.

Although young children are spending increasing amounts of time with their fathers and other familial and nonfamilial care-



givers, parenting manuals continue to be written for mothers. For example, Leonard (2000) began with the following passage: "Just when we thought we were finally getting the hang of it. Our stretch marks have started to fade; we've packed away our nursing bras and our maternity clothes" (p. 3). It is difficult to imagine many fathers feeling welcome, let alone enticed, to read books with such a tone. Even when speaking to mothers, attention to fathers' reactions, roles, and contributions during the second child transition are given only cursory attention (e.g., Wagner, 1998). We conclude that fathers are not receiving recent information about raising siblings.

Clearly, more action-oriented research is needed that takes into account parental concerns and also addresses how advice should be tailored to families that vary in size, structure, economic well-being, and cultural background. For example, findings that children from economically disadvantaged families experience more negative reactions to the birth of a sibling (Baydar et al., 1997) reinforces the importance of addressing the social context in which families live and function.

### *Theoretical Factors*

Most of the popular works examined did not specify the theoretical framework guiding their recommendations. Instead, commonsense rationale for specific advice was typical. Whether the authors lacked a theoretical framework or chose not to present one for fear of boring or confusing their readers is unknown. In some cases, the advice presented appeared stimulated by the authors' nonsystematic clinical observations (Welch, 1988) or personal experiences (Leonard, 2000). It is also the case that many researchers failed to clearly articulate their theoretical or conceptual frameworks.

Although not explicitly acknowledged, much of the advice continues to be influenced by psychodynamic concepts. A substantial number of parenting manuals examined conveyed that negative reactions to becoming a sibling were universal and stemmed from feelings of displacement or resentment about a loss of parental attention and love. Accordingly, primary attention was given to stabilizing the parent-child relationship around the sibling's birth. Instructing parents to be sensitive to their older child's needs for maternal closeness is excellent advice, because research consistently shows that mother-child confrontations tend to increase substantially soon afterward (Baydar et al., 1997; Dunn & Kendrick, 1982; Taylor & Kogan, 1973). Nonetheless, resentment over lost parental attention may not be the only reason that children develop poor sibling relationships. We argue that even when parent-child relationships are positive and stable, young children may fail to develop prosocial relationships with their siblings if no one teaches them how to engage in positive interaction and encourages them to do so. Thus, an emphasis on displacement and regression is less helpful because it does not incorporate skill building to promote sibling competence. It would be useful to introduce popular writers to a broader range of contextually based theoretical models that address family processes in addition to considering children's social, emotional, and cognitive development.

### *Implications for Practice*

Our results provide family life educators and practitioners with specific information about the quality of advice disseminated in popular resources. When selecting resources for families, educators should look for materials that cite, or at least seem consistent with, the results of current research or accepted the-

ory. Recentness of the publication is only one factor to consider, and publications that follow a sibling-relationship-building approach and that address the needs and interests of fathers, extended family members, and child-care providers will be most useful.

In addition, materials that tailor advice to families with children of different developmental levels, family structure characteristics, and cultural identifications will have broad appeal. We found that much of the advice is presented as if it applies to all families. Many resources do not specify the developmental levels of children who are most likely to benefit from the advice or at what point in the transition the advice is most appropriate. As a result, parents may be confused as to how to apply the advice. Family life educators can use their expertise to help parents filter the advice for suggestions that are most appropriate to their family, to help parents modify the recommendations to fit their unique needs, and to translate general advice into specific actions.

Family life educators and other practitioners are also in an excellent position to alert researchers to parents' unanswered questions about how to best help their children establish a positive relationship with one another. Direct feedback of this type might motivate more researchers to conduct studies aimed at providing parents with the specific information they most need.

## **Conclusions**

Few researchers and popular writers appear to acknowledge their interdependent relationship. Researchers usually do not play an active role in disseminating their findings to the general public, leaving their findings to be "picked up" and translated by popular writers and journalists. It is the rare professional (e.g., Judy Dunn) who both performs research and writes popular books. Greater appreciation of mutual interests and goals may lead researchers and popular writers to have more influence.

In summary, although the amount of research on the factors that facilitate the establishment of harmonious sibling relationships has grown dynamically since the early 1980s, this continues to be an area in need of more attention. Pronounced gaps exist between the advice offered in popular press materials and the available research. Researchers and popular writers may better help families by acknowledging the ways in which their efforts complement one another and by working together to effectively communicate the results of research to parents.

## **References**

- Adler, A. (1959). *Understanding human nature*. New York: Premier Books.
- Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: Assessed in the strange situation and at home*. Hillsdale, NJ: Erlbaum.
- Ames, L. B., & Haber, C. C. (1982). *He hit me first: When brothers and sisters fight*. New York: Warner.
- Bachu, A., & O'Connell, M. (2000). Fertility of American women: June 1998. *Current Population Reports*, No. P20-526. Washington, DC: U.S. Census Bureau.
- Balter, L. (1988). *Who's in control?* New York: Poseidon Press.
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. New York: Holt, Rinehart, & Winston.
- Baydar, N., Greek, A., & Brooks-Gunn, J. (1997). A longitudinal study of the effects of the birth of a sibling during the first 6 years of life. *Journal of Marriage and the Family*, 59, 939-956.
- Baydar, N., Hyle, P., & Brooks-Gunn, J. (1997). A longitudinal study of the effects of the birth of a sibling during preschool and early grade school years. *Journal of Marriage and the Family*, 59, 957-965.
- Beebe, B. M. (1983). *Tips for toddlers*. New York: Dell.

- Bliss, J. (1980). Sibling classes to promote family binding. *Dimensions in Health Services*, 57, 30–31.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Brazelton, T. B. (1992). *Touchpoints: Your child's emotional and behavioral development*. Reading, MA: Addison-Wesley.
- Brody, G. H., & Stoneman, Z. (1987). Sibling conflict: Contributions of the siblings themselves, the parent-child relationship, and the broader family system. *Journal of Children in Contemporary Society*, 19, 39–54.
- Brody, G. H., Stoneman, Z., & Burke, M. (1987). Family system and individual child correlates of sibling behavior. *American Journal of Orthopsychiatry*, 57, 561–569.
- Brody, G., Stoneman, Z., & McCoy, J. (1992). Parental differential treatment of siblings and sibling differences in negative emotionality. *Journal of Marriage and the Family*, 54, 643–651.
- Brody, G. H., Stoneman, Z., & McCoy, K. (1994). Forecasting sibling relationships in early adolescence from child temperaments and family processes in middle childhood. *Child Development*, 65, 771–784.
- Bryant, B. (1989). The child's perspective of sibling caretaking and its relevance to understanding social-emotional functioning and development. In P. Zukow (Ed.), *Sibling interaction across cultures: Theoretical and methodological issues* (pp. 143–164). New York: Springer-Verlag.
- Bryant, B., & Crockerberg, S. (1980). Correlates and dimensions of prosocial behavior: A study of female siblings with their mothers. *Child Development*, 51, 529–544.
- Canter, L., & Canter, M. (1993). *Surviving sibling rivalry: Helping brothers and sisters get along*. Santa Monica, CA: Lee Canter & Associates.
- Caplan, F., & Caplan, T. (1977). *The second twelve months of life: A kaleidoscope of growth*. New York: Gossett & Dunlap.
- Chess, S., & Thomas, A. (1987). *Know your child: An authoritative guide for today's parents*. New York: Basic Books.
- Cicirelli, V. G. (1972). The effect of sibling relationships on concept learning of young children taught by child teachers. *Child Development*, 43, 282–287.
- Davis, L., & Keyser, J. (1997). *Becoming the parent you want to be: A sourcebook of strategies for the first five years*. New York: Broadway Books.
- Dodson, F. (1978). *How to discipline with love*. New York: New American Library.
- Dreikurs, R. (1991). *Children: The challenge*. New York: Hawthorn/Dutton. (Original work published 1964)
- Dunn, J. (1983). Sibling relationships in early childhood. *Child Development*, 54, 787–811.
- Dunn, J. (1988). Sibling influences on child development. *Journal of Child Psychology and Psychiatry*, 29, 119–127.
- Dunn, J. (1988). *The beginnings of social understanding*. Cambridge, MA: Harvard University Press.
- Dunn, J. (1995). *From one child to two*. New York: Fawcett Columbine.
- Dunn, J., & Kendrick, C. (1982). *Siblings: Love, envy, and understanding*. Cambridge, MA: Harvard University Press.
- Dunn, J., Kendrick, C., & MacNamee, R. (1981). The reaction of first-born children to the birth of a sibling: Mothers' reports. *Journal of Child Psychology and Psychiatry*, 22, 1–18.
- Dunn, J., & Munn, P. (1986). Siblings and the development of prosocial behaviour. *International Journal of Behavioural Development*, 9, 265–284.
- Dunn, J., & Slomkowski, C. (1992). Conflict and the development of social understanding. In C. U. Shantz & W. W. Hartup (Eds.), *Conflict in child and adolescent development* (pp. 70–92). New York: Cambridge University Press.
- Dunn, J., Slomkowski, C., & Beardsall, L. (1994). Sibling relationships from the preschool period through middle childhood and early adolescence. *Developmental Psychology*, 30, 315–324.
- Eisenberg, A., Murkoff, H., & Hathaway, S. (1996). *What to expect the first year*. New York: Workman.
- Faber, A., & Mazlish, E. (1998). *Siblings without rivalry*. New York: Avon.
- Field, T., & Reite, M. (1984). Children's responses to separation from mother during the birth of another child. *Child Development*, 55, 1308–1316.
- Freud, S. (1920). *A general introduction to psycho-analysis*. New York: Live-right.
- Ginott, H. (1985). *Between parent and child*. New York: Avon. (Original work published 1969)
- Goldenthal, P. (1999). *Beyond sibling rivalry: How to help your children become cooperative, caring, and compassionate*. New York: Henry Holt.
- Goldstein, R. (1990). *Everyday parenting: The first five years*. New York: Penguin.
- Gookin, S. H. (1995). *Parenting for dummies*. New York: IDG Books Worldwide.
- Gottlieb, L. N., & Mendelson, M. J. (1990). Parental support and firstborn girls' adaptation to the birth of a sibling. *Journal of Applied Developmental Psychology*, 11, 29–48.
- Griffore, R. (1980). Toward the use of child development research in informed parenting. *Journal of Clinical Child Psychology*, 9, 48–51.
- Grotevant, H. D., Scarr, S., & Weinberg, R. A. (1977). Constellations with adopted and natural children: A test of the Zajonc and Markus model. *Child Development*, 48, 1699–1703.
- Guarendi, R. (1990). *Back to the family*. New York: Villard.
- Gullicks, J. N., & Crase, S. J. (1993). Sibling behavior with a newborn: Parents' expectations and observations. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 22, 438–444.
- Heins, M., & Seiden, A. (1987). *Child care: Parent care*. New York: Doubleday.
- Howe, N., & Ross, H. S. (1990). Socialization, perspective-taking, and the sibling relationship. *Developmental Psychology*, 26, 160–165.
- Ilg, F., Ames, S., & Baker, S. (1981). *Child behavior: From the Gesell Institute of Human Development*. New York: Harper & Row.
- Jalongo, M., & Renck, M. (1985). Sibling relationships: A recurrent developmental and literary theme. *Childhood Education*, 11, 223–251.
- James, H. S. (1996). The impact of female employment on the likelihood and timing of second and higher order pregnancies. Unpublished manuscript, University of Hartford, Connecticut.
- Kendrick, C., & Dunn, J. (1980). Caring for a second baby: Effects on interaction between mother and firstborn. *Developmental Psychology*, 16, 303–311.
- Klebanoff, M. A. (1999). The interval between pregnancies and the outcome of subsequent births. *New England Journal of Medicine*, 340, 643–644.
- Koch, H. L. (1954). The relation of "primary mental abilities" in five- and six-year-olds to sex of child and characteristics of his sibling. *Child Development*, 25, 209–223.
- Koch, H. L. (1955). Some personality correlates of sex, sibling position and sex of siblings among 5 and 6 year old children. *Genetic Psychology Monographs*, 52, 3–50.
- Kowal, A., & Kramer, L. (1997). Children's understanding of parental differential treatment. *Child Development*, 68, 113–126.
- Kramer, L. (1996). What's real in children's fantasy play? Fantasy play across the transition to becoming a sibling. *Journal of Child Psychology and Psychiatry*, 35, 749–767.
- Kramer, L., & Baron, L. (1995). Parental perceptions of children's sibling relationships. *Family Relations*, 44, 95–103.
- Kramer, L., & Gottman, J. (1992). Becoming a sibling: "With a little help from my friends." *Developmental Psychology*, 26, 685–699.
- Kramer, L., & Noorman, S. (1993, March). *Maternal expectations and children's adaptation to becoming a sibling*. Poster presented at the biennial meeting of the Society for Research in Child Development, New Orleans, LA.
- Kramer, L., Noorman, S., & Brockman, R. (1999). Representations of sibling relationships in young children's literature. *Early Childhood Research Quarterly*, 14, 555–574.
- Kramer, L., & Radey, C. (1997). Improving sibling relationships among young children: A social skills training model. *Family Relations*, 46, 237–246.
- Kramer, L., & Schaefer-Hernan, P. (1994). Patterns of fantasy play engagement across the transition to becoming a sibling. *Journal of Child Psychology and Psychiatry*, 33, 749–767.
- Kramer, L., & Washo, C. A. (1990, July). *Parental facilitation and gatekeeping of sibling relationships*. Presented at the annual conference of the International Network on Personal Relationships, Oxford, England.
- Lansky, V. (1980). *Best practical parenting tips*. Detroit, MI: Meadowbrook Press.
- Lansky, V. (1990). *Welcoming your second baby*. Deephaven, MN: Book Peddlers.
- Leach, P. (1997). *Your baby and child: From birth to age five*. New York: Knopf.
- Legg, C., Sherick, I., & Wadland, W. (1974). Reaction of preschool children to the birth of a sibling. *Child Psychiatry and Human Development*, 5, 3–39.
- Leman, K. (1993). *Bringing up kids without tearing them down*. New York: Delacorte.
- Leman, K. (1998). *The new birth order book: Why you are the way you are*. New York: Dell.
- Leonard, J. (2000). *Twice blessed*. New York: St. Martin's Press.
- Levy, D. M. (1934). Rivalry between children in the same family. *Child Study*, 11, 223–227.
- Lewis, M., & Kreitzberg, V. (1979). Effects of birth order and spacing on mother-infant interactions. *Developmental Psychology*, 15, 617–625.
- Maguire, J., with the Philadelphia Child Guidance Center. (1993). *Your child's emotional health*. New York: Macmillan.
- McDermott, J. (1980). *The complete book on sibling rivalry*. New York: Widenview.
- McEwan, E. K. (1996). "Mom, he hit me!": What to do about sibling rivalry. Wheaton, IL: Harold Shaw.

- McHale, S. M., Crouter, A. C., McGuire, S. A., & Updegraff, K. A. (1995). Congruence between mothers' and fathers' differential treatment of siblings: Links with family relations and children's well-being. *Child Development*, 66, 116-128.
- McHale, S. M., & Pawletko, T. M. (1992). Differential treatment of siblings in two family contexts. *Child Development*, 63, 68-81.
- Minnett, A. M., Vandell, D. L., & Santrock, J. W. (1983). The effects of sibling status on sibling interaction: Influence of birth order, age spacing, sex of child, and sex of sibling. *Child Development*, 54, 1064-1072.
- Murphy, S. (1992). Using multiple forms of family data: Identifying pattern and meaning in sibling-infant relationships. In J. Gilgun, K. Daly, & G. Handel (Eds.), *Qualitative methods in family research* (pp. 146-171). Newbury Park, CA: Sage.
- Nadelman, L., & Begun, A. (1982). The effect of the newborn on the older sibling: Mothers' questionnaires. In M. E. Lamb & B. Sutton-Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 13-37). Hillsdale, NJ: Erlbaum.
- Neifert, M. (1991). *Dr. Mom's parenting guide: Commonsense guidance for the life of your child*. New York: Penguin.
- Patterson, G. R. (1975). *Families: Applications of social learning theory to family life*. Champaign, IL: Research Press.
- Pepler, D. J., Abramovitch, R., & Corter, C. (1981). Sibling interaction in the home: A longitudinal study. *Child Development*, 52, 1344-1347.
- Pleck, J. H. (1997). Paternal involvement: Levels, sources, and consequences. In M. E. Lamb (Ed.), *The role of the father in child development* (pp. 66-103). New York: Wiley.
- Reikauf, D., & Trause, M. (1987). *Commonsense breast feeding: A practical guide to the pleasures, problems, and solutions*. New York: Atheneum.
- Reit, S. (1985). *Sibling rivalry*. New York: Valentine Books.
- Ross, H. S., Filyer, R. E., Lollis, S. P., Perlman, M., & Martin, J. L. (1994). Administering justice in the family. *Journal of Family Psychology*, 8, 254-273.
- Rubinstein, M. (1988). *The growing years: A guide to your child's emotional development from birth to adolescence*. New York: Atheneum.
- Samalin, N., with Whitney, C. (1996). *Loving each one best: A caring and practical approach to raising siblings*. New York: Bantam.
- Schachter, F. F., & Stone, R. K. (1987). *Practical concerns about siblings: Bridging the research-practice gap*. New York: Haworth.
- Schaefer, C. E., & Millman, H. L. (1982). *How to help children with common problems*. New York: Plume.
- Schmitt, B. D. (1991). *Your child's health*. New York: Bantam.
- Schor, E. (Ed.). (1999). *The American Academy of Pediatrics' caring for your school-aged child: Ages 5-12*. New York: Bantam.
- Schwartzman, M. (1990). *The anxious parent*. New York: Simon & Schuster.
- Sears, W. (1982). *Creative parenting*. New York: Everest House.
- Spock, B. (1985/1969). *Baby and child care*. New York: Dutton.
- Stewart, R. B., Jr. (1990). Sibling interaction: The role of the older child as a teacher for the younger. *Merrill-Palmer Quarterly*, 29, 47-68.
- Stewart, R. B., Jr. (1990). *The second child: Family transition and adjustment*. Newbury Park, CA: Sage.
- Stewart, R. B., Jr., & Marvin, R. S. (1984). Sibling relations: The role of conceptual perspective-taking in the ontogeny of sibling caregiving. *Child Development*, 55, 1322-1332.
- Stewart, R. B., & Mobley, L. A., Van Tuyl, S. S., & Salvador, M. A. (1987). The firstborn's adjustment to the birth of a sibling: A longitudinal assessment. *Child Development*, 58, 341-355.
- Stillwell, R., & Dunn, J. (1985). Continuities in sibling relationships: Patterns of aggression and friendliness. *Journal of Consulting Psychology and Psychiatry*, 26, 627-637.
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage.
- Sutton-Smith, B., & Rosenberg, B. G. (1970). *The sibling*. New York: Holt, Rinehart, & Winston.
- Sweet, P. T. (1979). Prenatal classes especially for children. *Maternal-Child Nursing Journal*, 3, 82-83.
- Tamony, K. (1995). *Your second pregnancy: What to expect this time*. Chicago: Chicago Review Press.
- Taylor, M. K., & Kogan, K. L. (1973). Effects of the birth of a sibling on mother-child interaction. *Child Psychiatry and Human Development*, 4, 53-58.
- Teti, D. M. (1992). Sibling interaction. In V. B. Van Hasselt & M. Hersen (Eds.), *Handbook of social development: A lifespan perspective* (pp. 201-226). New York: Plenum Press.
- Teti, D. M., & Ablard, K. E., (1989). Security of attachment and infant-sibling relationships: A laboratory study. *Child Development*, 60, 1519-1528.
- Teti, D. M., Bond, L. A., & Gibbs, E. D. (1986). Sibling-created experiences: Relationships to birth-spacing and infant cognitive development. *Infant Behavior and Development*, 9, 27-42.
- Teti, D. M., Gibbs, E. D., & Bond, L. A. (1989). Sibling interaction, birth spacing and intellectual/linguistic development. In P. G. Zukow (Ed.), *Sibling interaction across cultures: Theoretical and methodological issues* (pp. 117-139). New York: Springer-Verlag.
- Thomas, A., Birch, H. G., Chess, S., & Robbins, A. (1961). Individuality in the response of children to similar environmental situations. *American Journal of Psychiatry*, 117, 798-803.
- Thomson, J. (1994). *Natural childhood: The first practical and holistic guide for parents of the developing child*. New York: Simon & Schuster.
- Tiedemann, G. L., & Johnston, C. (1992). Evaluation of a parent training program to promote sharing between siblings. *Behavior Therapy*, 23, 299-318.
- Toman, W. (1993/1961). *Family constellations*. New York: Springer.
- Trause, M. A. (1978). Birth in the hospital: The effect on the sibling. *Birth and the Family Journal*, 5, 207-210.
- Trause, M. A., Voos, D., Rudd, C., Klaus, M., Kennell, J., & Boslett, M. (1981). Separation for childbirth: The effect on the sibling. *Child Psychiatry and Human Development*, 12, 32-39.
- Volling, B. L. (1997). The family correlates of maternal and paternal perceptions of differential treatment in early childhood. *Family Relations*, 46, 227-236.
- Volling, B. L., & Belsky, J. (1992). The contribution of mother-child and father-child relationships to the quality of sibling interaction: A longitudinal study. *Child Development*, 63, 1209-1222.
- Wagner, H. (1998). *And baby makes four*. New York: Avon.
- Weisner, T., & Gallimore, R. (1977). My brother's keeper: Child and sibling caretaking. *Current Anthropology*, 18, 169-190.
- Weiss, J. (1981). *Your second child*. New York: Summit Books.
- Welch, M. G. (1988). *Holding time*. New York: Fireside.
- Werner, E. E., & Smith, R. S. (1979). *Vulnerable but invincible*. New York: McGraw-Hill.
- White, B. L. (1975). *The first three years of life*. New York: Avon.
- Whiting, B. B., & Whiting, J. (1975). *Children of six cultures: A psychocultural analysis*. Cambridge, MA: Harvard University Press.
- Wilford, B., & Andrews, C. (1986). Sibling preparation classes for preschool children. *Maternal-Child Nursing Journal*, 15, 171-185.
- Zajonc, R. B. (1976). Family configuration and intelligence. *Science*, 192, 227-236.
- Zajonc, R. B., & Markus, H. B. (1975). Birth order and intellectual development. *Psychological Review*, 82, 74-88.
- Zhu, B., Rolfs, R. T., Nangle, B. E., & Horan, J. M. (1999). Effect of the interval between pregnancies on perinatal outcomes. *New England Journal of Medicine*, 340, 589-594.
- Zukow-Goldring, P. (1995). Sibling caregiving: Being and becoming and giving and getting. In M. Bornstein (Ed.), *Handbook of parenting. Vol. 4. Status and social conditions of parenting*. Hillsdale, NJ: Erlbaum.
- Zweiback, M. (1991). *Keys to preparing and caring for your second child*. New York: Barron's.