11

SIBLING CAREGIVING

Laurie Kramer and Tessa N. Hamilton

Introduction

In April 2017, a 5-year-old boy found his mother collapsed in the shower. Believing she had died, and not wanting his 2-month-old baby sister to be distressed, he wrapped her in a blanket and carried her to the safety of neighbors (Wasu, 2017). Although the boy's quick thinking was credited with saving his mother's life, his actions conveyed not only his concern for his mother, but also his commitment to providing care to his vulnerable sister. As evidenced in this story, even at a very young age, children are sensitive to their sisters' and brothers' physical and emotional needs and take action to respond to those needs (Dunn, 2007; Howe, Della Porta, Recchia, and Ross, 2016; Kramer, 2010). The fire department in his rural Arizona town named him an "honorary firefighter" for his bravery in caring for his mother. However, his role in providing both physical and emotional care to his infant sister received almost no recognition. This is just one example of how siblings' contributions to one another's care and development—which can be life changing—have been overlooked and understudied historically (Dunn, 2007; East, 2010).

The major objectives of this chapter are to bring stronger focus to the many ways siblings extend care and support to one another, to explore how these actions both reflect, and are formative for, individual and family well-being, and, further, how parents can best set the stage for continued care and support throughout siblings' relationship across the life course.

Sibling Caregiving as "Unseen" Phenomena

Siblings have great access to one another during childhood and adolescence and, as discussed ahead, have been shown to be critical agents of one another's socialization (Kramer and Conger, 2009). As reported by McHale, Updegraff, and Whiteman (2012), using 2010 Current Population Survey data (King et al., 2010), a higher percentage of youth in the United States live with one or more siblings (82.22%) than live with a father figure (78.19%). Time use data have shown that in middle childhood, siblings spend more time with one another than with parents, peers, or by themselves (McHale and Crouter, 1996). For example, Updegraff, McHale, Whiteman, Thayer, and Delgado (2005) found that adolescent siblings in Mexican American families living in the southwestern United States spent an average of 17 hours per week in shared activities—more time than they spent with parents or other family members. Through nightly telephone interviews with a U.S. sample who was largely of European American descent, Tucker, McHale, and Crouter (2008) found adolescent siblings spend

an average of 10 hours per week in shared activities. Despite such access, it is curious that whereas the contributions of mothers and fathers are well regarded in promoting children's social, cognitive, and emotional development and caregiving, siblings are not often recognized for the critical sources of caregiving they too provide.

The lack of attention to the caregiving acts exchanged among siblings may be understandable, at least in Western technological societies, as much of sibling interaction may occur outside of parents' view, especially when parents work outside of the home. Thus, the efforts siblings take to care for one another may not be readily apparent, often hidden, or "unseen." As discussed in this chapter, although parents may not be privy to all of siblings' exchanges of care, support, and emotional assurance, interactions such as these nonetheless play a formative role in both older and younger siblings' development (Maynard, 2002).

In many non-Western or rural agrarian societies, where sibling caregiving is recognized as occurring very frequently (Zukow-Goldring, 1989), parents take for granted the significance of these acts. According to Zukow-Goldring (2002), "The majority of the world's parents assume their children will become competent caregivers and depend on their assistance in socializing younger sisters and brothers" (p. 257). Thus, sibling caregiving may be visible, but yet not considered as anything out of the ordinary. As a result, adults may fail to recognize its significance for children's development and the well-being of the family as a whole.

The Challenge of Promoting Sustained Sibling Caregiving

Mothers and fathers of young children frequently express, in surveys and interviews, the desire that their children will not only get along well in childhood, but also continue to provide care and support to one another, especially in later adulthood when parents themselves are no longer present or able to help (Kramer and Baron, 1995). Because it is not likely that individuals will provide care and support to a sibling they have a conflictual or hostile relationship with, parents often inquire about how they can best nurture the types of sibling relationships that will encourage their offspring to be consistent sources of care and support to one another as adults (Kramer and Gottman, 1992). The quality of the relationship that siblings establish early in childhood often sets the stage for more supportive and caring relationships later in life. Longitudinal examinations of continuity and change in sibling relationship quality, in the absence of intervention, have shown high levels of consistency in positive and negative forms of sibling interaction over time (Dunn, 2007; Kramer and Kowal, 2005). Although we lack data about whether these patterns persist into adulthood, it is likely that the exchange of support and care among siblings later in life depends on the quality of the relationship established much earlier in life. The question of how parents may best encourage sustained caregiving among siblings is addressed later in this chapter.

Siblings as Agents of Socialization

In an earlier review of sibling caregiving, Zukow-Goldring (2002) presented evidence from around the globe to advance that, even as children, siblings not only give care to their younger sisters and brothers to protect them from harm and meet some of their basic physical needs, but also more importantly serve as "competent socializing agents" (p. 254), introducing their sisters and brothers to ways of acting and knowing that may be distinct from what they learn from parents and other adults. Relatedly, children serve as "culture brokers" (p. 278), moderating relationships their siblings establish within their immediate family, community, culture, and society. This chapter extends Zukow-Goldring's conceptualization of siblings across the globe as capable agents of socialization and culture brokers to further explore how siblings contribute to one another's socioemotional development and well-being throughout the life course. In so doing, this chapter adopts Bronfenbrenner's (1977) ecological

perspective to understand the various contextual influences that may shape expressions of sibling caregiving, focusing first on broader, more distal systemic contexts and then narrowing to examine the ways in which sibling caregiving is shaped by proximal familial processes, and by the characteristics that children and parents bring to these relationships. The discussion begins by examining definitions of sibling caregiving, the forms it may take, and its potential roles in socioemotional development.

Definitions of Sibling Caregiving

The range of activities included in definitions of sibling "caretaking" and "caregiving"—terms used relatively interchangeably in the literature—reflects the plurality of perspectives on the role siblings may play in one another's well-being and development. Hafford (2010) regarded sibling caregiving as the temporary transfer of parental authority or supervisory responsibilities to an older sibling, such as when a parent asks a child to "look after" a sibling while the parent is absent. In a similar vein, East and Hamill (2013) considered typical sibling caregiving responsibilities to include "monitoring to keep from harm, feeding or helping to feed, getting siblings ready for school, and helping with bathing, dressing or homework" (p. 543). These definitions may best fit many of the forms of sibling caregiving observed within families in Western technological societies in which sibling care is considered to be auxiliary to parental care. Parents are understood as the primary providers of care to children, if not performing it themselves, then at the very least assuming responsibility for determining the types of care a child needs (and should receive) and who should provide it (e.g., whether particular tasks should be delegated to a sibling, other family member, or childcare provider).

Taking a more comprehensive and global perspective, Weisner and Gallimore (1977) conceptualized sibling caregiving broadly, as

> activities ranging from complete and independent full-time care of a child by an older child to the performance of specific tasks for another child under the supervision of adults or other children; it includes verbal or other explicit training and direction of the child's behavior, as well as simply "keeping an eye out for younger siblings."
>
> *(p. 169)*

Weisner and Gallimore's definition takes into account many of the forms of sibling caregiving that are observed in non-Western or agrarian societies, where children may be delegated extensive caregiving responsibilities, or on occasion in Western societies when a child or adolescent provides extensive care when a parent is incapacitated (East, 2010). It is notable that Weisner and Gallimore (1977) included "all kinds of *socialization, training,* and routine responsibilities one child assumes for others" (p. 169, emphasis added) as part of their definition of sibling caregiving, reinforcing the notion that siblings can and do teach one another a myriad of things, and that their contributions to one another's welfare extends well beyond the provision of tangible support and supervision. This broader conceptualization of sibling caregiving remains influential and has been adopted in numerous studies of sibling caregiving (Bryant, 1982; Yi et al., 2012).

Bryant (1989) further broadened the definition of sibling caregiving to include those instances in which siblings turn to one another "*for counsel and emotional support*" (p. 143, emphasis added). Especially as adolescents, caregiving may involve confiding, self-disclosure, and sharing advice (Bryant, 1989; Howe, Aquan-Assee, Bukowski, Rinaldi, and Lehoux, 2000), mediating frustration with parents (Bank and Kahn, 1975), advocating on one's behalf (Burke, Arnold, and Owen, 2015; Li, 2006), or serving as a sounding board when trying to solve problems or plan for the future (Tucker, Barber, and Eccles, 1997). Although the inclusion of emotional support as part of the definition of sibling caregiving was a departure from more traditional definitions, there is supporting evidence for considering emotional responsiveness as part of sibling caregiving. For example, the majority of

Scottish primary school children interviewed by Kosonen (1996) named their sibling as the person they would first turn to for assistance when worried (56%) or on encountering something they needed help with (63%). In fact, siblings were identified as confidantes more frequently than were fathers and only slightly less frequently than mothers. Thus, as Bryant (1989) advanced, siblings represent an important component of children's social/emotional support network; their role as agents of support may be particularly heightened for children who have an otherwise limited support network (Kosonen, 1996).

Perceptions about which tasks and responsibilities are considered appropriate forms of sibling caregiving vary considerably in accordance with culture (Cicirelli, 1994; Maynard, 2002; Nuckolls, 1993; Weisner and Gallimore, 1977; Zukow-Goldring, 2002), ethnicity (Burton, 2007), gender roles (Grigoryeva, 2017), family structure (East, 2010), and socioeconomic status (McMahon and Luthar, 2007), among other factors. Thus, it is important that the working definition of sibling caregiving be broad enough to encompass the forms of sibling caregiving that occur in diverse corners of the world.

In following Bryant (1989), Weisner and Gallimore (1977), Zukow-Goldring (2002), and East (2010), this chapter adopts a relatively expansive definition of sibling caregiving, considering it to encompass a range of actions and processes that are directed toward meeting the physical and safety needs of a sibling, and those that might promote the social, cognitive, and emotional development and well-being of that child and her family. That is, sibling caregiving is considered to include various forms of teaching and instruction and socialization as well as the provision of emotional support and comfort, companionship, advice, and financial and other forms of assistance and advocacy. Definitions of sibling caregiving are also recognized as culturally relevant, that is, the types of caregiving that are observed are expressions of the culture in which it is embedded and must be understood using a cultural lens.

This chapter presents an analysis of the wide-ranging forms that sibling caregiving may take across development and across geography with an eye toward describing the variety of functions that sibling caregiving may fulfill to enhance the well-being of individuals, families, and society. The chapter begins with a brief review of the various forms that sibling caretaking may take in Western and non-Western cultures. This discussion brings focus to the characteristics of siblings (and their families) that are likely to place them in the respective roles of providers and recipients of care, the typical precipitants and duration and extent of sibling caregiving, and the different forms of caregiving that tend to emerge with development. The chapter next addresses the functions that sibling caregiving may hold for families in diverse cultures, including serving as a family economic survival strategy or as a mechanism for providing respite or support to parents. Particular emphasis is placed on the functions sibling caregiving may serve in both reflecting and advancing individuals' socioemotional development. Next, a broad set of sociocultural factors (i.e., cultural, historical, and legal factors) are examined for their potential influences on sibling caregiving. This is followed by an examination of potential familial influences, including family members' ethnic and cultural identities, family structure, and experiences of stress and economic pressures. A review of intrafamilial factors that may influence sibling caregiving follows that includes attention to the characteristics that parents and children bring to family interactions, such as their personality, health, and mental health. The chapter culminates in a discussion of how sibling caregiving can be promoted through evidence-based practice and experimental interventions, and how it may be best studied in future research. We begin with an exploration of the various forms that sibling caregiving takes around the globe.

Forms of Sibling Caregiving

Although the forms, functions, and frequency of sibling caregiving may vary dramatically across the globe, "social historians have verified that children have been expected to provide some caregiving in

much of our history and in most cultures" (East, 2010, p. 56). On the basis of extensive ethnographic and cross-cultural studies, numerous researchers (Cicirelli, 1994; Larson and Verma, 1999; Nuckolls, 1993; Weisner and Gallimore, 1977; Zukow-Goldring, 1989, 1995, 2002) observed significant variability in both societal expectations and specific sibling caregiving behaviors that occur across nations, cultures, ethnicities, and economic groups. In light of the diverse factors that may differentially set the occasion for sibling caregiving, it is useful to consider caregiving activities in terms of the following four dimensions: (1) who provides care to whom, (2) the precipitants of sibling caregiving (e.g., whether caregiving is spontaneously offered on recognition of a sibling's need or is performed upon an adult's direction), (3) the duration and/or extent of the caregiving activity, and (4) the developmental periods during which caregiving occurs.

Who Provides Care to Whom

Age

Across the globe, children generally begin to provide care to siblings between the ages of 5 and 10 years, with daughters (mostly eldest daughters) more often assuming such responsibilities than sons (Zukow-Goldring, 2002). Kosonen (1996) reported that Scandinavian adults consider children as young as 7 years of age, and Norwegian adults consider children 10–12 years of age, capable of household task management, including caring for siblings in the absence of adult supervision. In cultures where mothers have high workloads, children may be prompted to begin even earlier, as young as 3 years of age (Morrongiello, MacIsaac, and Klemencic, 2007). In large families, caregiving burden may be greatest when the age span between children is wide, with elder children (typically daughters) expected to take greater responsibility for the care of younger siblings (East, 2010; Zukow-Goldring, 2002).

Birth Order

Although elder siblings are more frequently observed to extend care to younger siblings rather than vice versa (Hafford, 2010; Weisner and Gallimore, 1977), it is also important to recognize that caregiving can be, and often is, reciprocal. Even as toddlers, children may extend some forms of care to elder siblings, for example, by comforting an older sibling who is hurt (Dunn and Munn, 1985). Howe et al. (2016) observed sequences of teaching and learning among sibling dyads across two time points in early childhood, approximately 2 years apart. Across both observations, older siblings were more likely than younger siblings to engage in teaching; however, younger siblings' efforts to teach their older siblings significantly increased from the first observation (at 2 years of age) to the second (at 4 years of age). These findings suggest that, even in early childhood, forms of caregiving can be reciprocal, and that the presumption that only elder children give care to younger siblings should be avoided.

Patterns of sibling caregiving among children very close in age—as may be the case with twins, half, or stepsiblings—are not yet fully understood. As reviewed by Tancredy and Fraley (2006), across development, twins are more likely to use one another as attachment figures than are non-twins, as they more often demonstrate key attributes of attachment relationships, (i.e., proximity seeking, separation distress, the use of the other as a safe haven during times of stress, and as a secure base from which to explore the world). In a cross-sectional online study of attachment relationships, Tancredy and Fraley (2006) found that young adults who had a twin were more likely than those without a twin to regard their sibling as an attachment figure, especially if they were encouraged to spend time together during childhood, and as adults, shared interests, experienced empathy for another, and "included the other as part of the self" (p. 87). Age differences between non-twin siblings did not

predict attachment relationships. This suggests that having a developmental advantage, such as when one sibling is significantly older or more experienced than another, does not need to exist for siblings to provide meaningful levels of support and care.

Gender

Research with U.S. samples indicates that older sisters are more often caregivers of younger siblings than older brothers (Bryant, 1989; Dodson and Dickert, 2004; Garner, Jones, and Palmer, 1994). Larson and Verma (1999) conducted cross-cultural comparisons of how male and female adolescents within postindustrial (e.g., European nations, North American nations, East Asian nations) and nonindustrial (e.g., Bangladesh, India, Kenya, Nepal, Philippines, Mexico, Botswana, Kenya) societies spend their time. In nonindustrialized societies, especially those in which children do not regularly attend formal schools, girls in early childhood spent nearly 2 hours per day on household tasks, including cooking and caring for younger children; this number rose to nearly 7 hours per day by late childhood and early adolescence. Thus, in many nonindustrial societies, by the time female children reach adolescence, they are expected to engage in comparable amounts of household tasks (including childcare) as adult females. In comparison, participation in household tasks by adolescents in the postindustrial countries they studied was less than 1 hour per day (Larson and Verma, 1999).

Although boys also participated in household tasks (including childcare) in nonindustrialized societies, they devoted significantly fewer hours than girls (Larson and Verma, 1999). Although boys were observed to participate in household maintenance, these were more commonly outdoor or out-of-home tasks (e.g., running errands, yard work, caring for animals) rather than sibling care tasks. However, according to Larson and Verma, important opportunities exist for nonsupervisory forms of caregiving—as may be the case in instances where a male child or adolescent teaches a brother how to carry out particular tasks and acquire culturally relevant skills—and such forms of sibling instruction may occur in a more gender equitable manner. Even considering cross-cultural differences, Larson and Verma (1999) concluded that "across nearly all populations—regardless of economic development or schooling—girls spend more time in household labor than do boys" (p. 707).

Taken together, these findings indicate that across cultures, the provision of care and supervision of siblings—prominent components of household tasks in all societies—are tasks more often expected of female than male offspring, and of older rather than younger offspring. In Western technological societies, where female out-of-the home workforce participation may be more prevalent, considerably less emphasis appears to be placed on female participation in household labor than in non-Western societies. An important caveat is that some cross-cultural studies may overlook forms of sibling caregiving that males are more likely to provide, such as informal forms of teaching and ensuring the safety of siblings in out-of-home contexts. For example, in a study of low-income families in San Francisco who immigrated from the Philippines, China, and Latin America, young adult daughters reported providing more physical forms of assistance, but sons were more likely to provide financial assistance to their siblings, parents, and extended family members (Fuligni, Tseng, and Lam, 1999). Thus, the degree to which males participate in the care of siblings may be under-recognized and appreciated.

Family Structure and Composition

Children who live with a father or father figure may provide relatively lower levels of caregiving than children in single-parent homes; mothers in two-parent families may provide more caregiving themselves, as they do not bear the full burden of providing income for the family (East, 2010). Furthermore, children who have large extended families nearby may not be required to provide as much care to siblings as those with less access to adult relatives (East, 2010). Changes in family structure and

composition, such as those precipitated by parental divorce and remarriage, offer unique opportunities and challenges for sibling caregiving.

Ethnicity

Margolis, Fosco, and Stormshak (2014) surveyed adolescents in urban U.S. settings to understand whom they considered to be the adults who provide care to them. Approximately 35% of Latin American, 17% of African American, and nearly 10% of European American adolescents listed older siblings as members of their network of caregivers. The higher percentage of Latin American (and to a lesser degree, African American) youth who considered adult siblings to be significant caregivers likely reflects a greater endorsement of the cultural value of familism (East and Hamill, 2013; Updegraff et al., 2005) in which, among other things, importance is placed on family members (including children) assuming responsibility for one another's care. African American families have long-standing traditions of providing care to family members (Dilworth-Anderson et al., 2005) and may have greater interest in providing support to siblings in later adulthood than do European American families (Gold, 1990). Namkung, Greenberg, and Mailick (2017) found that European American adults providing personal care to an ill or disabled sibling experienced greater caregiver burden (i.e., more depressive symptoms and lower ratings of life satisfaction) than minority (African American and Latin American) caregivers.

Personal Characteristics

Personal characteristics of children may influence the degree to which they are asked to assume caregiving duties. Perceived levels of competence, emotional maturity, and/or the possession of specific abilities or skills (including those that other family members may not have, for example, due to a language barrier, mental or physical health issues, or developmental delays) may make some children more likely candidates for caregiving assignments than other children in the family, regardless of their birth order (Burton, 2007; East, 2010). Particularly in instances in which one child experiences physical, cognitive, or developmental limitations, birth order may play a lesser role in determining which child assumes a caregiving role (McHale and Gamble, 1989). As children reach more advanced developmental stages, caregiving tends to become increasingly reciprocal (Tucker et al., 1997).

Precipitants of Sibling Caregiving

Although many instances of sibling caregiving, especially in early childhood, are prompted by a parent or other adult, child-initiated forms of caregiving also regularly occur (Maynard, 2002; Morrongiello et al., 2007). Provisions of emotional assurance, comfort, and support that occur spontaneously may have different implications for children's development than caregiving that is performed at the direction of parents or other adults.

Externally Directed Caregiving

Requests to provide care to siblings are more often initiated by parents than by other adults. These requests can range from discrete or time-bound duties (e.g., "Make sure you watch out for your sister on your way to school.") to broader, continuous expectations (e.g., "I'm counting on you to always look out for your brother."). Although parents may assign these tasks with the aim of obtaining help in an immediate situation or to gain brief respite, particularly in societies in which children's care of siblings is truly needed, parents may issue these directives to help children develop requisite skills they believe children will need as adults (Weisner and Gallimore, 1977). However, resentment may also

emerge, particularly if children feel that parents do not demonstrate sufficient appreciation for their mandated assistance. Such resentment may be directed at the parent who directed them to provide care or at the sibling whose mere presence may be perceived as precipitating this inconvenience (Dunn and Kendrick, 1982; Murphy, 1993). Song and Volling (2015) found that preschool children's compliance with their mothers' requests to help change their infant sibling's diaper was predicted by preschoolers' temperament (i.e., soothability) and a cooperative coparenting relationship.

Parents may begin to communicate the importance of supporting one another's physical and emotional needs and prepare their children to provide care to siblings at an early age. Howe and Rinaldi (2004) observed mothers in a laboratory setting as they prepared to leave their toddlers for a short period in the care of their preschool-age siblings. Prior to their departure, mothers provided the elder sibling with strategies and instructions to care for their younger child—who they anticipated would become distressed in their absence. Caregiving was observed as the preschoolers held, kissed, distracted, and offered reassuring statements to their siblings.

Morrongiello et al. (2007) conducted telephone interviews with a sample of Canadian mothers to estimate the percentage of time younger siblings (age 2 years on average) were supervised in the home by an elder brother or sister (age 6 years on average) while they were busy with tasks in another room in the home. Mothers indicated that sibling supervision occurs, on average, 11% of the time that children are home. (It should be noted that Morrongiello et al. focused on sibling supervision, and not other forms of sibling caregiving.) However, because mothers were asked to report only on the times that they specifically designated an older sibling to provide care for a sibling, and not those times when siblings spontaneously assumed responsibility, the researchers acknowledged that this statistic is likely an underestimate of the sibling caregiving that routinely occurs (Morrongiello et al., 2007).

Child-Initiated Caregiving

Caregiving that is provided voluntarily by a child, without prompting or request from a parent, may be particularly meaningful, and of a higher quality, than if it is extrinsically motivated (Deci and Ryan, 2000) or directed by an adult. Even at a very early age, children have the capacity to independently identify instances in which their sibling requires assistance or support and respond accordingly (Dunn, 1983, 2007). Stewart (1983) found that half of the preschoolers he observed who were left alone in a waiting room without their mothers in a simulated "Strange Situation" spontaneously extended comfort, assurance, and care to their infant siblings. Maynard (2002) observed that Mayan children as young as 4 years of age independently identified and initiated opportunities to teach younger siblings new skills. In many cultures, very young children imitate the forms of childcare they observe their parents performing, both in fantasy (e.g., doll play) and in reality with actual siblings (Kramer, 1996). With what begins as emulation of parental styles of caregiving, with practice and over time, children develop their own styles of caregiving (Weisner and Gallimore, 1977).

A young child's ability to independently identify a younger sibling's need and then implement a strategy (without prompting) to meet that need represents a significant milestone in the development of social understanding (Dunn, 1983). As part of Dunn's longitudinal research conducted in the natural setting of family's homes in Cambridge, England, Dunn and Munn (1985) observed young firstborn children as they anticipated the emotions of their family members during conflict and attempted to address these emotions. As 2-year-olds, the children responded to the distress of an infant sibling with kisses, pats, and going to their mother for assistance. By 3 years, children were better able to tailor the type of comfort they provided to the presumed cause of the infant's distress, such as by returning a pacifier that the baby had dropped. Observations such as these led Dunn and Munn (1985) to suggest that through early encounters with siblings, children develop a "practical understanding of the emotional state of the other family member and how to alleviate it" (p. 490).

Duration and Extent of Caregiving Behaviors

Caregiving behaviors can range from momentary activities—such as assisting with a diaper change or helping a younger sibling grasp an object out of his reach—to those that extend over time and across occasions, as when an adolescent mentors a sibling in a complex task (e.g., learning to tie a shoe or addressing a difficult situation with a peer). Factors such as whether the caregiving that is provided is brief or extensive—occurs on a one-time basis or is part of a series—and changes in accord with the growing capabilities of both the recipient and provider of care can be quite helpful for understanding the functions that sibling caregiving plays in particular families. For example, in families in which a parent (or child) is incapacitated by illness, disability, or other hardship, children may engage in more sustained and intensive caregiving of siblings (East, 2010). Children in families such as these may assume near-primary responsibility for ensuring that siblings eat breakfast, make it to school on time, and complete homework (McMahon and Luthar, 2007).

The extent to which a child assumes responsibility for the care and well-being of a sibling could be described in terms parallel to those offered by Lamb, Pleck, Charnov, and Levine (1985) to describe fathers' level of involvement in supporting their children's development: (1) interaction, or the extent of fathers' actual interaction with children; (2) availability, or the degree to which an individual is potentially available to children for interaction but perhaps not actually engaging with them; and (3) responsibility, or the role fathers take to ensure that children are taken care of or have developed to manage a system of care that addresses their overall well-being (e.g., setting up childcare, making medical appointments, and securing resources for these tasks). Pleck (2010) revised his conceptualization of father involvement to include three primary components (positive engagement activities, warmth and responsiveness, and control) as well as two auxiliary dimensions of responsibility (social and material forms of care that may be provided outside of interaction with the child, such as making plans or arrangements to meet a child's social needs, and process responsibilities, such as recognizing a child's needs rather than waiting to be asked to fulfill a child's needs). Sibling involvement in the provision of care for a brother or sister can similarly be understood as simultaneously functioning at one or more of these levels. For example, a child could be highly engaged with a sibling, not only by being available and interactive, but also because the sibling perceives and takes responsibility for some aspects of the sibling's well-being (e.g., taking custody of minor siblings when a parent is unable to fulfill parenting duties).

Thus, the duration and extent of sibling caregiving responsibilities that a child assumes vary considerably depending on family structure and functioning, and in accord with their own developmental level and other personal characteristics. Siblings deserve consideration for raising the visibility and value of their contributions to families. Although it is tempting (especially in Western technological societies) to believe that sibling caregiving is a nonessential, "bonus" contribution, in some families (such as those with parents affected by psychological disorders or addiction), it is may be entirely critical to the survival of individual children.

Sibling Caregiving Across the Life Course

Forms of sibling caregiving vary significantly across the life course, with brief, discrete instances of sibling caregiving—such as consoling a crying brother or sister—emerging spontaneously in early childhood (Dunn, 1983, 2007) and becoming more complex, intense, and sustained as siblings age (Lu, 2007).

Early Childhood

Toddler-age children typically seek contact with a sibling when distressed or when separated from a parent, particularly when older siblings respond with comfort and reassurance (Teti and Ablard,

1989). Children as young as 2 years old regularly demonstrate an interest in helping and serving the needs of others (Hepach, Vaish, Grossmann, and Tomasello, 2016; Hepach, Vaish, and Tomasello, 2017), including participating in the care and nurturance of their brothers and sisters (Dunn, 1983, 2007). Caregiving activities during early childhood may be relatively simple in nature (e.g., help feed or entertain a sibling while a parent is out of the room), may be imitations of acts they have observed adult caregivers to provide (e.g., verbally soothe a baby when she cries), and be initiated via adult assignment. As children become acquainted with the more complex tasks associated with meeting the needs of another, over time, they become able to independently identify opportunities to provide care (Dunn and Kendrick, 1982).

Middle Childhood

From her cross-cultural review of sibling caregiving practices, Zukow-Goldring (2002) observed that sibling caregiving activities tend to increase from early to middle childhood, with caregiving responsibilities increasing substantially around the time that the elder sibling reaches 5 years of age and peaking sometime between ages 7 and 13 or 14 years. Parents may assign more chores and household responsibilities to children as they reach middle childhood, which may include minding a sibling (Bryant, 1982). In some cases, parents may instruct siblings to share responsibilities (such as household tasks), which provide ample opportunities for more experienced siblings to teach or coach their brother or sister how to carry out tasks successfully (Bryant, 1982). Of course, carrying out these shared activities can also be a context for bossiness, bickering, irritation, and conflict (Kosonen, 1996).

Middle childhood is a period of tremendous developmental growth in the realms of personal and ethnic identity development (Umaña-Taylor, 2011), social understanding (Saarni, 1999), social skills (Downey, Condron, and Yucel, 2015), and interpersonal problem-solving (Rubin and Rose-Krasnor, 1992) and, as such, can be an important period for the development of prosocial sibling relationships (Stormshak, Bullock, and Falkenstein, 2009). It may be during middle childhood that siblings first begin to view one another as critical sources of knowledge, skills, and strategies that are especially useful for navigating the social worlds beyond the family. For example, the shared experience of going to middle school (which parents have only limited knowledge of) can enable "academic caretaking" (Bryant, 1982, p. 107) in which a more experienced sibling may use his or her inside knowledge to coach the other (e.g., help with homework or explain strategies for meeting teachers' seemingly excessive demands). Additionally, siblings' exchanges of emotional forms of support and guidance may also increase during middle childhood (Kosonen, 1996), especially when they, or their family, face critical transitions or stressors (Bryant, 1982).

Adolescence

Involvement in caregiving, especially in terms of the provision of physical care and supervision, appears to decrease in adolescence, particularly as the need for care declines and each sibling develops stronger relationships with individuals outside of the family. However, engagement in emotional forms of caregiving often persists throughout adolescence and into adulthood (Cicirelli, 1995; Margolis et al., 2014; Maynard, 2002; Tucker et al., 1997). Particularly in late adolescence, older siblings are perceived as serving as important care providers for younger siblings through sharing advice and emotional support (Tucker et al., 1997). In home and telephone interviews, Tucker, McHale, and Crouter (2001) found that first- ($M = 16$ years) and second-born siblings ($M = 13$ years) frequently sought each other out for advice on both nonfamilial (e.g., peer, academics) and familial issues, making them particularly poised to provide support during periods of stress. Adolescents often view their siblings as more knowledgeable and understanding about their experiences—occurring both within and external to the family—than parents or other adults (Tucker et al., 1997). In particular,

adolescents may find their sisters and brothers to be helpful in managing relationships with parents (e.g., how to avoid making a parent angry), given that they have more knowledge of, and experience with, the parent than would a peer or nonfamilial confidante (Tucker et al., 1997).

The influence of siblings may become more powerful than parental influence during adolescence, possibly as powerful as peers (McHale et al., 2012). For example, concurrent rates of sexual activity and adolescent pregnancy (East and Jacobson, 2001), alcohol and drug use (Rende, Slomkowski, Lloyd-Richardson, and Niaura, 2005; Rowe and Gulley, 1992), and delinquent acts (Criss and Shaw, 2005) among adolescent siblings suggest mutual influences on one another's behavior. For example, delinquent acts performed by younger siblings in middle adolescence were predicted by higher levels of hostility and coercion with their same-sexed sibling in early adolescence (Slomkowski, Rende, Conger, Simons, and Conger, 2001). Slomkowski et al. also found that in sibling dyads with an older brother who engaged in delinquent acts, warmth and support in early adolescence were predictive of their younger brother's later delinquency. In contrast, lower levels of sibling warmth and support predicted younger sibling delinquency in dyads with an older sister who engaged in delinquent acts. In addition to suggesting a "partner in crime" model for brothers in which they socialize one another to engage in deviant acts, it is also possible that adolescents' engagement in deviant activities increases if they have been introduced by a sibling to peers who model such behaviors and/or they become part of a deviant peer group (Criss and Shaw, 2005).

It is also possible that, as adolescents, individuals may have stronger predilections and/or powers to resist offers of guidance and support from sisters and brothers (Campione-Barr, 2017). For example, if the recipient of caregiving views the siblings' assistance as an infringement of independence, or as insufficient recognition of their growing capabilities, the sibling may become indignant or resistant (McHale, Kim, and Whiteman, 2006) and conflict and resentment may follow (East, 2010). Resistance toward care and support may be especially likely if siblings lack a warm relationship (Cicirelli, 1995).

Emerging and Early Adulthood

Although younger siblings are most often the recipients of emotional caregiving during middle childhood and adolescence, the level of support and care exchanged between siblings begins to become more equitable in emerging adulthood (Stocker, Lanthier, and Furman, 1997; Tucker et al., 1997). However, as young adults leave the family for college and begin their careers, sibling contact generally lessens in frequency and becomes increasingly voluntary and discretionary—they are not "required" to interact—except perhaps during certain ritual occasions (Cicirelli, 1995). Emotional support and caregiving continues in many families as siblings intentionally maintain their relationships through phone, e-mail, and text communications; greater sibling relational maintenance generally occurs among siblings who report greater closeness and intimacy than hostility (Lindell, Campione-Barr, and Killoren, 2015; Myers and Goodboy, 2010).

As siblings enter early adulthood, their help may be especially useful for navigating challenges associated with establishing careers, romantic relationships, and financial security (Conger and Little, 2010; Stocker et al., 1997). For example, in families of first-generation college students, elder siblings may be given full responsibility for guiding younger siblings with their applications for admission and financial aid as well as helping with their preparation and adjustment to college life and later, the job search process, given that these are unfamiliar experiences for parents (St. Clair-Christman, 2011). Whereas professionals—teachers and college counselors—may possess knowledge of college application and admission processes that parents may not possess, parents consider their elder children to be the real experts; it is they who possess intimate knowledge of the inner workings of the family, the family's economic struggles, and the emotional reactions (e.g., fears, worries) family members may have about a child leaving the home. Thus, elder siblings likely serve as immediate references for younger siblings as to what types of career paths, economic mobility, and relationships may be

possible for them and how to attain such success (Conger and Little, 2010). Given their inside knowledge of the family, emerging adults may be uniquely positioned to guide younger siblings through the developmental tasks associated with the transition to adulthood.

Middle Adulthood

Sibling interactions may decline in frequency in middle adulthood as individuals' attention often turns toward meeting workplace demands, achieving financial security, and rearing a family. Particularly when adult siblings live at some distance, interaction becomes increasingly voluntary; although as members of the same family, they may feel some degree of obligation to one another (Walker, Allen, and Connidis, 2005) and understand that help will be mobilized at a time of need (Tolkacheva, Brouse van Groenou, and van Tilburg, 2010). Lee, Mancini, and Maxwell (1990) found that discretionary (rather than obligatory) contact between adult siblings was most strongly predicted by emotional closeness, feeling responsible for one's sibling, having fewer siblings, geographic proximity and, paradoxically, greater conflict (which might be explained by greater frequency of interactions). Sibling support in middle adulthood appears to occur most often among same-sex sibling pairs and those who live geographically close (Cicirelli, 1995). Among Taiwanese families, sibling contact in middle adulthood is greatest among sisters than any other gender composition; the least amount of contact occurs among brothers (Lu, 2007). During middle adulthood, siblings often aid one another by alleviating child caregiving burden (Hunter, Pearson, Ialongo, and Kellam, 1998); for example, in Taiwan, adults often provide care to each other's children (Lu, 2007).

For many adults, siblings continue to play an important role during major life events, such as the entrance or exit of family members through marriage, the birth of children, divorce, and death (Connidis, 1992, 2010) or their own illness (Stahl and Stahl, 2017). Siblings may especially seek emotional care from one another in the face of a crisis, such as addressing financial turmoil or the death or serious illness of a family member (Bedford, 1998; Cicirelli, 1995). When faced with addressing their parents' affairs in the face of serious illness or death, sibling contact may increase as they work to manage needs, share memories, or secure companionship (Bedford, 1998). In addition, the shared experience of losing a parent, and undergoing the grieving process as a family, may bring adult siblings closer together (Lu, 2007).

However, in instances in which a parent requires long-term care, it is often the case that it is only one sibling (typically, an elder female) who assumes primary responsibility for the care of that aging parent (Coward and Dwyer, 1990), with conflict erupting if individual siblings perceive inequity in who is providing care (Ingersoll-Dayton, Neal, Ha, and Hammer, 2003). Feelings of resentment, perhaps stemming from childhood perceptions of unwarranted parental differential treatment, can reemerge as siblings plan for the care of an aging parent (Ingersoll-Dayton et al., 2003; Soli, McHale, and Feinberg, 2009). Grigoryeva (2017) reported that daughters provide twice as much care to elderly parents than sons; however, even with these differences, sons tend to provide more care to their fathers, whereas daughters tend to provide more care to their mothers.

Adult siblings of an individual with a disability typically assume greater caregiving responsibilities once parents are no longer able. Such caregiving may include financial and legal decision-making; securing, monitoring, and evaluating services (e.g., home healthcare); and providing companionship or social interaction (Davys, Mitchell, and Haigh, 2011). Increased caregiver burden can create stress for these care providers as well as for their immediate families.

Later Adulthood

Although sibling support may occur less frequently than at other ages, it may nonetheless play an important role in promoting the socioemotional well-being of older adults. For example, O'Bryant

(1988) demonstrated that regular interaction with married sisters was predictive of positive affect among recently widowed women over 60 years of age. Relationships appear to be most intimate among sisters, but same-sexed sibling relationships, in general, appear to be more intimate in later adulthood than cross-sexed siblings (Bedford and Avioli, 2001). Furthermore, factors such as physical proximity to a sibling and perceived closeness of the relationship between siblings have associations with both increased life satisfaction and decreased depressive symptoms (Bedford, 1998). Indeed, closeness and confiding among older adult siblings appear to be greater when one or both are single, have launched or did not have children, or have had a spouse pass away (Bedford and Avioli, 2001). The support siblings provide while grieving the loss of a spouse may strengthen their bond (Bedford and Avioli, 2001).

On examining sibling relationships in Taiwan, Lu (2007) found that sibling contact and support is most frequent during early adulthood, lower in middle age, and lowest in older adulthood. In addition, individuals who report feeling a sense of emotional closeness to a brother or sister are also more likely to provide help to that sibling than to those they feel less close (Lu, 2007). Levels of support exchanged among siblings in older adulthood are associated with the perceived quality of these relationships (Gold, 1989). On the basis of qualitative interviews with adults 65 years of age and older, Gold found more emotional caregiving occurred in sibling relationships described as *intimate* and *congenial*, greater instrumental support in siblings described as *loyal*, and little to no caregiving in those considered *apathetic* and *hostile*.

Furthermore, in later adulthood, siblings may provide acutely increased levels of care in the face of a particular hardship—such as when one becomes seriously ill or hospitalized, requires transportation or household assistance, or suffers the loss of their spouse. Cicirelli (1995) found that during periods of hospitalization, only 6% of older adults in the United States reported desiring or expecting help from a sibling on returning from hospitalization, relying on their spouses or children for tangible forms of assistance. In contrast, approximately 50% of all respondents indicated a desire for psychological support from their sibling. This is a notable indication of the significance of emotional caregiving among siblings, which can extend to the very end of their lives. Given their lifelong attachment and closeness (Tancredy and Fraley, 2006), the loss of a sibling can be particularly painful and, as Cicirelli (2009) noted, "the survivors of a sibling's death may have intense and profound grief reactions often lasting for decades" (p. 24).

Taken together, these findings suggest that siblings play important roles in providing emotional support and caregiving for one another across the life course even though the specific functions and dynamics of these caregiving behaviors may differ over time and in the face of various life events. Individuals' needs for sibling caregiving appear to lessen as emerging adults focus on developing their own social and professional networks of support. However, the need for sibling care and support often resurfaces later in life, when ironically, the ability to provide such care has diminished with age. Nonetheless, the emotional bonds and socioemotional support exchanged among sisters and brothers persist well into adulthood—with strong feelings about one's sibling continuing even beyond death (Cicirelli, 2009).

Functions of Sibling Caregiving

As the brief review of sibling caregiving across the course of development suggests, caregiving has the potential to fulfill a wealth of functions that enhance the well-being of individuals, families, and society. These range from the tangible and pragmatic (e.g., enabling parents to work and contribute to their communities) to the abstract (e.g., enabling children to develop empathy for others).

Through their extensive ethnographic studies of sibling caregiving that spanned both Western technological and non-Western societies, Weisner and Gallimore (1977) identified eight domains as "correlates and consequences" of sibling caregiving (p. 176)—essentially, ways in which sibling caregiving can have a cascading influence on development that goes beyond the momentary provision

of care. These correlates and consequence of sibling caregiving are: (1) supporting the mother-child relationship by relieving mothers of the full responsibility of childcare; (2) promoting the caregiving child's maturity and contributions to the welfare of the family and affording that child associated privileges; (3) providing a structure by which younger siblings become socialized into the world of peers; (4) developing social responsibility and nurturing behaviors, including the ability to anticipate and respond to another individual's needs; (5) learning culturally relevant gender roles, including the socialization of females into maternal roles; (6) developing personality traits that parallel their respective roles as primarily requiring, or providing, care; (7) promoting affiliation motivation or "the tendency of individuals to attend and orient to others" (p. 180); and (8) the formation of motivational styles and classroom engagement which has implications for learning and cognitive performance. Thus, as explored ahead, sibling caregiving is a dynamic process, that can have many positive implications for child and family development.

Sibling Caregiving as a Family Survival Strategy

Particularly in agrarian societies, sibling caregiving is often an instrumental component of ensuring the economic prosperity and functioning of a family, as providing care for a sibling allows parents to gather food, direct their attention to other activities (Maynard, 2002), or participate in "heavier and more skilled tasks that benefit the family" (Larson and Verma, 1999, p. 705). Whereas Cicirelli (1994) suggested that the function of sibling caregiving in Western societies is often to provide parents with temporary relief of responsibility, in non-Western societies, elder siblings do "more than just give the mother free time for other activities; [they] allow the parents to fulfill necessary work roles for family survival and maintenance" (p. 10). Cicirelli further suggested that sibling caregivers provide economic security for families "as a backup system in the event that parents do not survive some catastrophe" (p. 10). In recognition of these important roles, siblings who are caregivers may be regarded with a higher level of respect than non-caregiving children (Larson and Verma, 1999).

Sibling Caregiving as Processes That Reflect and Advance Socioemotional Development

As near-age mates who share a host of experiences, siblings have an uncanny ability to understand one another's perspectives, needs, and interests (Dunn, 2007; Howe et al., 2016; Kramer, 2010, 2014). These "powers" of social understanding (Dunn, 2007) enable siblings, even in early childhood, to detect the needs of others and, on many occasions, to act to address those needs (Hepach, 2016; Hepach et al., 2016, 2017). Dunn and Kendrick (1982) demonstrated that by studying the interactions of siblings as young as 2 years of age in the natural context, we can learn much about how children develop socially and emotionally—with children often demonstrating competencies with their siblings that, on the basis of prior research and theory, one would not expect them to demonstrate until later in development. In line with Dunn's extensive findings, sibling caregiving behaviors may both reflect, and potentially advance, children's development of key social and emotional competencies.

Sensitivity to the Needs of Others

On the basis of their ethnographic studies of diverse cultures, Whiting and Edwards (1988) described how the social and emotional development of a caregiver is reflected in that child's success in caring for an infant. As described by Zukow-Goldring (2002):

> The inability to assess the internal state of another (treating crying baby as if she is cranky when instead she is sleepy), to foresee the implications of one's acts in relation to another

person's response (more bouncing will not satisfy a hungry baby), to find alternate solutions (continuing to bounce a baby who persists in crying rather than stopping, and then walking with or singing to the baby), and to control one's own impulses (slapping a fussy baby in frustration) illustrate missing competence.

(p. 262)

Furthermore, possession of these characteristics may shift from time to time, influencing the degree and type of caregiving responsibilities one sibling provides another. For example, during a period of a sibling's extreme physical illness or injury, a well sibling may engage in greater, or more sensitive, levels of caregiving than before or after the illness has occurred (Branstetter, 2007).

Advancing the Mastery of New Competencies

Siblings scaffold (Vygotsky, 1978) one another's mastery of new skills, often enabling brothers and sisters to complete tasks that require skills beyond their present level of competency. Whereas in very early childhood an older sibling might retrieve an object out of an infant sibling's reach and place it in the infant's hands, later the older child might instead only move the object close to the younger sibling so the younger child can work to grasp it. In the same vein, when faced with emotionally challenging situations, a care-providing sibling may first supply a brother or sister with direct advice or instruction on how to address such a scenario. In subsequent encounters of this type, the elder sibling may reduce the use of direct assistance and instead ask probing questions designed to help the sibling arrive at his or her own conclusion. For example, the elder sibling may remind the younger sibling about past events and the problem-solving behaviors that proved successful for them in the past, prompting the sibling to consider how to apply those skills to the current situation. These scenarios represent basic examples of the role that scaffolding may play in the sibling caregiving dynamic, and they exemplify the transactional process of sibling caregiving, by which a sibling aims to provide the level of care that matches the needs of a brother or sister.

Maynard (2002) observed that sibling caregiving practices in the Zinacantec Mayan village culture in Chipas, Mexico, followed a similar model of teaching and learning as what occurred in adult apprenticeship of weaving, such that interactions involved "scaffolded help, contextualized verbal explanations and feedback, and obedience, with virtually no praise or criticism" (p. 978). Maynard observed discrete stages of caregiving practices, with elder siblings responding to the cognitive and verbal needs of their younger siblings in progressively more sophisticated ways, for example, from nonverbal teaching when the younger child was 3–5 years of age, progressing to commands when the younger child reached 6–7 years of age, and eventually using complex discussion and explanations when the younger child reached 8–11 years of age.

As these examples illustrate, whereas sibling caregiving can hold significant benefits to the child who receives care, developmental benefits also accrue to the provider of such care; for example, care providers advance their skills in the domain they assist with, they experience a sense of satisfaction that comes from helping another, and they become more sensitive to the needs and capabilities of others. According to Howe et al. (2016), care-providing siblings are able to capitalize on "inherent developmental advantages, enabling them to direct and control interactions with younger siblings . . . who in turn may benefit developmentally from interacting with more knowledgeable older siblings" (p. 2).

Social and Emotional Understanding

The exchange of warmth and emotional support, particularly with an older sibling, appears to facilitate the development of a younger child's social understanding (Jenkins and Dunn, 2009) and

promote abilities to provide effective support for one another over time. Dunn, Slomkowski, and Beardsall (1994) found that the emotional support school-age siblings provide one another in the face of adverse events (e.g., social difficulties at school, maternal illness, accidents, or illnesses they themselves experienced) was associated with more close, friendly, and affectionate relationships with their sibling.

Children's abilities to accurately perceive what their sibling is experiencing may contribute to their ability to appropriately respond to their sibling's immediate physical or emotional needs (Howe and Ross, 1990; Kramer, 2014; Volling et al., 2017). Perspective-taking, in particular, may be an integral component of effective sibling caregiving. Stewart and Marvin (1984) assessed the perspective-taking skills of 3- to 5-year-old children who had toddler-age younger siblings by asking them to form inferences about another person's likes or dislikes and knowledge based on information provided in a brief story. The performance of sibling caregiving behaviors correlated with children's perspective-taking abilities. Similarly, Garner et al. (1994) found that preschoolers who had stronger emotional role taking skills and knowledge of caregiving scripts extended more care and comfort to their toddler-age siblings during a modified Strange Situation task.

Particularly as they reach middle childhood, children can be very knowledgeable about their sisters' and brothers' tendency to react in particular ways in stressful situations, which can be harnessed to provide effective forms of help and support (Kahn and Lewis, 1988). Howe, Aquan-Assee, Bukowski, Lehoux, and Rinaldi (2001) found that stronger competencies in emotional understanding enable siblings in middle childhood and early adolescence to provide more realistic and, possibly, more effective assistance in managing life challenges. Children with well-developed abilities in emotional understanding—as evidenced by, for example, an enriched vocabulary with which to communicate about emotions and internal states, an understanding of the display rules that govern the socially acceptable forms of emotional expression, as well as skills in decoding the emotional expressions of others, and the regulation of emotions—may be better equipped to support siblings as they encounter stressful situations or difficult interpersonal issues (Howe et al., 2001; Howe, Petrakos, and Rinaldi, 1998; Kramer, 2014; Volling, McElwain, and Miller, 2002).

Sibling caregiving can provide increased opportunities for learning, companionship, exchange of warmth and affection, sharing of advice, and provision of mentorship and guidance in the face of new experiences (Bryant, 1989; Cicirelli, 1995; Kosonen, 1996; Tucker et al., 1997). Additionally, acts of sibling caregiving reflect, or may actively promote, children's socioemotional development, including empathy, perspective-taking, learning to become independent and self-sufficient, and balancing the often competing demands that emerge in various relationships and contexts (East, 2010; East, Weisner, and Reyes, 2006). Sibling caregiving may play a beneficial role for children who face adverse or challenging experiences, as the act of providing care can give youth a sense of purpose and experience, which can foster personal connections and self-confidence (East, 2010). Contributing to the care and prosperity of one's family can also help children to understand how individuals can work together effectively in a hierarchical society (East, 2010).

As siblings provide care to one another, opportunities for conflict arise. However, even in the course of sibling conflict, social, emotional, and cognitive skills can be developed if conflict remains constructive rather than destructive (Shantz and Hobart, 1989). It takes a fair amount of social competence to engage in, and manage, a fight with another child, and children develop stronger competencies in argumentation, conflict management, and the regulation of strong negative emotions in the safe confines of sibling relationships (Kramer, 2014). Through negative encounters such as these, children also expand their emotional vocabulary, and strengthen their ability to recognize, decode, and interpret the emotions of others (Dunn, 2007) and improve their ability to regulate challenging emotions (Kennedy and Kramer, 2008). It is a paradox that, despite intense negative affect, some constructive forms of sibling conflict can be formative for individual's social, cognitive, and emotional development.

The Dark Sides of Sibling Caregiving

Not all experiences with siblings are prosocial, and sibling caregiving can also be associated with a host of risks and negative interpersonal processes (Kramer and Conger, 2009; Kosonen, 1996).

The Risks of Sibling Supervision

Sibling supervision can indeed pose a risk to a child's safety, as rates of injuries are 33% higher in instances where he or she is being supervised by an elder sibling rather than another adult (Morrongiello, 2005; Morrongiello et al., 2007). Rauchschwalbe, Brenner, and Smith (1997) examined the supervisory arrangements that were in place when 32 toddlers (age 5–15 months) drowned in bathtubs. Of the 32 deaths reported to the United States Consumer Product Safety Commission, 11 occurred while an older sibling (whose ages were not specified) was left to watch the younger child.

Sibling caregiving may increase the risk of injury to children because caregiving children lack sufficient judgment (Nathans, Neff, Goss, Maier, and Rivara, 2000) and/or competence (Kurdick and Fine, 1995) to provide adequate supervision. However, Morrongiello et al. (2007), who examined sibling supervision with a sample of well-educated, middle- to upper-middle-class Canadian parents with younger children, who were 1.5–3 years old, and older children, who were 3–13 years old, found that rates of injuries during periods of sibling supervision are not related to the competency, skills, or supervisory strategies employed by the sibling supervisors. Rather, a key factor was the younger sibling's compliance to these supervisory strategies; the risk of injury to a child was greater when the supervisee was resistant to the instructions of their care-providing sibling. Although the mothers interviewed in this study were aware of the increased risk for injury, this did not deter them from requesting a child to supervise a sibling. Furthermore, mothers did not discourage sibling supervision even when siblings did not get along and were more apt to engage in conflict.

Parents may not adequately prepare their child to provide care in the face of resistance or resentment (Morrongiello et al., 2007). Furthermore, parents may send conflicting messages about a child's authority—for example, telling children to make a sibling behave appropriately but without granting them the authority to carry through with instructions, commands, and threats. As sibling interactions may rapidly fluctuate between the lateral and the hierarchical, there may be considerable confusion (and frustration) on the part of both children as to who is responsible, and who has the authority, to direct the other's behaviors. As children lack preparation for an authoritative role as well as true authority, they may resort to punitive or highly controlling measures (Bryant, 1989); care-providing siblings may resort to "excessive authoritarianism, with older children tending to tyrannize, harass, and threaten younger siblings" (Cicirelli, 1995, p. 111). With little experience in how to manage defiant or challenging behaviors, negative interactions may escalate (Patterson, 1984).

Contexts for Bullying and Abuse

Taken to more extreme levels, in the name of caregiving, siblings have acted as perpetrators of bullying, torment, intimidation (Bowes, Wolke, Joinson, Lereya, and Lewis, 2014; Hoetger, Hazen, and Brank, 2015; Kosonen, 1996), relational aggression (Stauffacher and DeHart, 2005), and physical and sexual abuse (Wiehe, 1997). In a longitudinal study conducted in the United Kingdom by Bowes et al. (2014), 47.4% of participants reported experiencing sibling bullying at some point during childhood, which, in turn, was associated with depressive symptoms and self-harm in adulthood. Wiehe (1997) reported the surprising frequency with which physical, emotional, and sexual abuse has been perpetrated by siblings outside of parents' view. Thus, when sibling caregiving occurs in the absence of adult supervision, the victimization of vulnerable siblings may be more likely to occur (Kosonen, 1996) and be sustained over time. However, sibling bullying can also occur when adults are present. Skinner and

Kowalski (2013) found that 40% of their adult respondents recalled that during childhood, sibling bullying had occurred when one or both parents were in the home. Further inquiry is needed to understand how sibling caregiving per se provides a context for bullying and aggression in childhood and how these experiences relate over time to individuals' socioemotional development and well-being as well as the quality of relationships children establish with sibling and other family members.

Impact on the Providers of Care

In cases where caregiving is extensive, caregiving responsibilities can interfere with a child's ability to engage in age-appropriate behaviors such as leisure activities with peers, attend school functions, and to complete homework, all of which can contribute to decreased academic achievement and dropping out of school (East, 2010; East et al., 2006). Caregiver burden has been associated with symptoms of anxiety and depression, social difficulties, stress, and/or feeling worried or resentful about caregiving responsibilities (East, 2010; McMahon and Luthar, 2007)

Furthermore, excessive sibling caregiving responsibilities may be associated with the parentification or the premature adultification of older siblings—an experience in which a child becomes involved in "developmentally inappropriate expectations that children function in a parental role within stressed, disorganized family systems" (McMahon and Luthar, 2007, p. 267). Parentification of a sibling can be linked to adverse outcomes; for example, Van Loon, Van de Ven, Van Doesum, Hosman, and Witteman (2017) found that the parentification of adolescents whose parents have a mental illness was directly and indirectly (via perceived stress) related to both internalizing (e.g., anxiety, depression, social withdrawal, somatic complaints) and externalizing (e.g., aggression, rule breaking) behavior problems at the time the youth were surveyed. One year later, parentification continued to be associated with internalizing, but not externalizing, symptoms. Van Loon et al. (2017) suggested that, in some instances, responsibilities to provide care to family members—including emotional caregiving—can be associated with distorted family boundaries and the assumption of responsibilities inconsistent with developmental expectations for a child. Developmentally inappropriate expectations may be especially true in instances in which a parent is incapacitated in some way, such as with a mental or physical illness.

In summary, whereas sibling caregiving offers a host of benefits for both the providers and recipients of care, and can be an extraordinary context for the development of a wide array of socioemotional competencies, it may also set the occasion for negative and, sometimes, dangerous sibling interactions. Researchers, practitioners, educators, and parents need to be cognizant of this potential, particularly if they aim to promote the types of sibling relationships that will be marked by the mutual provision of care and support sustained into late adulthood.

Sociocultural Influences on Sibling Caregiving

Caregiving behaviors evolve as both an expression and a function of "cultural priorities" within a society (Otto et al., 2017, p. 1235). Bronfenbrenner's (1977) ecological perspective provides a framework with which to understand sibling caregiving practices in light of the various social contexts in which individuals and families operate. Thus, the following exploration adopts an ecological lens to consider a variety of contextual factors, ranging from broad sociocultural influences to more proximal influences.

Cross-Cultural Examinations of Sibling Caregiving

Cross-cultural research has illuminated dramatic variations in sibling caregiving across the globe, appearing to be a custom more deeply woven into the cultural fabric of non-Western (nonindustrialized

or rural agrarian) societies than of Western technological societies. Such variations may reflect the individualistic nature of many Western societies, particularly those with European influences, where greater emphasis is placed on the contributions of individuals rather than the family or community as a collective (Kim, Triandis, Kâğitçibaşi, Choi, and Yoon, 1994). In promoting the independence and unique success of their children as individuals, parents in Western societies prompt children to provide care to siblings less often. In contrast, in valuing collectivism (Kim et al., 1994) and intrafamilial interdependence and connectedness (East, 2010), parents in some non-Western societies may encourage sibling caregiving as they emphasize the importance of children actively contributing to the well-being of the family.

Non-Western Societies

Rabain-Jamin, Maynard, and Greenfield (2003) compared the sibling caregiving practices of the Zinacantec with that of two villages of the Wolof peoples of Senegal. The comparisons of these two cultures were particularly rich given how significantly they differed; the Zinacantecs are Catholic and monogamous, whereas the Wolof are Muslim and polygamous (Rabain-Jamin et al., 2003). Wolof families live in compounds that consist of a collection of separate homes that house co-spouses and their children. Compounds vary in size and can contain 10–30 individuals; it is not uncommon for children to have half-siblings living in the compound who were very close in age. In contrast, the Zinacantecs live in single-family households, often in close proximity to extended family members.

Reflective of their more individualistic society, Zinacantec elder siblings took responsibility for integrating their sisters and brothers into social groups (Rabain-Jamin et al., 2003). In contrast, and perhaps reflective of their more collectivistic society, Wolof children did not require as much help from their older siblings to become socially integrated into social groups. Wolof children as young as 2 years old demonstrated an active interest in participating in the play of older children and did not require a formal entrée from elder siblings. Despite stunning differences in the physical and social structure of these two societies, sibling caregiving figures prominently in the socialization of young children in both. Taken together, these studies suggest that care-receiving children learn about the complexities of social hierarchies, acceptable social behavior, and what productive membership of their society means. In turn, care-providing siblings learn how to nurture—especially how to identify and respond to the needs of others.

Western Societies

Unlike non-Western societies in which siblings often become well acquainted with childcare practices through sibling caregiving long before they become parents, the adoption of caregiving roles in Western technological societies (at least in the present era) does not typically occur until an individual becomes a parent himself or herself (Weisner, 1989). However, the value and importance placed on sibling participation in caregiving responsibilities may vary dramatically *within* Western societies (Cicirelli, 1994). Within the United States, expectations and practices surrounding sibling caregiving vary considerably across ethnic and cultural groups (McHale et al., 2012). For example, Latino families place strong importance on values of "familism"—those principles that reflect an "interdependence among family members including familial support, obligation, and solidarity" (Soli et al., 2009, p. 4)—and hence, sibling caregiving likely occurs more often than in European American families (Margolis et al., 2014).

Elder siblings play an important role in the overall acculturation of families who immigrate to Western nations—not only as sibling caregivers, but also as translators, culture brokers, and advocates for the entire family (Fuligni, 2006; Hafford, 2010). For example, elder siblings in Mexican families who have immigrated to the United States often play a prominent role in the daily

functioning of the family, including assisting with the care of younger siblings, as they may surpass parents in quickly developing a versatile understanding of the cultural practices expected in the new culture (Hafford, 2010).

In summary, studies of Western and non-Western families suggest that sibling caregiving occurs in some form across the globe, albeit the forms caregiving takes vary in accord with the specific social and cultural characteristics of each society. Furthermore, significant variability in sibling caregiving is found *within* Western technological and non-Western societies, particularly with respect to ethnic and cultural differences.

Historical Factors

Whereas a range of sociocultural factors have historically played a role in shaping sibling caregiving practices, the exact nature of these influences continually evolves across time and geography, as care-giving practices affect, and are affected by, ever-changing legal, political, and philosophical factors. In "The Childhood We Have Lost: When Siblings Were Caregivers, 1900–1970," Pollock (2002) high-lighted the important roles that siblings have played in childrearing throughout history in Western technological societies. She pointed out that

> in large numbers of working- and lower-middle-class households, for much of the first two-thirds of the twentieth century, young children and even infants, spent much of their time under the watch, not of a doting mother, but a sibling—an adolescent or, not infre-quently, only another child.
>
> *(p. 31)*

Pollock recalled the work of prominent writers and biographers of the time who generally referred to elder sisters as "little mothers" (p. 32). Being a "little mother" was not considered a chore or additional duty but was "something [girls] did with little reason, little protest, and apparently little consequence" (Pollock, 2002, p. 32). In recognition of their role as caregivers, physicians of the time regarded the teaching of proper care for infants as just as important for elder siblings as for mothers.

According to Pollock (2002), sibling care (and especially sibling care that relied on the good will of elder sisters) was thought to have "formed the basis of an affiliative society, serving to 'integrat[e] the child into the social context'" (p. 33). Family historians such as Coontz (1992, 2016) have warned of the dangers of idealizing the "golden ages" of family life in America (2016, para. 1), and it is pos-sible that this view of sibling care as important for establishing an "affiliative society" reflects a "foggy lens of nostalgia for a mostly mythical past" (para. 11). Indeed, Pollock quoted an unnamed anthro-pologist who characterized an elder sister's years spent tending to siblings as "'the worst period' of a child's life" (p. 33). Whereas the role of elder siblings (typically sisters) as providers of care to younger children was very common in U.S. history, and served a variety of purposes that enhanced family life, it may not have always been beneficial for the caregiving child.

Shifts in Sibling Caregiving as Women Entered the Workforce

As the employment opportunities available to women began to increase in the second half of the twentieth century, and as mothers increased their participation in the workforce, caregiving practices within the home also changed as older sisters were generally assigned greater responsibility for caring for siblings (East, 2010; Galley, 2014; Pollock, 2002). According to East (2010), sisters' greater partici-pation in caregiving in adolescence and early adulthood potentially stemmed from a complex set of interrelated factors, including pressures to conform to sex role stereotypes, a socially or biologically driven orientation to nurture others, and gendered socialization practices.

As their mothers entered the workforce, over time, adolescent females also began to see the value in spending time outside of school earning money and obtaining work experience rather than staying at home to care for younger siblings (Pollock, 2002). Legislation passed during World War II established childcare options and subsidies that enabled women to work outside the home while men were deployed; such options expanded in the decades after World War II (Illinois Facilities Fund, 2000). Thus, increased workforce participation among mothers and elder sisters was associated with the eventual transfer of supplemental childcare from siblings to childcare professionals (Pollock, 2002), although it is difficult to definitively identify which was the driving factor.

Despite its increased availability and government subsidization, access to quality childcare is financially out of reach for many families (Otto et al., 2017). Thus, sibling caregiving continues to play a prominent role in the provision of care for younger children whose parents are employed, especially among single-parent families (East, 2010). According to East, "Solitary sibling caregiving continues today, with millions of children singularly cared for by an older sibling while their parents are away at work" (p. 2). Morrongiello et al. (2007) found that even in households where parents can afford to hire childcare providers, sibling supervision still occurs, albeit in discrete, short-term periods of time. In their review of seven studies on children's participation in family labor, Dodson and Dickert (2004) found that the care of younger children was the form of family labor most commonly reported, which they considered an "overlooked survival strategy" for parents (p. 318). Despite its prevalence, many parents in the United States today are reluctant to admit to using a child as a primary, albeit temporary, care provider, as solitary caregiving is widely stigmatized (Creighton, 1993), as it may be perceived as poor parenting or even child neglect.

Legal Standards

Whereas sociocultural factors largely govern which forms of sibling caregiving are considered appropriate, legal standards appear to play catch-up. For example, the age at which parents permit children to provide care for siblings in their absence—and what types of care they may provide—is a hotly debated issue, yet, surprisingly, few legal guidelines exist.

In the United States, only three states currently specify the age at which children can be left alone or in the care or another child, and each of these states sets different ages—8 years old in Maryland, 14 years old in Illinois, and 10 old years in Oregon (Child Welfare Information Gateway, 2013). Given the wide disparity in the ages specified in these three states, legal standards do not appear to be based on scientific evidence or even coherent theories that speak to children's developmental capacity to adequately provide such care. Although inadequate supervision of a child (which could include care from an underage sibling) is considered a form of child neglect nationwide, few guidelines are available to help parents define what "adequate supervision" entails (Child Welfare Information Gateway, 2013). Tomlinson and Sainsbury (2004) found a lack of consensus among the recommendations of pediatric health professionals in the United Kingdom regarding the appropriate age for children to be left without adult supervision, leaving parents to form their own judgments (Child Welfare Information Gateway, 2013; McCarren, 2015; Turner, 2015), which are often subject to scrutiny of child welfare officials and the public at large.

In England, figures provided by *The Telegraph* newspaper estimate that "a parent is arrested every day on the suspicion of leaving one or more children at home alone" (Turner, 2015, para. 1). In a widely publicized case in the United States, a Maryland couple was accused of child neglect in 2015 after allowing their 10-year-old child to supervise a 6-year-old sibling while they visited a park (McCarren, 2015). Whereas the children's mother felt she was providing them with an opportunity to practice independence and responsibility, adults who saw the children alone in the park were concerned for their safety and called protective services, which led to an investigation of child neglect

(McCarren, 2015). Although the investigators concluded that the parents were not guilty of child neglect (St. George, 2015), cases such as these highlight the need for greater clarity in legal and ethical standards related to sibling care.

Familial Influences on Sibling Caregiving

As we narrow our examination of factors that shape the occurrence of sibling caregiving, and how it reflects and stimulates individual growth and development, it is important to consider the range of contextual factors that may shape sibling caregiving behaviors, such as economic factors, families' ethnic and cultural identities, changes in parental marital status, or placement in foster care as result of child abuse, neglect, or other turmoil.

Economic Factors

Families' economic security, including parental work status, income, and the ratio of dependents to earners in the household, may influence parents' reliance on children as care providers for siblings (Otto et al., 2017; Vandenbroeck, De Visscher, and Van Nuffel, 2008). As lower income families have less access to quality childcare (Otto et al., 2017), families' reliance on children to supervise and care for siblings often increases (East, 2010), which, in turn, escalates safety risks (Morrongiello et al., 2007). In a study of mother-child dyads living in urban poverty, McMahon and Luthar (2007) asked children (age 8–17 years) to complete the Child Caretaking Scale (Baker and Tebes, 1994) to assess the extent to which they assumed caregiving responsibilities and experienced caregiving burden. Children who were the oldest in their family and whose mothers had lower levels of education and/or worked outside the home were more likely to be given responsibility to care for their siblings in comparison to families with higher incomes. Thus, although supervisory roles are assigned to siblings across socioeconomic strata (East, 2010; Morrongiello et al., 2007), the scope of caregiving responsibilities children assume for siblings may be particularly related to the level of economic pressures their family experiences.

Ethnic and Cultural Identity

Siblings are important sources of support and feedback as children, adolescents, and emerging adults develop their own understanding of what it means to be a person of their culture and ethnicity (Umaña-Taylor, 2011). As individuals who face identical challenges—biological siblings may be looked toward for help in navigating the intricacies of a unique cultural or ethnic identity and, perhaps, in addressing discrimination and racism (Butler-Sweet, 2011).

As seen with ethnically blended families (Song, 2010), individuals may view their siblings as particularly qualified to help them address the unique challenges associated with being a child of multiple cultures. A young woman interviewed by Song poignantly highlights how siblings may play a unique role in ethnic identity development; the interviewee was a younger child in a family in which the mother was Black African and the father was White and English. She remarked that in seeing how her brothers had each adopted distinct ethnic identities, she realized she, too, was able to adopt her own approach. Song further found that young adult siblings from ethnically blended families may choose to not ascribe to one parent's culture of origin or the other's, but rather to identify one that unifies them.

Although siblings may elect to develop a shared cultural identity, and one that may be distinct from either of their parents' identities, it is vital to acknowledge that through their unique process of ethnic identity development, individual siblings may forge their own distinct identities (Butler-Sweet, 2011).

Parental Divorce

Support from a sibling has been identified as a protective factor for children undergoing pronounced interparental conflict (Jenkins, 1992; Jenkins, Dunn, Rasbash, O'Connor, and Simpson, 2005) and divorce (Roth, Harkin, and Eng, 2014). Roth et al. (2014) conducted narrative interviews and administered questionnaires to female undergraduates whose parents had divorced when they were 7–13 years of age. Respondents recalled that they and their siblings often relied on one another for emotional support in the face of their parents' divorce. Birth order was a key factor, as older sisters reported engaging in heightened levels of sibling caregiving than did respondents who were younger sisters in their families. Many older sisters recalled exerting greater control and dominance toward their younger siblings, indicating that they felt it was their duty or obligation to take control when parents were physically or emotionally absent or used poor parenting strategies. Participants in their study did not express resentment about the greater responsibilities they assumed for younger siblings; however, only females were interviewed in this study, and it is possible that males may have different perspectives on sibling support and caregiving during parental divorce.

Poortman and Voorpostel (2009) examined the long-term impact of divorce on sibling relationships into adulthood in the Netherlands. In-person interviews with adult sibling pairs revealed that levels of interparental conflict were a stronger predictor of sibling conflict than whether parents remained married or divorced. Higher levels of interparental conflict were associated with lower quality sibling relationships, more frequent conflict, and less sibling contact with one another.

Taken together, these results provide evidence of the potential that siblings have to provide care and emotional support to one another during times of parental discord and may serve as a protective influence (Jenkins et al., 2005; Roth et al., 2014). However, in families that experience high levels of interparental and sibling conflict, such support may not occur.

Stepfamily Formation

Sibling caregiving practices may shift when divorced or single parents begin a new intimate relationship, cohabitate with, or marry a new partner or spouse, particularly if step- or half-siblings are introduced into the family's life (Anderson, 1999; Dorius and Guzzo, 2016). The challenges associated with establishing relationships with new siblings, who may come from a very different background, can be immense, particularly when they share a residence and when significant shifts in birth order result (such as when a firstborn child becomes a middle child). For only children, the blending of two families in which their parent's new spouse brings children may be the first time that child has ever experienced a sibling relationship (Dorius and Guzzo, 2016). Given the value of sibling support during parental divorce (Roth et al., 2014), it is likely that such support could also be useful during stepfamily formation (Anderson, 1999). However, very little is currently known about how sibling caregiving occurs and functions in cohabitating and remarried families.

Siblings in Foster Care

Sibling support and caregiving also play important roles when children are placed into substitute or foster care as a result of family turmoil, neglect, or abuse. Herrick and Piccus (2005) estimated that

between 47% and 59% of children in the U.S. foster care system are placed separately from at least one of their siblings. They noted that the separation of siblings may not only jeopardize the quality of siblings' attachment, but also may be particularly damaging for children and adolescents who have assumed responsibility for caring for a sibling. Herrick and Piccus found that such separations led care-providing siblings to feel that they had "failed" their sibling; in contrast, siblings who felt successful in their role as caregiver experienced a heightened sense of self-efficacy.

The decision to separate siblings by child welfare officials is often based on concerns that the elder sibling has become "parentified" to the extent that the younger child is more likely to respect the sibling's authority rather than the foster parents' authority, which could impede that child's adjustment to foster care. However, the decision to place siblings in separate foster homes may preclude siblings' ability to support one another during a most traumatic time in their lives. Thus, Herrick and Piccus advised child welfare professionals to recognize the critical importance of siblings as emotional caregivers, especially in situations in which attachments with other caregivers are disrupted. Linares et al. (2015) developed a preventive intervention, *Promoting Sibling Bonds*, to reduce forms of sibling conflict that may threaten the sustained joint placement of siblings in foster homes.

Although this discussion does not fully capture all of the possible familial-level influences that can shape sibling caregiving, there is growing evidence that the care and support exchanged among siblings can be important ingredients for helping families effectively respond to a variety of stressful events and transitions.

Within Family Influences on Sibling Caregiving

In this section, focus is narrowed to consider the ways in which the individual characteristics of parents and children shape, and are shaped, by sibling caregiving practices.

Parent Characteristics

Personality

Whereas a parent's decision to assign caregiving tasks may depend somewhat on their perceptions of qualities of the elder sibling (e.g., Are they old enough? Mature enough?), personality and other characteristics of the parent in question also play a role in determining parenting behaviors (Bornstein, 2016). Morrongiello et al. (2007) administered surveys to Canadian mothers to better understand how, when, and why parents assign supervisory responsibilities to elder siblings. Mothers who scored higher on the neuroticism subscale of the Big-Five Inventory (John, Donohue, and Kentle, 1991) reported assigning sibling supervision tasks more frequently; in contrast, mothers who scored higher on the protectiveness/conscientiousness subscale reported assigning sibling supervision less often. Thus, mothers who feel greater personal responsibility for carrying out caregiving are less likely to request assistance from children, whereas mothers experiencing stress are relatively more likely to do so.

Mental Health

Elder siblings are often called on to assume caregiving responsibilities for their younger siblings in instances in which a parent experiences mental illness (Reupert and Maybery, 2007a, 2007b). Maybery, Ling, Szakacs, and Reupert (2005) conducted focus groups with Australian parents who either themselves or their partner had a mental health diagnosis; separate focus groups were conducted with their 6- to 16-year-old children. Sibling support emerged as a key theme in both the parent and child focus groups, for example, as fathers noted that their children ceased fighting and voluntarily

supported one another when their mother had an episode of mental illness. In child focus groups, facilitators noted the evident closeness of siblings and their ability to rely on one another when their parent experienced a mental health crisis.

Chronic Illness of a Parent

Similarly, elder siblings may assume responsibilities for comforting younger siblings in instances in which a family is coping with a chronic and/or terminal illness of a parent. Christ and Christ (2006) overviewed approaches for aiding children as they cope with the terminal illness of a parent. In particular, they noted the difficulty that elder siblings may have in remaining patient with a younger sibling's questions or confusion about the parents' illness and/or death, especially while they themselves are also coping with this critical stressor. Engagement in sibling caregiving under these circumstances can have important implications both for care recipients (who directly benefit from support) and care providers (who may experience enhanced self-confidence, sense of power and control, and resilience amid a challenging circumstance; Maybery et al., 2005). At the same time, however, excessive caregiving responsibilities may also limit children's and adolescents' ability to socialize with peers, achieve personal growth, or excel academically (Reupert and Maybery, 2007a).

Child Characteristics

Sibling caregiving practices also vary dramatically depending on the characteristics of the children themselves, including the chronic illness, disability, mental health, and propensity toward risk-taking.

Chronic Illness or Disability of a Child

Siblings are inextricably affected when a child in the family experiences a chronic illness or disability. Well siblings may receive less attention from parents, have reduced access to social and recreational activities, and may be quite concerned about parents' reactions and well-being (Barlow and Ellard, 2005). In their systematic review of research related to the psychosocial well-being of families affected by childhood chronic illness, Barlow and Ellard (2005) found that siblings of children with chronic illness were more likely than siblings of healthy children to display internalizing behaviors, such as anxiety or depressive symptoms. Further, well siblings may attempt to "care" for the sibling (and parents) by minimizing or even subjugating the needs and demands he or she presents to parents.

Research conducted with school-age siblings of children with diabetes (age 11–17 years) found that 55% were directly involved in the medical care of their ill sibling, perhaps by helping to manage the child's diet or administer insulin, even though they reported having a limited understanding of the disease; 40% reported spending more time at home and less time with friends than their peers (Adams, Peveler, Stein, and Dunger, 1991). Williams, Lorenzo, and Borja (1993) interviewed 100 mothers of children with a chronic cardiac or neurologic condition in Manila, Philippines, and found that well siblings were assigned increased responsibility for caring for their ill sibling, as well as for housekeeping, with twice as many responsibilities delegated to girls than boys. Not surprisingly, parental attention and care to healthy siblings is often significantly diminished once a sibling is diagnosed with a chronic illness (Branstetter, 2007; Williams et al., 1993).

Neurotypically developing children are frequently called on to provide care activities to siblings with chronic illnesses or developmental delays. Such practices have been shown to present a mix of positive and negative implications for caregiving children (Burke et al., 2015; McHale and Gamble, 1989), including increased sensitivity, caring, supportive behaviors, and nurturing behaviors along with more internalizing disorders (Barlow and Ellard, 2005), social withdrawal, somatic complaints,

feelings of loneliness/isolation, anger, anxiety, and excessive concern about their chronically ill sibling (Williams, 1997).

Mental Health

Individuals with psychological diagnoses, behavioral conditions, and/or developmental delays may also present unique challenges and responsibilities for siblings. In a longitudinal study, Rodrigues, Binnoon-Erez, Plamondon, and Jenkins (2017) found that the emotional and behavioral symptoms of 4.5-year-old children were strongly predicted by the presence of similar symptoms in their older siblings, assessed when they were 2 months of age. Rodrigues et al. advocated for further study of how the identification of behavioral or mental health problems in elder siblings can be a risk factor for younger siblings, alerting practitioners to direct preventive resources to these children.

Stalberg, Ekerwald, and Hultman (2004) conducted semi-structured interviews with 16 adult siblings of individuals diagnosed with schizophrenia. Caregiving emerged as a common coping mechanism for dealing with feelings of guilt or inadequacy associated with their sibling's psychiatric condition. Well siblings reported feeling less helpless and less inadequate when they provided care; they also felt that providing care kept them involved in their sibling's life, which was important to them as they realized that their involvement was more discretionary at this point in their lives.

Caregiving of siblings with a psychiatric illness (or developmental disability) may continue, or even increase, in adulthood, especially after parents are no longer able to take responsibility (Namkung et al., 2017). Orsmond and Seltzer (2007) surveyed 154 adults with a sibling with autism spectrum disorder (ASD) or Down syndrome (DS) about their instrumental and affective involvement with their siblings. Siblings of individuals with ASD reported experiencing less positive affect in their relationship with their sibling, greater pessimism about their sibling's future, and greater interference in their relationship with their parents as compared with siblings of individuals with DS. These differences may reflect the pronounced communication impairments and social difficulties often associated with ASD (Orsmond and Seltzer, 2007). As children with an autism spectrum disorder age, their atypical behaviors may become more difficult and unpleasant for a neurotypical sibling, which may lead to less engagement in shared activities over time (Rivers and Stoneman, 2003) and less positive affect (Seltzer, Orsmond, and Esbensen, 2009).

These findings suggest that the burden associated with caring for a sibling may vary considerably, depending on the degree to which the affected individual's medical, developmental, or emotional functioning interferes with general well-being of the care-providing sibling. Furthermore, the quality of the sibling relationship is an important factor as children and adolescents who have warmer and less conflictual interactions with siblings tend to demonstrate fewer internalizing and externalizing behavior problems, even in families with a child with psychopathology (Buist, Deković, and Prinzie, 2013).

Risky Behaviors

Through their roles as socializing agents, culture brokers, and teachers, siblings may play significant roles in shaping one another's risk-taking behaviors. For example, younger siblings are more likely to experience teenage pregnancy if their older sibling is sexually active or has himself or herself faced teen pregnancy (Miller, 2002). In a longitudinal study of 227 Latin and African American families that included an elder sister (age 15–19 years) and a younger sibling (age 11–16 years), East and Khoo (2005) found that a warm sibling relationship reduced the likelihood of risky sexual behaviors and substance abuse among younger siblings. Surprisingly, low sibling conflict predicted risky sexual behaviors; this finding may suggest that sibling conflict in African American and Latin American families may help to limit the scope of risk-taking adolescents engage in. Relatedly, Brook, Brook,

Gordon, Whiteman, and Cohen (1990) examined associations between the drug use of European American middle-class males and that of their peers, parents, and brothers. Participants' drug use was more closely related to the drug use of peers and brothers than with parents' drug use. Brook et al. also found the effects of parental drug use could be offset if an older brother abstained.

Taken together, the work of East and Khoo (2005) and Brook et al. (1990) suggests that adolescents play an important role in socializing younger siblings' engagement in appropriate and inappropriate behaviors, which can potentially have both protective and detrimental functions. Siblings have the potential to open up their social worlds to one another and they may be placed at greater risk for engaging in risky behaviors when they are introduced by their siblings to older peers who engage in such risky or deviant behaviors (Criss and Shaw, 2005). In instances in which a younger child engages in risky behaviors, he or she may turn to an elder sibling for guidance (Killoren and Roach, 2014). Kowal and Blinn-Pike (2004) found that sibling discussions about safe sex, in conjunction with parent discussions, predicted better attitudes toward safe sexual practices; such discussions were more likely to occur when sibling relationship quality was positive.

In summary, sibling caregiving practices are influenced by individual characteristics, such as the presence of developmental delays, chronic illnesses, and mental illness. Relatedly, the behavioral patterns of elder siblings, and their peers, can have a unique influence on the behavior of younger siblings. Together, these findings provide further evidence of the pronounced role that sibling caregiving can have on the socialization and well-being of children and adolescents.

Promoting Caring Sibling Relationships

Given the power that sibling relationships have to shape individuals' lives for the better (and for the worse; Kramer and Conger, 2009), and given parents' desire to promote the types of positive engagement that will lead to sustained caregiving across the life course (Kramer and Baron, 1995), it is important to consider the practical implications of what we have learned about sibling caregiving.

To promote lifelong sibling caregiving, it is necessary to start early and help children to develop a kind of relationship that includes caregiving as well as the desire to give care or be invested in the welfare of one's sibling. On the basis of the results of prior research, Kramer (2010) outlined an emerging list of evidence-based "essential ingredients" (p. 80) of successful sibling relationships. These ingredients center on helping children develop nine key competencies shown in previous research to be predictive of, or contribute to, prosocial sibling interactions. For parents who aim to promote positive engagement among their children, this may mean adopting childrearing strategies that: (1) recognize and praise children for their efforts to support or protect their sibling as well as demonstrations of loyalty, pride, or placing trust in a sibling (Furman and Buhrmester, 1985); (2) acknowledge both the unique contributions that individual children bring to the family as well as what they together, as siblings, bring to the family (Kowal, Krull, and Kramer, 2006); (3) help children to consider their siblings' unique perspectives, interests, ideas, and needs as points of view that are just as valid and important as their own (Dunn, 1988); (4) serve as "emotion coaches" (Gottman, 1997) in helping children to develop skills in identifying, naming, and regulating feelings, thoughts, and behaviors in emotionally challenging situations and using this emotional understanding to manage negative affect, disagreements, and conflicts (Kramer, 2014); (5) work with children to explore and correct unfounded negative attributions about one another's behaviors by clarifying intentions and encouraging communication about the perceived impact of actions (Stormshak, Bellanti, and Goodman, 1999); (6) model and scaffold effective conflict management strategies, such as collaborative problem-solving (Kramer and Baron, 1995), perspective-taking (Howe and Rinaldi, 2004), and mediation (Siddiqui and Ross, 2004; Smith and Ross, 2007), and finally (7) avoid forms of differential treatment that are perceived by children to be unfair or unwarranted while adjusting behaviors and communication to enable children to feel that their individual needs are being met (Kowal and

Kramer, 1997; Kowal et al., 2006; Shanahan, McHale, Crouter, and Osgood, 2008). Further research is needed to identify additional precursors of prosocial sibling relationships along with studies that formally test their contributions to enhancing sibling relationship quality.

Several evidence-based interventions have been developed that harness many of these "essential ingredients" to foster positive sibling relationships, including Siblings Are Special (Feinberg et al., 2013), Promoting Sibling Bonds (Linares et al., 2015) and the More Fun With Sisters and Brothers Program (Kennedy and Kramer, 2008; Ravindran, McElwain, Engle, and Kramer, 2015). Experimental interventions such as these can play a critical role in expanding our understanding of how to promote the types of sibling relationships in which sustained caregiving will occur.

Future Directions for Studying Sibling Caregiving

Despite the headway many investigators have made to better understand the forms and functions of sibling caregiving across the life course, and across the globe, a multitude of questions remains. Foremost is: How do we promote and preserve forms of sibling caregiving that have been shown to contribute to individual and family well-being, especially in the face of Western technological pressures toward individualistic rather than collectivistic values? How can we better understand the functions of sibling caregiving in our increasingly diverse and complex societies? How can we help siblings to maintain the types of relationships that will continue to foster the exchange of support and care into later adulthood? How can we best test whether sibling caregiving is truly formative for individual, family, and societal development and well-being? Ideally, longitudinal studies that track the precipitants and consequences of sibling caregiving over the life course will provide the most convincing evidence of the contributions caregiving processes can provide. With greater evidence, families may be convinced that the cultivation of sibling relationships, in which caregiving is an integral part, is worthy of their time and effort.

Our advice for future researchers is multifold. First, investigators are advised to adopt a definition of sibling caregiving that extends beyond the traditional—such as the fulfillment of physical needs—to incorporate the more complex and difficult-to-define dimensions of caregiving—such as emotional support and social understanding, and service as teachers, coaches, advocates, confidantes, and consolers. It is particularly important to clarify the many ways in which males may provide care to siblings that may have been under recognized because they look different from the nurturant acts commonly associated with female caregiving.

Second, investigators must think outside of their own "cultural box." Much can be learned from caregiving practices in different cultures, particularly as we see that many non-Western societies and U.S. minority groups have already figured out ways to capitalize on children's abilities to teach and socialize one another. We reiterate the calls of prior work for enhanced attention to understanding sibling practices in non-Westernized societies; for example, there is a persistent lack of attention to families in Middle Eastern cultures (Cicirelli, 1994).

Third, it is important to examine sibling caregiving processes within the natural contexts in which children live while paying considerable attention to the overarching social and cultural contexts in which families operate, including the historical, legal, economic, religious, and cultural belief systems that may shape sibling caregiving practices. Cross-cultural and ethnographic studies have emphasized the importance of observing children in natural contexts to discern the ways in which siblings care for and socialize one another (Zukow-Goldring, 2002). A reliance on parental report, or observation in contrived experimental settings, may not sufficiently reveal the extent and functions of caregiving behaviors. Such ethnographic research reminds us that the process of caregiving occurs—and so must be understood—within the contexts of familial and cultural norms that govern language, emotional expression, response to authority, gender, sexuality (Hafford, 2010), and other culturally relevant contextual factors.

Conclusion

This chapter builds on the seminal work of Weisner and Gallimore (1977), Zukow-Goldring (1995, 2002), and others to recognize sibling caregiving as a notable, dynamic set of processes of socialization that have significant influences on the socioemotional development of all individuals within a family system. Acts of caregiving do not simply extend from elder to younger siblings, but rather are exchanged bidirectionally and are shaped by a host of cultural, societal, familial, and individual factors. This review supports the conceptualization of sibling caregiving as extending beyond traditional perspectives of "care" (such as supervision and the fulfillment of physical needs) to also include forms of teaching and instruction and emotional support (e.g., emotional assurance, soothing, and the provision of advice and help).

As our understanding of the significance and function of sibling caregiving grows, researchers and practitioners will be better able to harness this information to better assist families that strive to promote more frequent and meaningful forms of sibling caregiving among their children. Gains in the quantity and quality of sibling caregiving may occur through educational programming, and prevention and intervention programs that are evidence based and experimentally evaluated (Kramer, 2004).

In closing, consider this compelling call to action from a father 1 year following the loss of his adult son, Michael, who had Down syndrome.

> Today, as we all remember Michael, I think about what a difference they [siblings Peter and Amy] made in Michael's life. They both let us know, pretty early on, that they wanted to be a part of the ongoing decisions about Michael's life. Peter and Amy taught Michael so many things. They were his audience and he was theirs. They could often calm him down when we were at wit's end. I know that it was not always easy for them but they were always up to the challenge.
>
> Michael loved to go see people and it was always amazing to be with him as he anticipated seeing his many friends. But, special as that was, it was nothing like his anticipation before one of his siblings was coming home. He seemed serene about the fact that both of them left home to pursue their own lives. But he always counted the days before "my big, big brother" or "my good sister" would be coming home.
>
> *During the last year, Cindy and I have heard two things that pertain to us many times. "I can't imagine losing a child" and "Michael was blessed to have great parents." We appreciate it every time we hear that. I hope that Peter and Amy have been repeatedly told that they were great siblings. Because they were. I can't imagine them being any better.*
>
> —David Buchanan (July 2017)

In refrain, we call for recognition of the importance of sibling caregiving in promoting individual and family well-being. Let's make the contributions of siblings to one another's development "seen."

Acknowledgments

References

Adams, R., Peveler, R. C., Stein, A., and Dunger, D. B. (1991). Siblings of children with diabetes: Involvement, understanding and adaptation. *Diabetic Medicine, 8*, 855–859. doi:10.1742-3071/91/090855-05

Anderson, E. R. (1999). Sibling, half sibling, and stepsibling relationships in remarried families. In E. M. Hetherington, S. H. Henderson, and D. Reiss (Eds.), Adolescent siblings in stepfamilies: Family functioning and the adolescent adjustment. *Monographs of the Society for Research in Child Development, 64*(Serial No. 259, 101–126). doi:10.1111/1540-5834.00049

Baker, M. S., and Tebes, J. K. (1994). *The child caretaking scale.* New Haven, CT: Yale University School of Medicine.

Bank, S., and Kahn, M. D. (1975). Sisterhood-brotherhood is powerful: Sibling sub-systems and family therapy. *Family Process, 14,* 311–337. doi:10.1111/j.1545-5300.1975.00311.x

Barlow, J. H., and Ellard, D. H. (2005). The psychosocial well-being of children with chronic disease, their parents and siblings: An overview of the research evidence base. *Child: Care, Health, and Development, 32,* 19–31. doi:10.1111/j.1365-2214.2006.00591.x

Bedford, V. H. (1998). Sibling relationship troubles and well-being in middle and old age. *Family Relations, 47,* 369–376. doi:10.2307/585267

Bedford, V. H., and Avioli, P. S. (2001). Variations on sibling intimacy in old age. *Generations, 25,* 34–41.

Bornstein, M. L. (2016). Determinants of parenting. In D. Cicchetti (Ed.), *Developmental psychopathology. Vol 4. Risk, resilience and intervention* (pp. 180–270). New York: John Wiley & Sons. doi:10.1002/9781119125556.devpsy405

Bowes, L., Wolke, D., Joinson, C., Lereya, S. T., and Lewis, G. (2014). Sibling bullying and risk of depression, anxiety, and self-harm: A prospective cohort study. *Pediatrics, 134*(4), 1032–1039. doi:10.1542/peds.2014-0832

Branstetter, J. E. (2007). Pediatric chronic illness or disability: Family caregivers' reports of well child-sibling caregiving (Doctoral dissertation). Retrieved from ProQuest. (3258377).

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32,* 513–531.

Brook, J. S., Brook, D. W., Gordon, A. S., Whiteman, M., and Cohen, P. (1990). The psychosocial etiology of adolescent drug use: A family interactional approach. *Genetic, Social, and General Psychology Monographs, 116,* 111–267.

Bryant, B. K. (1982). Sibling relationships in middle childhood. In M. E. Lamb and B. Sutton- Smith (Eds.), *Sibling relationships: Their nature and significance across the lifespan* (pp. 87–123). New York: Lawrence Erlbaum Associates, Inc.

Bryant, B. K. (1989). The child's perspective of sibling caretaking and its relevance to understanding social-emotional functioning and development. In P. Zukow-Goldring (Eds.), *Sibling interactions across cultures* (pp. 143–164). New York: Springer.

Buist, K., Deković, M., and Prinzie, P. (2013). Sibling relationship quality and psychopathology of children and adolescents: A meta-analysis. *Clinical Psychology Review, 33,* 97–106. doi:10.1016/j.cpr.2012.10.007

Burke, M. M., Arnold, C. K., and Owen, A. L. (2015). Sibling advocacy: Perspectives about advocacy from siblings of individuals with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities, 55,* 72–83. doi:10.1352/2326-6988-3.3.162

Burton, L. (2007). Child adultification in economically disadvantaged families: A conceptual model. *Family Relations, 56,* 329–345. doi:10.1111/j.1741-3729.2007.00463.x

Butler-Sweet, C. (2011). 'Race isn't what defines me': Exploring identity choices in transracial, biracial and monoracial families. *Social Identities, 17,* 747–769. doi:10.1080/13504630.2011.606672

Campione-Barr, N. (2017). The changing nature of power, control, and influence in sibling relationships. In N. Campione-Barr (Ed.), The changing nature of power, control, and influence, *New Directions for Child and Adolescent Development, 156,* 7–14. doi:10.1002/cad.20202

Child Welfare Information Gateway. (2013). *Leaving your child home alone.* Retrieved from www.childwelfare.gov/pubPDFs/homealone.pdf

Christ, G. H., and Christ, A. E. (2006). Current approaches to helping children cope with a parent's terminal illness. *CA: A Cancer Journal for Clinicians, 56,* 197–212.

Cicirelli, V. (1994). Sibling relationships in cross-cultural perspective. *Journal of Marriage and Family, 56,* 7–20.

Cicirelli, V. (1995). *Sibling relationships across the life span.* New York: Springer.

Cicirelli, V. (2009). Sibling death and death fear in relation to depressive symptomology in older adults. *The Journals of Gerontology: Series B, 64B,* 24–32. doi:10.1093/geronb/gbn024

Conger, K. J., and Little, W. M. (2010). Sibling relationships during the transition to adulthood. *Child Development Perspectives, 4,* 87–94. doi:10.1111/j.1750- 8606.2010.00123.x

Connidis, I. A. (1992). Life transitions and the adult sibling tie: A qualitative study. *Journal of Marriage and the Family, 54,* 972–982. doi:10.2307/353176

Connidis, I. A. (2010). *Family ties and aging.* Thousand Oaks, CA: Sage.

Coontz, S. (1992). *The way we never were: American families and the nostalgia trap.* New York: Basic Books.

Coontz, S. (2016). The way we never were. *New Republic*. Retrieved from https://newrepublic.com/article/132001/way-never

Coward, R. T., and Dwyer, J. W. (1990). The association of gender, sibling network composition and patterns of parent care by adult children. *Research on Aging, 12*, 158– 181. doi:10.1177/0164027590122002

Creighton, L. L. (1993). Kids taking care of kids. *U.S. News and World Report, 115*(24), 26.

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

Davys, D., Mitchell, D., and Haigh, C. (2011). Adult sibling experience, roles, relationships and future concerns: A review of the literature in learning disabilities. *Journal of Clinical Nursing, 20*, 2837–2853. doi:10.1111/j.1365-2702.2010.03530.x

Deci, E. L., and Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.

Dilworth-Anderson, P., Brummett, B. H., Goodwin, P., Williams, S. W., Williams, R. B., and Siegler, I. C. (2005). Effect of race on cultural justifications for caregiving. *The Journals of Gerontology, Series B, 60*, S257–S262. doi:10.1093/geronb/60.5.S257

Dodson, L., and Dickert, J. (2004). Girls' family labor in low-income households: A decade of qualitative research. *Journal of Marriage and Family, 66*, 318–332. doi.10.1111/j.1741- 3737.2004.00023.x

Dorius, C., and Guzzo, K. B. (2016). Factors affecting adolescent risk-taking in stepfather families. In G. Gianesini, and S. L. Blair (Eds.), *Divorce, separation and remarriage: The transformation of family. Contemporary Perspectives in Family Research, 10*, 163–197.

Downey, D. B., Condron, D. J., and Yucel, D. (2015). Number of siblings and social skills revisited among American fifth graders. *Journal of Family Issues, 36*, 273–296. doi:10.1177/0912513X13507569

Dunn, J. (1983). Sibling relationships in early childhood. *Child Development, 54*, 787–811. doi:10.2307/1129886

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

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

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

Dunn, J., and Munn, P. (1985). Becoming a family member: Family conflict and the development of social understanding in the second year. *Child Development, 56*, 480–492. doi:10.2307/1129735

Dunn, J., Slomkowski, C., and Beardsall, L. (1994). Sibling relationships from the preschool period through middle childhood and early adolescence. *Developmental Psychology, 30*, 315–324. doi/10.1037/0012-1649.30.3.315

East, P. L. (2010). Children's provision of family caregiving: Benefit or burden? *Child Development Perspectives, 4*, 55–61. doi:10.1111/j.1750-8606.2009.00118.x

East, P. L., and Hamill, S. B. (2013). Sibling caretaking among Mexican American youth: Conditions that promote and hinder personal and school success. *Hispanic Journal of Behavioral Sciences, 35*, 542–564. doi:10.1177/0739986313499003

East, P. L., and Jacobson, L. J. (2001). The younger siblings of teenage mothers: A follow-up of their pregnancy risk. *Developmental Psychology, 37*, 254–264.

East, P. L., and Khoo, S. T. (2005). Longitudinal pathways linking family factors and sibling relationship quality to adolescent substance use and risky sexual behavior. *Journal of Family Psychology, 19*, 571–580. doi:10.1037/0893-3200.19.4.571

East, P. L., Weisner, T. S., and Reyes, B. T. (2006). Youths' caretaking of their adolescent sisters' children: Its costs and benefits for youth. *Applied Developmental Science, 2*, 86–95. doi:10.1207/s1532480xads1002_4

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

Fuligni, A. J. (2006). *Family obligation among children in immigrant families*. Washington, DC: Migration Policy Institute.

Fuligni, A. J., Tseng, V., and Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asian, Latin American, and European backgrounds. *Child Development, 70*, 1020–1044.

Furman, W., and Buhrmester, D. (1985). Children's perceptions of the qualities of their sibling relationships. *Child Development, 56*, 448–461. doi:10.2307/1129733

Galley, J. (2014, September). Stay-at-home mothers through the years. *Monthly Labor Review*, U.S. Bureau of Labor Statistics. doi:10.21916/.

Garner, P. W., Jones, D. C., and Palmer, D. J. (1994). Social cognitive correlates of preschool children's sibling caregiving behavior. *Developmental Psychology, 30*, 905–911. doi:10.1037/0012-1649.30.6.905

Gold, D. T. (1989). Sibling relationships in old age: A typology. *International Journal of Aging and Human Development, 28,* 37–51. doi:10.2190/VGYX-BRHN-J51V-0V39.

Gold, D. T. (1990). Late-life sibling relationships: Does race affect typological distribution? *The Gerontologist, 30,* 741–748. doi:10.1093/geront/30.6.741

Gottman, J. M. (1997). *The heart of parenting: How to raise an emotionally intelligent child.* New York: Simon and Schuster.

Grigoryeva, A. (2017). Own gender, sibling's gender, parent's gender: The division of elderly parent care among adult children. *American Sociological Review, 82,* 116–146. doi:10.1177/0003122416686521

Hafford, C. (2010). Sibling caretaking in immigrant families: Understanding cultural practices to inform child welfare practice and evaluation. *Evaluation and Program Planning, 3,* 294–203. doi:10.1016/j.evalprog plan.2009.05.003

Hepach, R. (2016). Prosocial arousal in children. *Child Development Perspectives, 11,* 1–6. doi:10.1111/cdep.12209

Hepach, R., Vaish, A., Grossmann, T., and Tomasello, M. (2016). Young children want to see others get the help they need. *Child Development, 87,* 1703–1714. doi:10.1111/cdev.12633

Hepach, R., Vaish, A., and Tomasello, M. (2017). Children's intrinsic motivation to provide help themselves after accidentally harming others. *Child Development, 88,* 1251–1264. doi:10.1111/cdev.12646

Herrick, M. A., and Piccus, W. (2005). Sibling connections: The importance of nurturing sibling bonds in the foster care system. *Children and Youth Services Review, 27,* 845–861. doi:10.1016/j.childyouth.2004.12.013

Hoetger, L., Hazen, K. P., and Brank, E. M. (2015). All in the family: A retrospective study comparing sibling bullying and peer bullying. *Journal of Family Violence, 30,* 103–111. doi:10.1007/s10896-014-9651-0

Howe, N., Aquan-Assee, J., Bukowski, W. M., Lehoux, P. M., and Rinaldi, C. M. (2001). Siblings as confidants: Emotional understanding, relationship warmth and sibling self-disclosure. *Social Development, 10,* 439–454. doi:10.1111/1467-9507.00174

Howe, N., Aquan-Assee, J., Bukowski, W. M., Rinaldi, C. M., and Lehoux, P. M. (2000). Sibling self-disclosure in early adolescence. *Merrill-Palmer Quarterly, 46,* 653–671.

Howe, N., Della Porta, S., Recchia, H., and Ross, H. S. (2016). "Because if you don't put the top on it, it will spill": A longitudinal study of sibling teaching in early childhood. *Developmental Psychology, 52,* 1832–1842. doi:10.1037/dev0000193

Howe, N., Petrakos, H., and Rinaldi, C. (1998). "All the sheeps are dead. He murdered them": Sibling pretense, negotiation, internal state language, and relationship quality. *Child Development, 69,* 182–191. doi:10.1002/icd.350f.

Howe, N., and Rinaldi, C. M. (2004). 'You be the big sister:' Maternal-preschooler internal state discourse, perspective-taking, and sibling caretaking. *Infant and Child Development, 13,* 217–234. doi:10.1002/icd.350

Howe, N., and Ross, H. S. (1990). Socialization, perspective-taking, and the sibling relationship. *Developmental Psychology, 26,* 160–165. doi:10.1037/0012-1649.26.1.160

Hunter, A. G., Pearson, J. L., Ialongo, N. S., and Kellam, S. G. (1998). Parenting alone to multiple caregivers: Child care and parenting arrangements in Black and White urban families. *Family Relations, 47,* 343–353.

Illinois Facilities Fund. (2000). *A history of federal and state child care legislation and programs for low income children in Illinois.* Retrieved from www.iff.org/resources/content/3/1/documents/century_of_caring.pdf

Ingersoll-Dayton, B., Neal, M. B., Ha, J., and Hammer, L. B. (2003). Redressing inequity in parent care among siblings. *Journal of Marriage and Family, 65,* 201–212. doi:10.1111/j.1741-3737.2003.00201.x

Jenkins, J. (1992). Sibling relationships in disharmonious homes: Potential difficulties and protective effects. In F. Boer and J. Dunn (Eds.), *Children's sibling relationships: Developmental and clinical issues* (pp. 125–138). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Jenkins, J., and Dunn, J. (2009). Siblings within families: Levels of analysis and patterns of influence. In L. Kramer and K. J. Conger (Eds.), *Siblings as agents of socialization. New Directions for Child and Adolescent Development, 126,* 79–93. doi:10.1002/cd.258

Jenkins, J., Dunn, J., Rasbash, J., O'Connor, T. G., and Simpson, A. (2005). The mutual influence of marital conflict and children's behavioral problems: Shared and non-shared family risks. *Child Development, 76,* 24–39. doi:10.1002/cd.258

John, O., Donohue, E., and Kentle, R. (1991). *The "Big Five" Inventory.* Berkeley, CA: Institute of Personality and Social Research, University of California.

Kahn, M. D., and Lewis, K. G. (1988). *Siblings in therapy: Life-span and clinical issues.* New York: W. W. Norton.

Kennedy, D., and Kramer, L. (2008). Improving emotion regulation and sibling relationship quality: The more fun with sisters and brothers program. *Family Relations, 57,* 567–578. doi:10.1111/j.1741-3729.2008.00523.x

Killoren, S. E., and Roach, A. L. (2014). Sibling conversations about dating and sexuality: Sisters as confidants, sources of support, and mentors. *Family Relations, 63,* 232–243. doi:10.1111/fare.12057

Kim, U., Triandis, H. C., Kâğitçibaşi, Ç., Choi, S-C., and Yoon, G. (Eds.). (1994). *Cross- cultural research and methodology series, Vol. 18. Individualism and collectivism: Theory, method, and applications.* Thousand Oaks, CA: Sage.

King, M., Ruggles, S., Alexander, J. T., Flood, S., Genadek, K., Schroeder, M. B., Trampe, B., and Vick, R. (2010). *Integrated Public Use Micro-data Series, Current Population Survey: Version 3.0.* Minneapolis, MN: University of Minnesota.

Kosonen, M. (1996). Siblings as providers of support and care during middle childhood: Children's perceptions. *Children and Society, 10,* 267–279. doi:10.1111/j.1099-0860.1996.tb00595.x

Kowal, A. K., and Blinn-Pike, L. (2004). Sibling influences on adolescents' attitudes toward safe sex practices. *Family Relations, 53,* 377–384. doi:10.1111/j.0197-6664.2004.00044.x

Kowal, A., and Kramer, L. (1997). Children's understanding of parental differential treatment. *Child Development, 68,* 113–126. doi:10.2307/1131929

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

Kramer, L. (1996). What's real in children's fantasy play? Fantasy play across the transition to becoming a sibling. *Journal of Child Psychology and Psychiatry, 37,* 329–337.

Kramer, L. (2004). Experimental interventions in sibling relations. In R. D. Conger, F. O. Lorenz, and K. A. S. Wickrama (Eds.), *Continuity and change in family relations: Theory, methods, and empirical findings* (pp. 345–380). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

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

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

Kramer, L., and Baron, L. A. (1995). Parental perceptions of sibling relationships. *Family Relations, 44,* 95–103. doi:10.2307/584746

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

Kramer, L., and Gottman, J. M. (1992). Becoming a sibling: "With a little help from my friends." *Developmental Psychology, 28,* 685–699. doi:10.1037/0012-1649.28.4.685

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

Kurdick, L. A., and Fine, M. A. (1995). Mothers, fathers, stepfathers and siblings as providers of supervision, acceptance and autonomy granting to young adolescents. *Journal of Family Psychology, 9,* 95–99.

Lamb, M. E., Pleck, J. H., Charnov, E. L., and Levine, J. A. (1985). Paternal behavior in humans. *American Zoologist, 25,* 883–894.

Larson, R. W., and Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin, 125,* 701–736. doi:10.1037/0033-2909.125.6.701

Lee, T. R., Mancini, J. A., and Maxwell, J. W. (1990). Sibling relationships in adulthood: Contact patterns and motivations. *Journal of Marriage and the Family, 52,* 431–440. doi:10.2307/353037

Li, Y. (2006). Sibling advocates of people with intellectual disabilities. *International Journal of Rehabilitation Research, 28,* 175–178. doi:10.1097/01.mrr.0000191845.65198.d7

Linares, L. O., Jimenez, J., Nesci, C., Pearson, E., Beller, S., Edwards, N., and Levin-Rector, A. (2015). Reducing sibling conflict in maltreated children placed in foster homes. *Prevention Science, 16,* 211–221. doi:10.1007/s11121-014-0476-0

Lindell, A., Campione-Barr, N., and Killoren, S. (2015). Technology-mediated communication with siblings during the transition to college: Associations with relationship positivity and self-disclosure. *Family Relations, 64,* 563–578. doi:10.1111/fare.12133

Lu, P. C. (2007). Sibling relationships in adulthood and old age: A case study of Taiwan. *Current Sociology, 55,* 621–637. doi:10.1177/0011392107077646

Margolis, K., Fosco, G. M., and Stormshak, E. A. (2014). Circle of care: Extending beyond primary caregivers to examine collaborative caretaking in adolescent development. *Journal of Family Issues, 37,* 1179–1202. doi/10.1177/0192513X14536565

Maybery, D., Ling, L., Szakacs, E., and Reupert, A. (2005). Child of a parent with a mental illness: Perspectives on need. *Australian e-Journal for the Advancement of Mental Health, 4,* 1–11. doi:10.5172/jamh.4.2.78

Maynard, A. E. (2002). Cultural teaching: The development of teaching skills in Maya sibling interactions. *Child Development, 73,* 969–982. doi:10.1111/1467-8624.00450

McCarren, A. (2015). Parents in trouble again for letting kids walk alone. *USA Today.* Retrieved from www.usatoday.com/story/news/nation/2015/04/13/parents-investigated- letting-children-walk-alone/25700823/

McHale, S. M., and Crouter, A. C. (1996). The family contexts of children's sibling relationships. In G. H. Brody (Ed.), *Sibling relationships: Their causes and consequences* (pp. 173–195). Norwood, NJ: Ablex.

McHale, S. M., and Gamble, W. C. (1989). Sibling relationships of children with disabled and non-disabled brothers and sister. *Developmental Psychology, 25*, 421–429.

McHale, S. M., Kim, J.-Y., and Whiteman, S. D. (2006). Sibling relationships in childhood and adolescence. In P. Noller and J. A. Feeney (Eds.), *Close relationships: Functions, forms and processes* (pp. 127–149). Hove: Psychology Press/Taylor and Francis.

McHale, S. M., Updegraff, K. A., and Whiteman, S. D. (2012). Sibling relationships in childhood and adolescence. *Journal of Marriage and Family, 74*, 913–930. 10.1111/j.1741-3737.2012.01011.x

McMahon, T. J., and Luthar, S. S. (2007). Defining characteristics and potential consequences of caretaking burden among children living in urban poverty. *American Journal of Orthopsychiatry, 77*, 267–281. doi:10.1037/0002-9432.77.2.267

Miller, B. C. (2002). Family influences on adolescent sexual and contraceptive behavior. *The Journal of Sex Research, 39*, 22–26. doi:10.1080/00224490209552115

Morrongiello, B. A. (2005). Caregiver supervision and child-injury risk: I. Issues in defining and measuring supervision; II. Findings and directions for future research. *Journal of Pediatric Psychology, 30*, 536–552, doi:10.1093/jpepsy/jsi041

Morrongiello, B. A., MacIsaac, T., and Klemencic, N. (2007). Older siblings as supervisors: Does this influence young children's risk of unintentional injury? *Social Science and Medicine, 64*, 807–817. doi:10.1016/j.socscimed.2006.10.036

Murphy, S. O. (1993). Siblings and the new baby: Changing perspectives. *Journal of Pediatric Nursing, 8*, 277–288.

Myers, S. A., and Goodboy, A. K. (2010). Relational maintenance behaviors and communication channel use among adult siblings. *North American Journal of Psychology, 12*, 103–116.

Namkung, E. H., Greenberg, J. S., and Mailick, M. R. (2017). Well-being of sibling caregivers: Effects of kinship relationship and race. *The Gerontologist, 57*, 626–636. doi:10.1093/geront/gnw008

Nathans, A. B., Neff, M., Goss, C. H., Maier, R. V., and Rivara, F. P. (2000). Effects of older sibling and birth interval on the risk of childhood injury. *Injury Prevention, 6*, 219–222.

Nuckolls, C. W. (Ed.). (1993). *Siblings in South Asia: Brothers and sisters in cultural context*. New York: Guilford.

O'Bryant, S. L. (1988). Sibling support and older widows' well-being. *Journal of Marriage and Family, 50*, 173–183. doi:10.2307/352437

Orsmond, G. I., and Seltzer, M. M. (2007). Siblings of individuals with autism or Down syndrome: Effect on adult lives. *Journal of Intellectual Disability Research, 51*, 682–696. doi:10.1111/j.1365-2788.2007.00954.x

Otto, H. W. R., Schuitmaker, N., Lamm, B., Abels, M., Serdtse, Y., Yovsi, R., and Tomlinson, M. (2017). Infants' social experiences in three African sociocultural contexts. *Child Development, 88*, 1235–1250. doi:10.1111/cdev.12661

Patterson, G. R. (1984). Siblings: Fellow travelers in coercive family processes. In R. J. Blanchard and D. C. Blanchard (Eds.), *Advances in the study of aggression* (Vol. 1, pp. 173–261). Orlando, FL: Academic Press.

Pleck, J. H. (2010). Paternal involvement: Revised conceptualization and theoretical linkages with child outcomes. In M. E. Lamb (Ed.), *The role of the father in child development* (pp. 67–107). New York: John Wiley & Sons.

Pollock, E. G. (2002). The childhood we have lost: When siblings were caregivers, 1900–1970. *Journal of Social History, 36*, 31–61.

Poortman, A. R., and Voorpostel, M. (2009). Parental divorce and sibling relationships: A research note. *Journal of Family Issues, 30*, 74–91. doi:10.1177/0192513X08322782

Rabain-Jamin, J., Maynard, A., and Greenfield, P. (2003). Implications of sibling caregiving for sibling relations and teaching interactions in two cultures. *Ethos, 31*, 204–231. doi:10.1525/eth.2003.31.2.204

Rauchschwalbe, R., Brenner, R. A., and Smith, G. S. (1997). The role of bathtub seats and rings in infant drowning deaths. *Pediatrics, 100*, 1–5. doi:10.1542/peds.100.4.e1

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

Rende, R. Slomkowski, C., Lloyd-Richardson, E., and Niaura, R. (2005). Sibling effects on substance abuse in adolescence: Social contagion and genetic relatedness. *Journal of Family Psychology, 19*, 611–618. doi:10.1037/0893-3200.19.4.611

Reupert, A., and Maybery, D. (2007a). Families affected by parental mental illness: A multi-perspective account of issues and interventions. *American Journal of Orthopsychiatry, 77*, 362–369. doi:10.1037/0002-9432.77.3.362

Reupert, A., and Maybery, D. (2007b). Strategies and issues in supporting children whose parents have a mental illness in the school system. *School Psychology International, 28*, 195–205. doi:10.1177/0143034307078098

Rivers, J. W., and Stoneman, Z. (2003). Sibling relationships when a child has autism: Marital stress and support coping. *Journal of Autism and Developmental Disorders, 33*, 383–394.

Rodrigues, M., Binnoon-Erez, N., Plamondon, A., and Jenkins, J. (2017). Behavioral risk assessment from new-born to preschool: The value of older siblings. *Pediatrics, 140*, 1–9. doi:10.1542/peds.2016-4279

Roth, K. E., Harkin, D. A., and Eng, L. A. (2014). Parental conflict during divorce as an indicator of adjustment and future relationships: A retrospective sibling study. *Journal of Divorce and Remarriage, 55*, 117–138. doi:10.1080/10502556.2013.871951

Rowe, D., and Gulley, B. (1992). Sibling effects on substance abuse and delinquency. *Criminology, 30*, 217–233.

Rubin, K. H., and Rose-Krasnor, L. (1992). Interpersonal problem-solving and social competence in children. In V. B. van Hasselt and M. Hersen (Eds.), *Handbook of social development: A lifespan perspective* (pp. 283–321). New York: Plenum.

Saarni, C. (1999). *The development of emotional competence*. New York: Guilford.

Seltzer, M. M., Orsmond, G. I., and Esbensen, A. (2009). Siblings of individuals with an autism spectrum dis-order: Sibling relationships and wellbeing in adolescence and adulthood. *Autism, 13*, 59–80. doi:10.1177/1362361308097119

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

Shantz, C. U., and Hobart, C. J. (1989). Sibling conflict and development. In T. J. Berndt and G. W. Ladd (Eds.), *Peer relationships in child development* (pp. 71–94). New York: John Wiley & Sons.

Siddiqui, A. A., and Ross, H. S. (2004). Mediation as a method of parent intervention in children's disputes. *Journal of Family Psychology, 18*, 147–159.

Skinner, J. A., and Kowalski, R. M. (2013). Profiles of sibling bullying. *Journal of Interpersonal Violence, 28*, 1726–1736. doi:10.1177/0886260512468327

Slomkowski, C., Rende, R., Conger, K. J., Simons, R. L., and Conger, R. D. (2001). Sisters, brothers, and delin-quency: Evaluating social influence during early and middle adolescence. *Child Development, 72*, 271–283. doi:10.1111.1467-8624.00278

Smith, J., and Ross, H. (2007). Training parents to mediate sibling disputes affects children's negotiation and conflict understanding. *Child Development, 78*, 790–805. doi:10.1111/j.1467-8624.2007.01033.x

Song, J-H., and Volling, B. H. (2015). Coparenting and children's temperament predict firstborns' cooperation in the care of an infant sibling. *Journal of Family Psychology, 29*, 130–135. doi:10.1037/fam0000052

Song, M. (2010). Does 'race' matter? A study of 'mixed race' siblings' identifications. *The Sociological Review, 58*, 265–285. doi:10.1111/j.1467-954X.2010.01903.x

Soli, A. R., McHale, S. M., and Feinberg, M. E. (2009). Risk and protective effects of sibling relationships among African American adolescents. *Family Relations, 58*, 578–592. doi:10.1111/j.1741-3729.2009.00576.x

St. Clair-Christman, J. (2011). Family support and institutional support for low-income, first generation college students (Doctoral dissertation). Retrieved from ERIC. (ED534702).

St. George, D. (2015). 'Unsubstantiated' child neglect finding for free range parents. *Washington Post*. Retrieved from www.washingtonpost.com/local/education/decision-in-free-range-case-does-not-end-debate-about-parenting-and-safety/2015/03/02/5a919454-c04d-11e4-ad5c-3b8ce89f1b89_story.html?utm_term=.6f840acbd2c7

Stahl, D., and Stahl, D. (2017). Caretaking through art: A sibling story. *Journal of the Medical Humanities, 38*, 77–78. doi:10.1007/s10912-016-9407-3

Stalberg, G., Ekerwald, H., and Hultman, C. M. (2004). Siblings of patients with schizophrenia: Sibling bond, coping patterns, and fear of possible schizophrenia heredity. *Schizophrenia Bulletin, 30*, 446–458. doi:10.1093/oxfordjournals.schbul.a0070091

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

Stewart, R. B. (1983). Sibling attachment relationship: Child-infant interactions in the strange situation. *Developmental Psychology, 19*, 192–199.

Stewart, R. B., and Marvin, R. S. (1984). Sibling relations: The role of conceptual perspective-taking in the ontogeny of sibling caregiving. *Child Development, 55*, 1322–1332. doi:10.2307/1130002

Stocker, C. M., Lanthier, R. P., and Furman, W. (1997). Sibling relationships in early adulthood. *Journal of Family Psychology, 11*, 210–221.

Stormshak, E. A., Bellanti, C. J., and Goodman, M. (1999, April). *High-risk sibling relationships as a context for the development of social cognitive deficits in conduct problem children*. Presented at the biennial meeting of the Society for Research in Child Development, Albuquerque, NM.

Stormshak, E. A., Bullock, B. M., and Falkenstein, C. A. (2009). Harnessing the power of sibling relationships as a tool for optimizing social-emotional development. In L. Kramer and K. J. Conger (Eds.), *Siblings as agents of socialization: New Directions for Child and Adolescent Development, 126*, 61–77. San Francisco, CA: Jossey-Bass. doi:10.1002/CAD.257

Tancredy, C. M., and Fraley, R. C. (2006). The nature of adult twin relationships: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 90*, 78–93. doi:10.1037/0022-3514.90.1.78

Teti, D. M., and Ablard, K. E. (1989). Security of attachment and infant-sibling relationships: A laboratory study. *Child Development, 60*, 1519–1528.

Tolkacheva, N., Brouse van Grounou, M. B., and van Tilburg, T. (2010). Sibling influence on care given by children to older parents. *Research on Aging, 32*, 739–759. doi:10.1177/0164027510383532

Tomlinson, R., and Sainsbury, C. (2004). Childhood injury prevention advice: A survey of health professionals' responses to common scenarios. *Child: Care, Health, and Development, 30*, 301–204. doi:10.1111/j.1365-2214.2004.00436.x

Tucker, C. J., Barber, B. L., and Eccles, J. S. (1997). Advice about life plans and personal problems in late adolescent sibling relationships. *Journal of Youth and Adolescence, 26*, 63–76. doi:10.1023/A:1024540228946

Tucker, C. J., McHale, S. M., and Crouter, A. C. (2001). Conditions of sibling support in adolescence. *Journal of Family Psychology, 15*, 254–271. doi:10.1037//O893-32OO. 15.2.254

Tucker, C. J., McHale, S. M., and Crouter, A. C. (2008). Links between older and younger adolescent siblings' adjustment: The moderating role of shared activities. *International Journal of Behavioral Development, 32*, 152–160. doi:10.1177/0165025407087214

Turner, C. (2015). Arrests for leaving kids home alone made every day. *The Telegraph*. Retrieved from www.telegraph.co.uk/news/uknews/law-and- order/11498123/Arrests-for-leaving-kids-home-alone-made-every-day.html

Umaña-Taylor, A. (2011). Ethnic identity. In S. J. Schwartz, K. Luyckx, and V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 755–774). New York: Springer.

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

Vandenbroeck, M., De Visscher, S., and Van Nuffel, K. (2008). Mothers' search for infant child care: The dynamic relationship between availability and desirability in a continental European welfare state. *Early Childhood Research Quarterly, 23*, 245–258. doi:10.1016/j.ecresq.2007.09.002

Van Loon, L. M. A., Van De Ven, M. O. M., Van Doesum, K. T. M., Hosman, C. M. H., and Witteman, C. L. M. (2017). Parentification, stress, and problem behavior of adolescents who have a parent with mental problems. *Family Process, 56*, 105–125. doi:10.1111/famp.12165

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

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

Vygotsky, L. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

Walker, A. J., Allen, K. R., and Connidis, I. A. (2005). Theorizing and studying sibling ties in adulthood. In V. L. Bengtson, A. C. Acock, K. R. Allen, P. Dilworth- Anderson, and D. M. Klein (Eds.), *Sourcebook of family theory and research* (pp. 167–181). Thousand Oaks, CA: Sage.

Wasu, S. (2017). San Tan Valley boy honored by firefighters after saving his mom. *ABC News*. Retrieved from www.abc15.com/news/region-southeast-valley/queen-creek/san-tan-valley-boy-honored-by-fire fighters-after-saving-his-mom

Weisner, T. S. (1989). Comparing sibling relationships across cultures. In P. Zukow-Goldring (Ed.), *Sibling interaction across cultures* (pp. 11–25). New York: Springer-Verlag.

Weisner, T. S. (2011). Socialization for parenthood in sibling caretaking societies. In J. B. Lancaster, J. Altmann, A. S. Rossi, and L. R. Sherrod (Eds.), *Parenting across the life span: Biosocial Dimensions* (pp. 237–270). Piscataway, NJ: Transaction Publishers.

Weisner, T. S., and Gallimore, R. (1977). My brother's keeper: Child and sibling caretaking. *Current Anthropology, 18*, 169–190.

Whiting, B. B., and Edwards, C. P. (1988). *Children of different worlds: The formation of social behavior*. Cambridge, MA: Harvard University Press.

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

Williams, P. D. (1997). Siblings and pediatric chronic illness: A review of the literature. *International Journal of Nursing Studies, 34*, 312–323. doi:10.1016/S0020-7489(97)00019-9

Williams, P. D., Lorenzo, F. D., and Borja, M. (1993). Pediatric chronic illness: Effects on siblings and mothers. *Maternal-Child Nursing Journal, 21*, 111–121.

Yi, S., Poudel, K. C., Yasuoka, J., Palmer, P. H., Yi, S., Yanagisawa, S., and Masamine, M. (2012). Sibling care, school performance, and depression among adolescent caretakers in Cambodia. *Asian Journal of Psychiatry, 5*, 132–136. doi:10.1016/j.ajp.2012.04.002

Zukow-Goldring, P. (1989). Siblings as effective socializing agents: Evidence from central Mexico. In P. Zukow-Goldring (Ed.), *Sibling interaction across cultures* (pp. 79–105). New York: Springer. doi:10.1007/978-1-4612-3536-1_5

Zukow-Goldring, P. (1995). Sibling caregiving. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 3, pp. 177–208). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Zukow-Goldring, P. (2002). Sibling caregiving. In M. H. Bornstein (Ed.), *Handbook of parenting* (Vol. 3, pp. 253–286). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.