In M. J. Gurlanick (Ed.), The Effectiveness of Early Intervention. Baltimore, MD: Brookes (1997).

23 Designing Early Intervention Programs to Promote Children's Social Competence

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SOCIAL COMPETENCE has emerged as a central organizing construct in the study of human development (Guralnick, 1986, 1990a; Hartup, 1983; Sroufe, 1983). Consensus as to the complete meaning of the term *social competence* remains elusive, yet there is general agreement that this construct captures how individuals define and solve the most fundamental problems in human relationships. Essential challenges include the ability to initiate and sustain interactions with others, to resolve conflicts, to build friendships, and to achieve related interpersonal goals. Agreement can also be found in the recognition that social competence is a dynamic and higher order construct in which skills and abilities categorized within the traditional domains of cognitive, communicative, affective, and motor development are integrated in the service of specific interpersonal goals. Moreover, social competence is a developmental construct, with distinctive behavioral patterns emerging to meet adaptive demands associated with each developmental period. In particular, enthusiasm, responsivity, persistence, sensitivity, and flexibility constitute primary organizing characteristics that guide adaptations of existing developmental skills and abilities to establish socially competent exchanges with adults during the first 2–3 years of life (Spiker, Ferguson, & Brooks-Gunn, 1993; Sroufe, 1983). These characteristics then form the foundation for the development of complex processes and behavioral patterns that address the social tasks associated with building relationships during the preschool years, especially with one's peers (Guralnick, 1986; Howes, 1988). In view of the now well-recognized significance of this construct to human development, it comes as little surprise that children's social competence during the early years has become a prominent issue for both researchers and clinicians.

Appeals to the field of early intervention to consider social competence as a valued outcome during the first generation of research went largely unheeded (Guralnick, 1988, 1989, 1990b; Taft, 1983; Zigler & Trickett, 1978). In many ways, this reluctance was understandable. During that period, the construct of social competence was still mired in definitional problems, and its measurement was correspondingly unclear (Bailey & Wolery, 1989; Guralnick & Weinhouse, 1983). This was particularly the case in comparison to the generally agreed on and standardized assessments offered for the primary domains of cognition, communication, motor, and affective development. With rare exceptions, it was these well-developed, domain-specific assessments that formed the basis for evaluating the effectiveness of early intervention for children at risk and those with established disabilities (Casto & Mastropieri, 1986; Guralnick & Bennett, 1987). Moreover, no coherent developmental framework related to social competence had yet been formulated. What were the relevant psychological processes involved? How did families influence a child's developing social competence? In what ways did a child's unique biological characteristics contribute to this process? How did competence with family members

or other adults relate to competence with peers? In the absence of a reasonable framework to address these and related questions, first-generation research in early intervention found little incentive to develop, implement, and evaluate programs related to children's social competence.

EMERGING INTEREST IN SOCIAL COMPETENCE

Fortunately, within the 1990s many of these concerns have started to be addressed, and arguments to include social competence as part of early intervention programs have intensified (Guralnick, 1990b). Specifically, considerable progress has been achieved in arriving at useful definitions of the construct of social competence, recognizing the importance of both information-processing (Dodge, Pettit, McClaskey, & Brown, 1986; Rubin & Krasnor, 1986) and emotional (Dodge, 1991; Gottman, 1986) components of social competence, as well as the interactions occurring between the two (Asher, 1983; Dodge, 1991; Guralnick, 1992a; Howes, 1988; Odom, McConnell, & McEvoy, 1992; Rubin & Coplan, 1992; Strain, Guralnick, & Walker, 1986). Correspondingly, a developmental framework has emerged that has created a new and exciting understanding of the factors governing the development of children's social competence in general (Sroufe, 1983) and peer-related social competence in particular (Guralnick, 1986; Rubin & Coplan, 1992). The relationship between family and peer systems, including the contributions of child characteristics, has been especially instructive (see Parke & Ladd, 1992, for a review), as has the role of moderating factors such as social supports (e.g., Pianta & Ball, 1993). Taken together, this new framework has provided clear directions for the design of early intervention programs. Of equal importance, this approach fits comfortably within second-generation research in the field of early intervention (Guralnick, 1988, 1993b).

Supporting these developments has been the emergence of assessments designed expressly to evaluate social competence in the context of early intervention programs. For example, Beckman and Lieber (1994) have described the Social Strategy Rating Scale intended for young children with disabilities. This scale requires professionals to rate the frequency and appropriateness of 25 social activities judged to reflect a child's overall social competence. For children at risk, Hogan, Scott, and Bauer (1992) have developed an Adaptive Social Behavior Inventory consisting of three scales relevant to social competence. In contrast, Spiker et al. (1993) have taken a more focused approach to assessing social competence for populations of children at risk, tapping the important affective dimensions of enthusiasm and persistence when children are interacting with their mothers. For more general populations of preschool-age children, Guralnick (1992a, 1992b) developed an Assessment of Peer Relations. This instrument is organized in terms of the social tasks of entry into peer groups, resolving conflicts, and maintaining play. Social strategies children use to accomplish their interpersonal goals (social tasks) are assessed, as are the contributions of social-cognitive, shared understanding, emotional regulation, and higher order processes. Although only a clinical instrument at this time, the development of a more formal research version is underway. However, the Preschool Socioaffective Profile (LaFreniere, Dumas, Capuano, & Dubeau, 1992) is a rating scale that—in 1996—does have research application. It is composed of eight scales, including a broad-band measure of social competence. Factors assessing emotional aspects of anger-aggression and anxiety-withdrawal are also part of this profile. A more abbreviated but nevertheless useful scale has been developed by Dodge, McClaskey, and Feldman (1985). This scale is a checklist that yields composite scores for aggressiveness and social skills with peers and has been applied effectively to children at risk as a result of stressful home environments (Pettit, Dodge, & Brown, 1988).

Increased interest in social competence on the part of early interventionists also has resulted from a growing awareness that inter-

ventions intended to achieve positive effects for one or more of the traditional developmental domains are likely to have only limited impact on the domain of social competence. For example, although cognitive competence is an important correlate of young children's social competence (Wright, 1980), *within* typically developing, at-risk, or established disability groups, only modest relationships exist between social and cognitive competence (Guralnick & Groom, 1985; Putallaz, 1983; Quay & Jarrett, 1984; Rubin & Krasnor, 1986). Even levels of language development yield surprisingly small associations with social competence for young children despite their apparent importance in advanced forms of social pretend play (Guralnick, Connor, Hammond, Gottman, & Kinnish, in press; Guralnick & Groom, 1985). These findings reflect the dynamic and integrative nature of social competence as well as the ability of many young children to compensate for difficulties associated with one or more of the fundamental developmental domains. Interestingly, it appears that improvements in peer-related social competence may actually encourage advances in children's cognitive and communicative development as well as other aspects of prosocial behavior (Bates, 1975; Garvey, 1986; Hartup, 1983; Howes, 1988; Rubin & Lollis, 1988). Clearly, then, if improved social competence is to be a goal of early intervention, programs must be designed to address this higher order and integrative domain specifically.

From a broader framework, the disability field has, since the 1980s, emphasized the concepts of independence and inclusion as primary goals of intervention programs and the design of support systems in general (Taylor, 1988). The emphasis on independence in particular extends to the early years, with social competence seen as a central mechanism fostering this goal (Guralnick, 1990a). In fact, in the field of general early childhood education, social competence serves as an important means for promoting independence, a long-established priority associated with developmentally appropriate practice (Bredekamp, 1987). Similarly, promoting an individual's social competence, particularly when conceptualized as the ability to carry out one's interpersonal goals, is now seen as essential for maximizing independence for those children requiring early intervention services (Guralnick, 1993a).

Complementing the emphasis on social competence in relation to independence is the press to include or integrate children with and without disabilities in school and community settings. This has resulted in attention being focused on the social aspects of development (Guralnick, 1990a, 1990b), a view supported by the majority of parents of children in general (Guralnick, Connor, & Hammond, 1995; Quirk, Sexton, Ciottone, Minami, & Wapner, 1984). As a consequence, an emphasis on social competence stands as a major agenda item for young children and their families and serves, in many respects, as a developmental theme unifying the fields of general early childhood development and early intervention (Guralnick, 1993b, 1994).

Finally, a sense of urgency in the field of early intervention has now developed as an awareness of the scope and magnitude of difficulties in social competence has become apparent for both children considered to be at risk and those with established disabilities. For example, problems in the domain of social competence have been well documented for low-birth-weight/premature children assessed during toddler (Landry, Chapieski, Richardson, Palmer, & Hall, 1990) and school age (Ross, Lipper, & Auld, 1990) periods. Similar problems in peer-related social competence have been found to affect a disproportionately large number of children at risk because of stressful environmental circumstances (e.g., Booth, Rose-Krasnor, & Rubin, 1991). Moreover, numerous studies have now established the unusual and pervasive difficulties exhibited by young children with documented disabilities in their efforts to establish relationships with their peers and to develop friendships (see Guralnick, 1990a). Considerable attention has been given to the peer interaction difficulties of young children with general (cognitive) delays, because

problems extend well beyond those expected based on the child's overall developmental level (Field, 1980; Guralnick & Groom, 1985, 1987, 1988; Guralnick & Weinhouse, 1984; Lieber, Beckman, & Strong, 1993). Yet, similar difficulties have been reported for young children with other disabilities (Odom et al., 1992), including children with communication disorders (Guralnick et al., in press; Rice, Sell, & Hadley, 1991), hearing loss (Higgenbotham & Baker, 1981; McKirdy & Blank, 1982; Vandell & George, 1981), and visual impairments (Erwin, 1994; Markovits & Strayer, 1982). It should also be noted that evidence continues to suggest that peer relationship difficulties observed during early childhood are predictive of later adjustment problems for children who are otherwise developing typically (Parker & Asher, 1987). Although no long-term studies of a similar nature have been carried out for children at risk or for those with established disabilities, there is every reason to believe that similar outcomes would result. Consequently, priority given to issues related to social competence in early intervention programs may well yield significant long-term benefits.

PURPOSE AND ORGANIZATION OF THIS CHAPTER

The overall purpose of this chapter is to integrate theoretical and empirical work in the domain of social competence in order to establish a framework and direction for comprehensive early intervention programs designed to promote children's social competence. An emphasis is placed on family influences, especially the relationship between family factors and social competence with peers. Because interest in this area is a primarily 1990s phenomenon, this chapter is not able to provide a review of the effectiveness of early intervention programs focusing on children's social competence, although relevant research that has been conducted is noted. This focus on social competence as an outcome of early intervention and its implications for the design of early intervention programs has the potential to substantially advance the process of second-generation research (Guralnick, 1988, 1993a).

Accordingly, a major portion of this chapter considers the role families play in fostering the development of children's peer relations. The now extensive research linking family and peer systems in the general population has successfully identified interaction patterns that appear to have substantial influences on the development of children's peer-related social competence and is considered in detail. The pathways through which family influences are transmitted, the influence of specific child characteristics on this process, and the moderating role of social support are of special interest. These discussions are followed by analyses of family influences in relation to children in high-risk groups as well as those with established disabilities. Considered at this point is the extent to which family patterns and circumstances associated with children at high risk or with established disabilities are likely to create conditions in which children become more vulnerable to difficulties in social competence. An additional section provides suggestions for general intervention approaches and specific strategies in the context of early intervention programs in relation to family influences. A brief section focusing on interventions occurring in the context of preschool programs also is included, followed by concluding comments that address the design of comprehensive early intervention programs within a social competence framework.

FAMILY INFLUENCES

Research and theoretical advances have documented the intricate linkages that exist between family and peer relationships in the general population (Ladd, 1991; Parke & Ladd, 1992). Four aspects of family influence that can be readily incorporated into an early intervention framework and appear to have strong associations with children's peer-related social competence are as follows:

1. Early caregiver–child relationships
2. Parent–child interactions
3. The child's peer social network
4. Parental attitudes and beliefs regarding peer relationships.

Separate linkages between peer-related social competence and each of these influences can be identified and are discussed in this section. It is important to emphasize, however, as expected from family systems theory (see Krauss & Jacobs, 1990) and ecological models of development (Bronfenbrenner, 1979), that these influences are all interrelated. Where appropriate, interrelationships and developmental continuities are discussed. In addition, although the direction of influence is thought to flow from families to children when accounting for differences in peer-related social competence, a plausible argument also can be made that endogenous factors governing children's behavior or levels of competence influence the nature of family patterns. There is no doubt that such reciprocal relationships exist, but family adaptations to the characteristics of their children and other prevailing conditions remain important sources of influence on children's social competence (LaFreniere & Dumas, 1992; Rubin & Lollis, 1988).

Early Caregiver–Child Relationships

Bowlby (1980) proposed that the adaptation of the individual is a function of both current circumstances and early caregiver–child relationships. A number of studies have tested the importance of early attachment on peer social competence at a variety of age points. Because attachment is a molar construct in which the measurement paradigm was designed to be an indicator of the global affective bond between child and caregiver, it can provide a good general test of the linkage between the family and peer social systems.

Attachment ratings are typically made using the Strange Situation paradigm (Ainsworth, Blehar, Waters, & Wall, 1978). In this system, 1-year-old children are separated from their mothers, and their responses to separation–reunion episodes are observed and coded. The infant's reactions to the reunion are placed into four broad categories (which can be further subdivided): insecure-avoidant, secure, insecure-resistant, and insecure-disorganized. Secure babies show little anxiety prior to separation, are distressed by the separation, and seek comfort from mother on reunion. Insecure-avoidant babies rarely cry on separation and avoid their mothers on reunion. Insecure-resistant babies tend to show preseparation anxiety, are highly distressed by separation, and seek close contact on reunion while also resisting the contact (Ainsworth, 1979). The insecure-disorganized babies display a combination of both avoidance and resistance (Main & Solomon, 1986). In studies linking attachment and social competence, only the broad categories of secure versus insecure are typically employed.

Following this approach, quality of attachment has indeed been shown to be associated with measures of peer social competence. For example, Pastor (1981) examined 18-month-olds' responsiveness to other toddlers and found the securely attached toddlers to be more sociable and positively oriented toward other toddlers. The work of Sroufe and colleagues has extended the general attachment-social competence linkage to preschool settings. In an early study, infant attachment status was significantly associated with global social competence ratings in a 3½-year-old middle-class, preschool sample (Waters, Wippman, & Sroufe, 1979). These findings were replicated in a high-risk sample of 4-year-olds in the laboratory preschool at the University of Minnesota (LaFreniere & Sroufe, 1985; Sroufe, 1983). Similarly, teachers have been asked to rate the behavior of children who had been previously rated for attachment quality. Compared with insecurely attached children, securely attached children are rated by teachers as having fewer behavior problems (Cohn, 1990; Erickson, Sroufe, & Egeland, 1985) and as being more socially competent and emotionally healthy (Arend, Gove, & Sroufe, 1979; Cohn, 1990; Sroufe, 1983).

Like attachment, social competence is a molar construct composed of numerous component behaviors. Such social behaviors have also been examined, providing further support for the importance of a secure attachment in peer-related social development. In the affective domain, securely attached children have been distinguished as displaying more positive and less negative affect (LaFreniere & Sroufe, 1985; Sroufe, 1983; Waters et al., 1979). They have also been observed to be more positively responsive to other children both emotionally (Kestenbaum, Farber, & Sroufe, 1989) and in the typical give-and-take of play (Lieberman, 1977). In an important early study, Lieberman (1977) examined concurrent attachment ratings (both in the home and in the laboratory situation) as well as 3-year-old children's play in a familiar laboratory playroom with an unfamiliar peer. Using partial correlations, she found a negative association (after partialling out the effects of amount of peer experience) between security of attachment and negative child–peer exchanges (e.g., threats, aggression, crying). Similarly, Booth et al. (1991) found that 4-year-old children who had been rated as insecurely attached at 20 months displayed more negative affect; they also noted a trend indicating the use of more aggressive strategies when asked to share a single attractive toy with a peer. In related social domains, securely attached children have been found to display more positive self-esteem (Sroufe, 1983) and a more open and flexible, as opposed to deprecating and defensive, self-evaluative style (Cassidy, 1988). Although these studies indicate that poor attachment is associated with lower social competence, they do not necessarily speak to the overall quality of the friendships these children form. Elicker, Englund, and Sroufe's (1992) summer camp study examined just this ability by analyzing sociometric friendship nominations, backed by observations by camp staff. In this study, 11-year-old children with secure attachments in infancy were more likely to form friendships during the 4-week day camp and spent a greater portion of their time with peers than did those with insecure histories. When asked about their friendships, 10-year-olds in a German sample were also more likely to report one or more good friends and less likely to report problems with peers if they had secure histories (Grossman & Grossman, 1991).

Beyond the ability to establish friendships, studies have also examined the quality of those relationships. Park and Waters (1989) obtained contemporaneous attachment ratings using the Attachment Q-set (Waters & Deane, 1985) on a sample of 33 children 42 to 48 months old and their best friends. Children were observed playing with their friends for 1 hour, and the quality of the interactions was rated. Friend pairs that contained both secure or one secure and one insecure child were compared. Secure-secure pairs were rated as more harmonious, less controlling, more responsive, and happier than insecure-secure pairs.

In a longitudinal analysis, Youngblade and Belsky (1992) examined children playing with close friends at age 5. The attachment status of the target children with each parent had been assessed at age 13 months. Attachment in this study was weakly and inconsistently associated with observations of children playing with a friend. Although a weak, negative association was found between mother–child attachment and negative aspects of child–friend play, father–child attachment was found to be negatively associated with positive aspects of play. Although the findings across studies consistently support the importance of parent–child attachment in the development of peer relations, this study challenges the robustness of the effects of early attachment on later peer functioning in close relationships.

The question remains as to the process by which parent–child attachment influences relationships with peers. The attachment model posits an "internal working model" for relationships that is learned in the attachment relationship and generalizes to other relationships (Bowlby, 1973; Bretherton,

1985; Sroufe & Fleeson, 1986). It is composed of conscious and subconscious cognitive/affective mental representations that guide attitudes and expectations about relationships. Putallaz and Heflin (1990), following their review of the literature, cited two hypothesized explanations for the associations between infant–parent attachment and children's social behavior: 1) the attachment relationship establishes a social orientation that generalizes to others, and 2) the establishment of a secure home base facilitates more confident, less anxious exploration of the social world. To these mechanisms, Elicker et al. (1992) added that these explorations result in a learned sense of self-worth and efficacy, and that the rudiments of reciprocity are learned in the attachment relationship. Studies directly testing these mechanisms have begun, but methodological and assessment issues are still being worked out. Although a promising avenue of study, no firm conclusions can be made about these mechanisms at this point. Some of the best general support for the internal working model, however, comes from the social cognition literature, which is discussed below.

Given the links between parent–child attachment and peer social acceptance, what, then, do the parent–child relationships of securely and insecurely attached dyads look like? Although peer studies in the attachment literature have focused on links between overall attachment and peer relations, other studies have examined the behavioral correlates of parental interactions with their children across attachment categories. Briefly, mothers of securely attached babies have been found to be more sensitive to the cues of their babies, more consistent and appropriate in their responses, as well as more positive in their emotional expressions during interactions (e.g., Ainsworth et al., 1978; Isabella, 1993). In contrast, mothers of avoidant babies have been found to be more angry, controlling, and intrusive with their babies (Ainsworth et al., 1978); mothers of resistant babies have been found to be less consistently responsive across time, seemingly capable of both very sensitive and insensitive responding (Isabella, 1993) and less involved with their babies (Belsky, Rovine, & Taylor, 1984).

Consistent with this approach of tying early caregiver interactions and attachment to competence with peers, linkages between similar parental behaviors and the peer relations of children beyond infancy have also been directly examined. Detailed molecular observations of the interaction processes between parents and their toddler and preschool-age children hold the promise of yielding knowledge of the specific interactional styles that may influence relationships outside the parent–child dyad. These studies are reviewed next.

Parent–Child Interactions

A variety of parent–child interactional style variables occurring beyond the early period of a child's life has been linked to children's social competence. However, the most consistent and replicated finding in this area is the importance of the dimensions of parental control and warmth (see Baumrind, 1971). Similar to the findings in the attachment literature, higher levels of child social competence (measured with a variety of techniques) have been tied to positive displays of parental affect and, reciprocally, lower levels of competence have been tied to negative parental affect (Gottman & Katz, 1989; MacDonald & Parke, 1984; Putallaz, 1987). Lower levels of peer competence have also consistently been associated with both an overly controlling parental style (Howes & Stewart, 1987; Kochanska, 1992; MacDonald & Parke, 1984; Putallaz, 1987) and a lack of control or limit setting (Gottman & Katz, 1989). Moreover, harsh maternal disciplinary styles have been tied to lower sociometric ratings by peers and more disruptive behaviors among preschool- and school-age children (Hart, DeWolf, Wozniak, & Burts, 1992; Hart, Ladd, & Burleson, 1990). As asserted by Baumrind (1971) approximately 25 years ago, the optimal parental strategy to enhance children's social development combines moderate lev-

els of control with a warm emotional climate, at least among middle-class families.

Beyond these stylistic approaches with which parents engage their children, parents' responsivity to the child's behavior has also been found to be predictive of children's social competence. LaFreniere and Dumas (1992) found that preschoolers' ratings of children's social competence were associated with the conditional probability of maternal responses to positive and negative affect and behavior, as well as compliance and noncompliance. Specifically, mothers of socially competent children appropriately reciprocated positive and negative affect and behavior and responded positively to compliance and negatively to noncompliance; mothers of children rated average in terms of social competence reciprocated positive and negative behavior, and negative but not positive affect, and responded aversively to noncompliance but inconsistently to compliance; and mothers of anxious-withdrawn children reciprocated negative affect and behavior, were nonresponsive to positive affect and behavior, and responded aversively to both noncompliance and compliance. Similarly, Dumas, LaFreniere, Beaudin, and Verlaan (1992) found that mothers of aggressive preschoolers displayed a generally noncontingent pattern of communication characterized by reinforcement and punishment of both aversive and compliant child behavior. Consistent with the attachment literature, these studies nicely demonstrate a link between the contingency of parental responding and child social competence.

How, then, do these parent–child interaction patterns influence the child's peer relationships? Two broad sets of mediators have been proposed: social-cognitive and emotional processing factors (Parke, Burks, Carson, Neville, & Boyum, 1994; Pettit et al., 1988). With regard to emotional factors, Parke and his colleagues have proposed that emotional encoding, decoding, and regulatory skills are (at least partially) learned within the parent–child relationship and are generalized to interactions with others (Parke, Cassidy, Burks, Carson, & Boyum, 1992). Studies from this group have found social competence to be positively associated with parental affect in play, particularly the level of emotional arousal during parent–child interactions and the quality of the affect produced (Boyum, 1991; Carson, 1991; MacDonald & Parke, 1984). Moreover, the ability of the parent and child to sustain play interactions was positively associated with children's ability to decode the expressions of others and produce (encode) expressions that are more easily decoded by others (Parke et al., 1992). Such emotion regulation skills have elsewhere been established as important elements of social competence (Buck, 1975; Field & Walden, 1982; Guralnick, 1992a).

The other proposed mechanism that may mediate the family–peer linkage is the child's social information processing. Social problem-solving skills learned in the home have been proposed to generalize to peer interactions, influencing social competence (Pettit et al., 1988). Furthermore, drawing on Dodge's (1986) more general information-processing model, Parke et al. (1994) have added children's goals, expectations, anticipated consequences, and efficacy beliefs to the list of potential cognitive mediators. Although this is likely to be a fruitful avenue of research, few studies are available to support the model at this time. Pettit et al. (1988) demonstrated that, although maladaptive parental attitudes had no direct effects on peer and teacher ratings of social competence, they were found to be associated with poorer child social problem-solving skills, which were, in turn, directly associated with lower levels of social competence. Thus, the effect of maladaptive maternal attitudes on child social competence was mediated by the social problem-solving skills of the child. No other study could be found that measured family factors, child social information-processing factors, and peer competence. Burks and Parke (1991) have found a correspondence among the attributions, goals, and anticipated consequences of fourth and

fifth graders and their mothers. Such factors have elsewhere been found to influence children's social competence (Crick & Dodge, 1994; Dodge, 1986), but support for all three components of the model within the same sample has yet to be reported.

In addition to these basic processes, more complex interpersonal processes also may be learned in the parent–child context that are generalized to the peer context. For example, children's attempts to influence their mother's behavior during interaction have been found to be positively associated with sociometric ratings of peer status (Putallaz, 1987). Children are more likely to influence the behavior of mothers than they are the behavior of peers (Kochanska, 1992), thus providing a better opportunity for children to learn negotiation strategies. Moreover, mothers' greater responsivity is more likely to promote children's sense of self-efficacy.

Similarly, conversational skills necessary for maintaining verbal exchanges may also be learned within the parent–child context. Martinez (1987) studied the use of skills for maintaining and controlling conversational exchanges in mother–child and child–child interactions with 2- and 4-year-old children. Children used simpler versions of strategies to control exchanges with other children than those used by mothers to control exchanges with their children. Although no direct association was found between mothers' and children's use of these strategies, it may be that only when the children are old enough to master the strategies can the true relationship be established. This issue awaits further study.

The characteristic parental behavior associated with higher levels of peer social competence centers around issues of affect, control, responsivity, and consistency. Such parents are able to create a generally warm, positive emotional tone to their exchanges and are sensitive to the behavioral and emotional cues of the child. They use this information to respond contingently to the child. Whereas they are able to set limits on the child's behavior, they are not controlling to the point of being intrusive, allowing the child to influence his or her exchanges when appropriate. Moreover, they are able to respond in this way consistently. Children learn from such experiences to trust in their safety to explore the social world, to expect positive reactions from others, to be able to regulate their own emotional reactions and decode those of others, to solve social problems in a more effective manner, and to use some of the specific strategies for negotiating with others when goals and desires conflict.

Peer Social Network

Another avenue through which families influence the peer relations of their children is by providing access to a peer social network (Parke et al., 1992). Experience with peers (productive experience, presumably) is an important pathway to peer social competence (Mueller & Brenner, 1977). For example, Lieberman (1977) found that the amount of experience with peers that the 3-year-olds in her sample had over the past year was positively associated with peer competence, specifically their verbal responsivity and ability to sustain play. Reciprocally, Pettit et al. (1988) showed that rejected preschool children had fewer opportunities with peers based on mother's report.

There are a variety of ways that parents influence children's opportunities to play with other children. Parents often have the opportunity to choose the neighborhoods in which to live, which vary in terms of child population density, distance and barriers between houses, number of playgrounds, and level of safety, all of which influence the number of friends children have and their opportunities for informal unstructured play (Berg & Medrich, 1980; Medrich, Roizen, Rubin, & Buckley, 1982). Parents also facilitate children's enrollment in organized activities, which have been linked to greater social perspective-taking skills in 10-year-olds (Bryant, 1985), an important component of peer interaction. Other factors, such

as parents' choice of child care or preschool experiences and connections to extended family members, also create opportunities for children to interact with peers (Rubin & Slomin, 1984).

Parents also can initiate individual contacts for their child with likely play partners. Ladd and his colleagues (Ladd & Golter, 1988; Ladd & Hart, 1992) found that preschool children whose parents regularly initiated contact with peers had larger peer networks with whom they played more frequently than children whose parents were not active arrangers. These children were also more likely to initiate contacts with peers themselves and displayed less anxiety in school. The boys in these studies were also better liked by peers in the preschool setting and less rejected if their parents actively initiated contacts. These studies nicely demonstrate the effectiveness of this simple parental activity.

Parents also directly supervised and intervened in the play of children, with few peer contacts completely unmonitored among preschool-age children (Ladd & Golter, 1988). Parents' degree of involvement and quality of support can obviously vary and change with child development. Generally, children require less direct help as they grow older. Whereas the level of peer competence increases with direct parental intervention at age 2–3, it has little appreciable benefit in preschool-age children (Bhavnagri & Parke, 1991). Furthermore, children whose parents report using direct supervision rather than indirect methods (e.g., oversee from a distance) receive lower sociometric ratings and have been viewed as more hostile toward peers by teachers (Ladd & Golter, 1988).

When parents do attempt to provide instructions and advice to their children regarding social tasks such as gaining entry into a peer group, the quality of those instructions and advice is clearly associated with children's acceptance by their peers. Mothers of preschoolers rated by teachers as having high social skills were observed to use more skillful assistance strategies with their children during peer interaction (e.g., verbal coaching, specific suggestions for group activity, positive discipline) than mothers of low-social-skill children, who tended to use such tactics as avoidance and power-assertive discipline (Finnie & Russell, 1988). When mothers' advice given prior to group entry was examined, similar results were obtained: Mothers of preschool children of high-social-status (rated sociometrically) encouraged group entry and suggested specific ideas for accomplishing this goal, whereas mothers of children of low-social-status tended to focus their child's attention on the toys available in the setting (Russell & Finnie, 1990).

In sum, the literature suggests a number of general familial factors that are important in the development of good peer relations: a secure early attachment and parents' ability to create a generally warm emotional tone, to set appropriate limits while not being overly controlling or intrusive, to respond consistently and contingently to child behaviors, and to create opportunities for their child to regularly interact with peers. These experiences for children in the family context result in cognitive, affective, and behavior skills that they take into their relationships with peers. Such skills are the building blocks of social competence.

Parental Attitudes and Beliefs

The extent to which parents work to extend and enhance their child's social network and the ways in which they carry this out may well be mediated by attitudinal and belief systems regarding their child's developing social competence (see Mize, Pettit, & Brown, 1995). At any given point in time, the importance parents attach to the domain of social competence, how they conceptualize reactions to their child's problematic social behavior, and their beliefs as to whether specific social skills are determined more by environmental circumstance than by intrinsic characteristics of their child are among the logical candidates guiding the peer social network patterns discussed in the previous section (Rubin & Mills, 1990).

Research by Rubin and his colleagues (Mills & Rubin, 1990, 1992; Rubin & Mills, 1990) provided the first systematic attempt to describe typical parental attitudes and beliefs in relation to a child's social competence. When mothers of 4-year-old children enrolled in preschool and child care centers were asked to identify factors contributing to preschool children's abilities to get acquainted with someone new, to resolve conflicts, to enter an ongoing group containing unfamiliar peers, or to persuade others, a consistent pattern emerged. Mothers believed that a child learned these social skills primarily through personal experiences in direct social exchanges. Other factors, in descending order of importance, were observational learning, adult explanations, and directive teaching, such as rewarding or punishing specific behaviors or being told what to do. Although there was some difference in the order found for resolving conflicts, the pattern was nevertheless highly consistent across the various social skills (for similar results, see Mize et al., 1995). Accordingly, based on expressed beliefs, it can be expected that the majority of mothers who value their child's social development will seek to provide as many experiences with peers as possible for their child (assuming all is going well), and are not likely to take a directive role.

Even when mothers were asked to describe what they would do to help their children if they demonstrated problematic social behaviors (by providing specific vignettes reflecting aggressive behavior and social withdrawal), primarily nondirective strategies such as modeling, reasoning, information seeking, or redirecting their children predominated (Mills & Rubin, 1990). This appears to be the normative reaction characterizing families whose children are interacting effectively with their peers. However, when children exhibiting actual problematic social behavior were identified based on observations during free play and teacher ratings (either withdrawn or aggressive), a different pattern of responses by parents to the vignettes was obtained (Rubin & Mills, 1990). Specifically, mothers of withdrawn children reported that they would use more highly coercive strategies involving force, threats, commands, and the like than mothers of typical children for both vignettes, whereas mothers whose children were judged to be more negative and aggressive in their own social play were more likely to report they would use either indirect or no strategies at all. In general, mothers of children without difficulties suggested fewer coercive strategies than mothers of children with problematic social skills. Of equal interest was the finding that mothers of withdrawn children attributed their child's behaviors in the vignettes more to an enduring trait rather than to transitory factors such as the child's mood or an age-related phenomenon. In the general population, parents attribute possible problematic behaviors of their child primarily to transitory states or situational influences, but infrequently to internal and stable factors such as traits or dispositions (Mills & Rubin, 1990).

These assessments of attitudes and beliefs of parents of children having difficult peer relationships appear to be consistent with actual parental behaviors (see LaFreniere & Dumas, 1992), further indicating that a controlling, directive style by parents is not conducive to promoting children's social competence. Although it is not possible to determine the extent to which these parental patterns contributed to their child's peer interaction difficulties initially, the existing attitudes and beliefs do not present an optimistic picture for the future. Moreover, that parents of withdrawn children tended to attribute their child's peer interaction problems to stable child characteristics further suggests that there may be less of an incentive to promote the child's social competence. Consequently, unless these attitudes and beliefs are examined in more depth, a pattern of coercive interactions or lack of interest altogether regarding their child's peer relations and friendships is most likely to develop and to remain stable over time (Mills & Rubin, 1992).

SOCIAL SUPPORT AND CHILD CHARACTERISTICS

Individual child characteristics that produce stressful circumstances for families, such as irritability, wariness, overactivity, and being difficult to soothe during infancy, can, as Rubin and his colleagues (Rubin, LeMare, & Lollis, 1990; Rubin & Lollis, 1988) have described, create higher risks for insecure attachment and correspondingly difficult and nonfacilitating parent–child interactions that carry over to the preschool periods. It is this pattern that can lead directly to problematic peer relationships. Belsky, Robins, and Gamble (1984) noted that it is "parenting that is *sensitively* attuned to children's capabilities and to the developmental tasks they face that promotes the kinds of developmental outcomes thought important: emotional security, behavioral independence, social competence, and intellectual achievement" (p. 254). Difficult child characteristics pose a further threat to this already difficult task.

Fortunately, most parents are able to establish "competence-inducing parenting practices" (Belsky et al., 1984, p. 254), even for challenging children. Parents' personal characteristics and resourcefulness are of course vital, allowing them to attend to the parenting process despite many stressors. Moreover, those parents who have adequate supports are likely to be successful irrespective of their child's characteristics. Contextual sources of support related to finances, work, and health, for example, are all associated with the quality of parenting (e.g., Belsky, 1984). Similarly, as discussed elsewhere in this volume (see Chapters 10 and 20), social support appears to be an especially important factor in fostering development, consisting of both informal sources of support provided by family members (especially the spouse) and friends and formal sources of support provided by agencies and professionals (e.g., informational support).

Social support, in the broadest sense of the term, appears to be particularly valuable in moderating the effects of difficult circumstances such as those associated with a child's characteristics. In fact, social support figures prominently in early intervention programs, is potentially amenable to change, and has both direct and indirect linkages to children's social competence. For example, Crockenberg (1981) found that, in infants, social support was associated with greater security of attachment. However, this effect was most powerful for those infants who were difficult to manage because of their tendency to be irritable. Apparently, the stress created by children with difficult temperaments can be buffered by the availability of sufficient support. Similarly, Pianta and Ball's (1993) research suggests that adverse effects on child competency related to stressors created by a child's low cognitive levels or low family sociodemographic factors (e.g., being a young mother, having a poor education, holding a job considered to be of low status) could be buffered to some extent by social support.

The pathways through which social support influences peer-related social competence are not well established, but presumably indirect effects (through facilitating secure attachments, helping to establish positive maternal perceptions or cognitions, or reducing intrusive parenting styles) are primary mechanisms. For preschool-age children, research on typically developing samples has confirmed the positive association between social support and parent–child interactions (Jennings, Stagg, & Connors, 1991) and between maternal support networks and peer-related social competence (Melson, Ladd, & Hsu, 1993). The latter association appears to be mediated indirectly through maternal perceptions and attributions. Even parents' attitudes and beliefs regarding the use of coercive strategies in response to vignettes in which their child was having difficulties in peer relationships are related to perceived availability of social support (Mills & Rubin, 1990). Support from a spouse is especially consistent with a mechanism that operates through indirect paths. For example, Gottman and Katz (1989) have offered a model suggesting that marital con-

flict affects peer relations indirectly through its influence on parenting style, thereby inducing chronic stress that interferes with the child's ability to regulate emotions during peer play. However, a more direct path involving modeling of the inappropriate conflict resolution strategies of parents has also been suggested, especially in connection with behavior problems likely to influence children's social competence (Katz & Gottman, 1993).

Of course, many factors, such as the interpersonal characteristics of parents (e.g., depression, emotional adjustment), parenting styles (e.g., approaches to discipline), and even parents' own childhood peer relationships (Putallaz, Costanzo, & Smith, 1991; Putallaz & Heflin, 1990), contribute significantly to the emergence of children's peer-related social competence. Nevertheless, difficult child characteristics and the absence of adequate social supports can be said to constitute risk factors that, under certain conditions, will adversely affect those family relationships that influence a child's developing social competence. Moreover, this discussion has provided the background for examining the potential effects of risk factors that are of a different order of magnitude than variations in social support or child temperament. Specifically, when parents (in particular, mothers) are nearly completely socially isolated with few contextual supports or when children exhibit difficult-to-understand behavioral patterns associated with biological risk factors or a developmental disability, the increased risk for creating nonoptimal family relationships linked to a child's social competence can be readily appreciated. In fact, these additional stressors are likely to influence all the areas of family–child interaction discussed previously.

IMPACT OF RISK AND DISABILITY STATUS

This section examines how additional stressors on families can produce circumstances that adversely affect their child's developing social competence. As noted previously, children at biological risk, especially premature/low-birth-weight children, and those with established disabilities manifest unusual difficulties in peer-related social competence. The question addressed here is whether these peer relations problems can be understood, at least in part, as a consequence of nonoptimal family interaction patterns that arise from difficulties accommodating to a child's risk or disability status. Similarly, increasingly larger numbers of families today lack adequate social and related contextual supports, which, as suggested in the previous section, may well be associated with parenting practices inconsistent with promoting the child's social competence. Should one or more of the areas of family influence discussed previously in this chapter (i.e., early caregiver–child relationships, parent–child interactions, peer social network, or parental attitudes and beliefs) in fact be affected by these stressful conditions, appropriate early intervention programs can be established to assist families in developing strategies that will maximize their children's social competence. Suggested intervention approaches are discussed in the following sections.

Risk Factors

It is important to note that families considered to be at high risk based on sociodemographic factors achieve secure attachment relationships with their children to about the same extent as families at low risk (Spieker & Booth, 1988), at least when cases of child maltreatment or other extreme instances of inadequate care are excluded from the samples. Yet, when high- and low-risk samples are compared in terms of mother–child interactions in the context of peer-related social competence, a number of interesting patterns emerge (Booth et al., 1991). Specifically, when mothers were asked to manage a task in which their child was required to cooperate with a peer, interactional differences became apparent between the mothers at high and low risk that are relevant to issues of peer-related social competence. In partic-

ular, mothers at high risk (defined as those with an absence of social support during the prenatal period combined with low educational level, young age, or low income) were more coercive and adult centered and displayed a behavioral pattern less likely to foster social interactions between the children in the setting. These maternal interaction patterns corresponded to the varying levels of socially competent behavior evident in the children from the families at high and low risk as observed in a separate situation. The unique contributions of the absence of social support to these patterns cannot be determined because social support is inevitably part of a constellation of variables associated with families at high risk as defined in terms of sociodemographic factors. Nevertheless, research on attitudes and beliefs suggests that social support can in fact mitigate parents' negative emotional arousal projected to occur in response to their child's problematic social behavior (vignettes of aggressive and withdrawn behavior) and reduces reactions to those vignettes that would lead to more coercive strategies, at least for families at lower occupational status (Mills & Rubin, 1990).

Biologically vulnerable children introduce an entirely new set of issues for families, often posing an array of difficult challenges to the parent–child relationship (see Chapters 3, 4, and 12). Most research has focused on premature/low-birth-weight children and has identified a number of important characteristics that distinguish preterm from full-term infants. In general, preterm children exhibit more overall distress, lower responsivity, gaze aversion, less smiling, and poorer readability of social cues (Barnard & Kelly, 1990; Beckwith, 1990; Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Field, 1983). Compounded by the stress and uncertainty associated with preterm birth (Bennett & Guralnick, 1992), it is not surprising that early parent–child interactions have often been described as less contingent and less positive, with mothers being more active in stimulating their child (see Crnic et al., 1983). Yet, despite this early pattern, few differences in attachment relationships have been found that distinguish groups at biological risk from nonrisk groups (e.g., Frodi & Thompson, 1985), a finding similar to that obtained from comparisons between families at high and low risk based on sociodemographic factors. Although severity of neonatal illness may increase the risk of insecure attachments, preterm children do not appear to create unusual attachment problems (Beckwith, 1990).

Accordingly, many if not most families of preterm children are able to make successful adaptations between the first and second year, at least for relatively healthy preterm children (Greenberg & Crnic, 1988). However, residual problems may remain for some subgroups, because preventive intervention studies for preterm children have been successful in facilitating parenting competence, including parent–child interactions. It is important to note, these improved parent–child interactions have a developmental impact. Specifically, in the absence of these preventive interventions, a gradual decline in intellectual development occurs over the first 3 years of life, a pattern that can be avoided through family-centered interventions (e.g., Rauh, Achenbach, Nurcombe, Howell, & Teti, 1988; Resnick, Armstrong, & Carter, 1988). Perhaps for some subgroups of families and children, adaptations by parents to their child's biological risk have not been completely successful, thereby affecting the course of the child's cognitive development. In fact, as suggested by the study by Spiker et al. (1993), it would seem that these preventive interventions are of the form that would likely have a positive impact on social as well as cognitive competence (Belsky, 1984). It is possible that subgroups at high risk, based on medical factors alone (Landry et al., 1990) or combined with sociodemographic factors (Resnick et al., 1988), would benefit most from early intervention programs focusing on social competence.

The difficulties that exist in identifying the characteristics of children and families

who might best benefit from preventive intervention programs are underscored by the fact that many preterm infants, especially those born at extremely low birth weight, are likely to manifest a wide range of developmental problems over time (Bennett & Guralnick, 1992). In general, the developmental trajectories of children, particularly those at biological risk, are highly unpredictable. Even children at biological risk who score in the typical range based on neurodevelopmental testing during infancy may develop significant problems during the preschool period (Collin, Halsey, & Anderson, 1991). This raises the possibility that parent–child interaction patterns for a subgroup of preterm children may actually reflect, at some point in development, those family interaction patterns that correspond to the emergence of a child's established disability. In the following section, the relationship between possible family influences and social competence for children with established disabilities is examined more closely.

Established Disability

As was the case for children at risk, despite numerous obstacles, secure attachment relationships are formed in most instances between children with established disabilities and their primary caregiver (see Blacher & Meyers, 1983; Cicchetti & Beeghly, 1990). Patterns of attachment similar to those of typically developing children have been obtained for many groups of children, including those with hearing impairments (Lederberg & Mobley, 1990) and physical/neurological disabilities (Stahlecker & Cohen, 1985; Wasserman, Lennon, Allen, & Shilansky, 1987). Moreover, the organization of attachment relationships appropriate for developmental level has been observed for children with Down syndrome (Cicchetti & Serafica, 1981).

Despite these similarities, some notable differences in the behavior of children with established disabilities have been observed when participating in the attachment protocol. For example, observations suggest that an unusually large number of young children with Down syndrome do not become distressed during separation/reunion episodes and infrequently seek contact with or proximity to their mothers (Vaughn et al., 1994). Indeed, many children do not display those social cues associated with distress that tend to elicit parental behaviors of holding or comforting the child. These investigators suggested that the situations that are part of the attachment protocol (e.g., separation and reunion) may not be stressful for children with Down syndrome, perhaps because of dampened arousal mechanisms (Emde, Katz, & Thorpe, 1978). From an assessment perspective, these unusual behavior patterns result in a high proportion of children described as unclassifiable within the attachment evaluation system. Given the unusual nature of these classification patterns, the meaning of the attachment paradigm for children with Down syndrome, and perhaps other groups of children with established disabilities, can be called into question (Vaughn et al., 1994). However this issue is resolved, the less-expressive behavioral repertoire characteristic of children with Down syndrome as well as other groups of children with established disabilities (Stahlecker & Cohen, 1985) may well require substantial adaptations by parents to create harmonious and synchronous relationships with their child (see also Capps, Sigman, & Mundy, 1994).

In fact, as demonstrated for heterogeneous groups of children with developmental disabilities, social interactions occurring between parents and children often take on a quality that is different from that of parent–child interactions when children do not have disabilities (see Marfo, 1988). In many ways, these unique patterns can be understood as parental adaptations to specific characteristics of their children, such as lower levels of child responsiveness and reduced social initiations (Beeghly, Weiss-Perry, & Cicchetti, 1989; Jones, 1980; Landry, Garner, Pirie, & Swank, 1994). The most consistent finding is the tendency of parents of

children with disabilities to become more directive and controlling during social exchanges than parents of children without disabilities (Buium, Rynders, & Turnure, 1974; Cunningham, Reuler, Blackwell, & Deck, 1981; Jones, 1980; Mahoney, Fors, & Wood, 1990; Terdal, Jackson, & Garner, 1976). From the perspective of promoting children's social competence, however, this pattern could well turn out to be counterproductive. A lack of balance in social exchanges can limit opportunities for the give-and-take needed to practice important social skills, and fewer social initiations reduce a child's ability to determine the goals of parent–child interactions.

How to interpret the developmental implications of this difference in parental directives is now a matter of intense debate (Mahoney, Robinson, & Powell, 1992; Marfo, 1990). The primary issues center around whether parents are providing the appropriate structure and stimulation levels or are interfering with or inhibiting the development of children's self-initiated interactions. Related issues with regard to the possible differential effects of the type of directive used (e.g., imperatives, suggestions, restrictions), and how other aspects of the parent–child interaction are affected (i.e., the responsiveness, warmth, and sensitivity observed in the relationship), are yet to be resolved (see Chapter 22) and will certainly provide insight into this complex problem.

Yet, evidence is accumulating to suggest that there exists a substantial subgroup of parents of children with established disabilities whose social interactions with their children seem to have a different purpose than those of parents of children without disabilities. Specifically, rather than primarily encouraging pleasurable and extended social exchanges, engaging in toy play, or calling attention to interesting features of the environment, as is most common, this subgroup of parents of children with established disabilities is far more focused on encouraging their children to *perform* certain behaviors (Mahoney et al., 1990; Marfo, 1991). As a consequence, requests for the child to do something (action requests) tend to predominate. Correspondingly, positive reciprocity, as indexed by playfulness and laughing, has been observed to occur less frequently for children with disabilities across a range of ages (Floyd & Phillippe, 1993). This more performance-oriented pattern is indeed of concern from the perspective of promoting young children's competence and appears to extend into the preschool years (Eheart, 1982).

A directive tendency may also be more evident when parents attempt to encourage their children to play with peers in home or playgroup settings. Indeed, children's compliance to parents' directives is less likely to occur in unstructured social settings, thereby encouraging even greater use of directives (Landry et al., 1994; see also Floyd & Phillippe, 1993). If this does occur, parents of children with disabilities may have considerable difficulty facilitating their child's peer social network (e.g., helping their child to play more effectively with a peer at home), perhaps discouraging future peer-related activities.

Available research indicates that parents should make the most of any opportunities to strengthen their child's peer social network because social contacts with peers in the neighborhood and community appear to be more limited for children with established disabilities. Research by Lewis, Feiring, and Brooks-Gunn (1987), for example, on the social networks of young children (social contacts) indicates that children with disabilities have proportionately fewer peer contacts, relative to adult contacts, than do children without disabilities. Moreover, this relative proportion does not appear to change over the preschool period. The reasons for these differences are likely to be many and varied, perhaps related to issues of stigmatization (Goffman, 1963), limited options in the community to interact with peers, or the demands of specialized therapies. Nevertheless, the limited peer experience in community settings is likely to slow

the development of children's peer-related social competence.

Finally, only limited information is available with regard to the attitudes and beliefs about the development of social competence of mothers of young children with disabilities. However, a 1994 study carried out by Booth (1994) provides insight into this issue. Specifically, maternal responses to a standard series of assessments requesting information about the causal attitudes and beliefs regarding their child's developing social competence (sharing, making friends, gaining acceptance into a group) were carefully evaluated. Interestingly, results revealed that mothers of children with disabilities tended to attribute the development of their child's social competence more to traits or dispositional factors than to factors external to the child. In addition, mothers also believed that children primarily learn social skills through their own experiences rather than from adult intervention. It is quite possible that this combination of attitudes and beliefs regarding the importance of child dispositional characteristics and reliance on the children themselves to learn from their own experience without adult intervention may create little enthusiasm on the part of parents for the prospects of a systematic intervention program. The difficulties parents of children with disabilities have in arranging for peer experiences for their child noted previously may dilute parental enthusiasm even further, despite the fact that the development of their child's social competence is highly valued (Booth, 1994). To the extent that this is the case, these attitude and belief systems of mothers of preschool-age children with disabilities should be addressed directly (see Chapter 25).

INTERVENTION SUGGESTIONS

As shown, early intervention strategies to assist families of very young children to support their child's developing social competence are likely to follow closely approaches suggested to support general aspects of development. Chapters in this volume concerned with fostering optimal parent–child interactions and providing supports (e.g., Chapters 10, 12, 20, and 22) reflect that perspective. In addition, a brief discussion of programs designed to enhance the quality of attachment between parents and children is presented at the end of this section. However, for preschool-age children, additional efforts that are more directly focused on children's social competence (particularly peer-related social competence) can be established. This section focuses primarily on intervention suggestions for preschool-age children.

As in the case of the younger child, approaches to working with families of preschool-age children to promote the social competence of their children should fall well within established early intervention paradigms. Promoting a child's social competence should not be seen as a separate enterprise; rather, it should be integrated into the child's overall early intervention program. Fortunately, the emerging family-centered programs (Guralnick, 1989) are highly consistent with our understanding of the factors that influence children's social competence described previously, particularly those programs that advocate for an emphasis on strengthening relationships among family members (Affleck, McGrade, McQueeney, & Allen, 1982) and on developing a meaningful parent–professional partnership (Dunst, Trivette, & Deal, 1988).

At this point, only some general suggestions to organize an intervention in the area of social competence can be provided. Although the approach that follows has been structured in terms of the areas of family influence on children's peer-related social competence presented in the previous section, that framework must be translated into clinical information (i.e., assessments) needed to develop a coherent intervention plan. In addition, a process must be established that will effectively involve the clinician well within the complex and sensitive relationships existing within the family network.

General principles and practices as well as issues of concern for both professionals and parents are available for guidance (Bailey, 1987; Comfort & Farran, 1994). It is important to point out that, to our knowledge, no comprehensive approach such as the one presented in this section has been attempted.

Clinical Assessment

A first step is to gain an overall perspective on child and family functioning in areas relevant to a child's social competence. Assessments of the child's developmental profile, usually obtained from existing clinical or educational sources, provide such a perspective of the child's cognitive, communicative, behavioral, and emotional strengths and concerns. In addition, specific clinical assessments directed toward understanding the child's peer-related social competence are now available (e.g., Guralnick, 1992b) and are discussed briefly in the next section of the chapter. Once this child-focused information is obtained, the family situation is then considered, emphasizing available supports and the stressors impinging on the family. Information related to the economic and occupational status of family members, how the family work is divided, their level and sources of stress, and what supports they have to help cope with child-rearing and related issues provides an essential context for a comprehensive intervention program. Interviews and questionnaires are available to organize this information. For example, the Parenting Stress Index (Abidin, 1990) is just one of a number of standardized measures that can be of value in evaluating the stress levels of families. Similarly, a variety of methods are also available to assess social support (see Chapters 10 and 20) that can be easily incorporated into a clinical assessment.

Parents' beliefs and attitudes about the importance of social development and how social skills are acquired and fostered should also be assessed. As the studies reviewed earlier revealed, parents' attitudes can play a critical role in the choices they make and approaches they take in fostering their child's peer-related social development. A series of interview questions related to beliefs and attitudes, emphasizing parental perceptions of their child's developing peer-related social competence—particularly its importance, its malleability, and the way in which children learn to interact with their peers—is now available (Booth, 1994). It is during this interview process that a dialogue can be established between parents and professionals regarding these most critical of issues.

The next element of the assessment is an evaluation of the child's social network. The opportunity to interact with peers is, of course, essential for the development of peer-related social skills. Therefore, it is important to know how many children the child of interest plays with and the frequency with which they contact one another. Also of interest are the circumstances under which the child has access to playmates, how often the parents arrange social activities, and how the parents monitor and supervise their child's play. Numerous checklists and interview formats are now available (e.g., Ladd & Golter, 1988) and can be easily adapted for clinical use. However, assessments of the strategies parents use to foster their child's social competence during play with peers (i.e., strengthen the peer social network) remain to be developed. Observations of child–child social play situations in the home in which the parent is asked to encourage productive play when difficulties arise will certainly form a component of any useful clinical protocol. Moreover, important insights can be obtained through discussions of the child's compliance with parental requests when the child plays with other children.

Finally, the parent–child relationship must be evaluated and will likely reveal patterns similar to those obtained from observations of parent involvement in child–child play just noted. This is an especially difficult task, requiring extensive observations in a variety of situations as well as interviews with

parents and others familiar with the family. Of particular interest for the development of peer relations is the emotional tone of parent–child interactions, the responsiveness of parents to child behavior, the contingent relationship between child and parent behavior, the degree to which parents maintain control over the exchanges (i.e., support vs. intrusiveness), and the opportunities parents and children take to play together. A number of observational instruments for assessing parent–child interactions are available that can be of value (e.g., Comfort & Farran, 1994).

Intervention

The outcome of this interactive assessment process, which typically would include extensive sharing of views and information by participants, can then be used to create a list of mutually agreed on issues in order to focus intervention efforts. Of primary importance is the recognition that any intervention must correspond to the beliefs and attitudes of parents if they are to participate in a meaningful manner. There are a myriad of attitudinal factors that are potentially important. However, the attributions parents make regarding the source and malleability of possible problems in social skills are likely to determine their willingness to put effort into creating change. For example, attributions of at least some of their child's peer social interaction difficulties to more transitory states or to situational factors can create a more hopeful scenario for change than attributions associated with aspects of the child's disability or enduring psychological traits. Interventions consisting of discussions of realistic developmental expectations, case histories of experiences of how other families have approached similar problems, conversations focusing on the child's strengths in peer interactions (best obtained from direct and joint observations by the parent and professional during an arranged play situation), and simply providing as much information as possible on these issues constitute important beginning points. Assisting parents to build a sense of self-efficacy in relation to their child's social development provides a foundation for more active involvement to promote their child's skills that may follow.

However, before more demanding and time-consuming activities related to strengthening the child's peer social network or fostering more optimal parent–child interactions emerge from the process, issues of family stress and social support must be considered. If the parents are experiencing a high level of stress and feeling that they have little extra energy to expend on a new activity, suggestions that place additional demands on them will likely result in failure. As a result, every effort should be made to design an intervention that brings additional resources to the problems at hand.

Because the goal is to establish an intervention with long-term generalizability, the ideal would be to encourage the use of supports that will continue beyond the life of the intervention. Naturally existing supports such as other family members, friends, and neighbors would therefore be the first place to look for additional resources. If these resources are not currently being tapped, the reasons will need to be explored. It may also be that families have not thought broadly enough about what resources are available. Alternatively, attitudinal factors, such as the parents' comfort with asking for and accepting help, may be interfering. Creativity in brainstorming about untapped resources in the family, neighborhood, or larger community can result in unexpected solutions to problems. Organized community resources, such as support groups, child care facilities, preschool services, and health service agencies, may also be available to the family. Support, reassurance, and building on the strengths of parents are necessary in order to foster change in a family system that will establish the conditions for maximizing the child's social competence.

A more demanding phase is to begin to address problems related to more specific issues—ones that require extensive involvement of the parents themselves. Expanding a

child's peer contacts in the community is a likely avenue of intervention for children with disabilities. This approach may also fit well with many parents' beliefs regarding effective means of improving their child's social skills (i.e., through experience with peers). Typical opportunities include community or informally organized playgroups and parent-arranged one-to-one play with a peer. However, such activities may not be as straightforward to arrange as it would first appear. Parents of children with disabilities may have difficulty finding opportunities in which families in the general community are willing to make adjustments to the needs of individual children (Bailey & Winton, 1989). Parents may also have concerns about their child being rejected or ignored and may need to work through their own reactions to possible stigmatization as a result of having a child with a disability now facing the challenges of interacting with peers and establishing friendships.

Similarly, parents may need assistance in the context of the child's play with peers in fostering productive interactions. This part of the process should be coordinated with the child's educational program (see next major section) and should attempt to minimize didactic or structured activities while emphasizing the parents' role as facilitator by adapting the play setting to maximize success. As the process unfolds, high-priority concerns can be identified, such as improving the child's conflict resolution skills or expanding a dramatic play repertoire to enable more extensive shared exchanges with peers.

The final potentially fruitful strategy that follows from our approach is to explore opportunities to enhance parent–child interactions. As noted in the previous section, parent–child play can be an important setting in which children learn social skills necessary for effective peer relations and can serve as an excellent vehicle for encouraging broader aspects of parent–child interactions. Consequently, although compliance problems also may be apparent, perhaps even directly expressed as a concern by the parents during the interview process, parent–child play can be readily discussed in a nonjudgmental way.

Should assessments suggest that nonoptimal styles predominate, the parent–child play context may be an ideal way to address these issues. For example, after discussing the importance of initiation skills in peer relations, the interventionist could encourage highly directive parents to focus more on supporting and expanding the initiations of the child. Emphasizing the importance of providing their child with opportunities to regulate his or her emotions in this context and to support any attempts at compliance to parental requests may provide a basis for subsequent interventions related to this sensitive area of development. An advantage to promoting parent–child play is that it is generally an enjoyable activity that is likely to be mutually satisfying and may have generally positive repercussions on the parent–child relationship as a whole. In addition, parents may be more open to learning new play styles than altering other aspects of the relationship with their child.

Early Efforts

To complete this discussion of possible interventions, early child–caregiver relationships should be considered in view of their importance to the development of peer social competence. By emphasizing these early relationships, it is hoped that the extensive array of interventions just described for preschool children can be minimized.

As reviewed previously, our earliest efforts might best focus on supporting the development of a secure attachment between parent and child, particularly for specific subgroups. Although most early intervention programs are consistent with this general goal, surprisingly few attempts have specifically targeted attachment (when appropriate) and measured intervention effectiveness with an attachment rating. An exception is the recent work of van den Boom (1994). In a carefully designed intervention study, 100 mother–infant dyads, who were at risk for de-

veloping insecure attachments as a result of low socioeconomic status and high infant irritability at birth, were randomly assigned to intervention and control groups. The focus of the intervention was to assist mothers (in their homes) in increasing sensitive responsiveness to their babies. The training took place when the babies were 6–9 months old, after which mother–infant interaction was observed. Intervention mothers were found to be more responsive, stimulating, visually attentive, and controlling. Their babies were observed to display more sociability and a greater capability to self-soothe, to engage in more cognitively sophisticated levels of exploration, and to cry less than control babies. At 12 months the dyads were observed in the Strange Situation. Significant differences between the groups were found in attachment classifications, with only 28% of control infants classified as secure compared with 62% of the intervention group. This study nicely documents the efficacy of individualized assistance in developing the skills and feelings of effectiveness that lead to secure attachments.

A more traditional clinical approach was adopted by Lieberman, Weston, and Pawl (1991). They provided services to mothers at risk for attachment problems as a result of sociodemographic factors, in which "clinicians sought to alleviate the mothers' psychological conflicts about their children and to provide developmental information that was clinically timed and tailored to the child's temperament and individual style" (p. 202). In this study, insecurely attached mother–child dyads were randomly assigned to either an intervention or a control group at 12 months of age. Comparisons were made at 24 months of age among three groups: insecure-intervention, insecure-control, and secure-control. The results supported the effectiveness of the intervention in enhancing the affective quality of mothers' interaction styles and decreasing child avoidance, resistance, and anger, thus improving the overall quality of mother–child interactions and the negotiation of conflict. The intervention group became more comparable to the secure-control than the insecure-control group on these measures. No differences, however, were found in ratings of security of attachment. More time may be needed after an insecure attachment has already been established for parents and children to develop the level of trust and comfort with each other that secure attachment demands.

Additional studies are needed to establish the reliability of these intervention methods, to evaluate longer term changes, and to extend the approach to families of children with disabilities. It does appear, however, that these approaches can be useful for many families of children with disabilities. By providing highly individualized guidance, support, and information relevant to attachment quality—including, for example, concerns about the relative absence of emotional expressiveness seen in many children with Down syndrome—the foundation for adaptive parent–child relationships and subsequent social competence can be bolstered. It would also appear, based on these two studies, that prevention efforts are more likely to be effective with parents at very high risk, rather than waiting until an insecure attachment has been formed.

INTERVENTIONS IN THE PRESCHOOL CONTEXT

Despite our best efforts during the first 3 years of a child's life, it is likely that preschool-age children at risk and those with established disabilities will manifest many of the difficulties in establishing relationships with their peers and developing friendships described earlier (see Guralnick, 1990a). As noted, many of the intervention approaches emphasized in the previous section were intended for families of preschool-age children. In fact, one component related to expanding or sustaining the child's peer social network consisted of parent-orchestrated strategies designed specifically to facilitate their child's social skills in informal peer play situations.

Nevertheless, it is educators and clinicians in preschool and child care settings who generally take primary responsibility for directly fostering children's peer-related social competence. Indeed, numerous educational and therapeutic techniques have been developed over the years to promote young children's peer interactions, many of which are best carried out with the assistance of, or in a context that includes, children without disabilities. Approaches involving modeling and observational learning, coaching, prompting, rehearsal, direct teaching of social strategies, and reinforcement procedures, as well as the application of peer-mediated techniques, have been used extensively. Moreover, there has been an increased recognition of the fact that environmental and social context factors can have a major impact on children's peer interactions. These factors include the number and familiarity of the children in the social setting, the types of toys available, and the physical arrangement of the classroom environment. Detailed reviews of these techniques and their effectiveness are available elsewhere (McEvoy, Odom, & McConnell, 1992; Odom & Brown, 1993; Sainato & Carta, 1992).

Whether focused on individual children (Odom & Strain, 1986) or larger groups (Antia & Kreimeyer, 1987, 1988; Hundert & Houghton, 1992; Poresky & Hooper, 1984), these potentially important techniques can be readily employed by educators and clinicians in preschool contexts. Yet, it is also the case that these techniques have not yielded social interaction skills that generalize to other contexts over time in the majority of circumstances (see Guralnick, 1994). In part, this generally acknowledged problem can be attributed to the difficulties encountered in altering behavioral patterns that are unusually resistant to change. Apparently, numerous factors contribute to this tendency toward stability, including constraints associated with the child's developmental characteristics, reputational factors, the existence of social status hierarchies in the classroom context, family–child interaction patterns, and the often restricted peer social networks found for children with disabilities.

Although intervention techniques designed to be applied in the peer context are continually being refined and revised to improve their effectiveness, three limitations to the general approaches that have been taken can be identified. First, thorough assessments consistent with contemporary conceptualizations of children's peer-related social competence are not typically found. Absent as well are linkages between a comprehensive assessment and the design of intervention strategies. Second, interventions tend to focus only on altering the surface features of children's peer-related social behavior, with virtually no consideration of the underlying processes that may be influencing those social interaction patterns. Of importance here are attentional processes as well as the ability of the child to regulate his or her emotions in the peer context or to arrive at a mutual or shared understanding regarding what to do when engaging in specific play themes (e.g., rough and tumble play, cooking sequences). Third, an unusually large proportion of intervention techniques have not been cast within a developmental framework.

Advances in the field of peer-related social competence have begun to address each of these limitations. Specifically, assessments in which peer-related social competence is conceptualized as the appropriateness and effectiveness with which children solve important social tasks noted earlier (see Dodge et al., 1986; Guralnick, 1990b), such as entry into peer groups or resolving conflicts, have now been developed (Guralnick, 1992b). Although additional information is needed to bridge assessment and intervention, procedures for this are now becoming available (see Guralnick, 1994). Similarly, the adaptations and special considerations at the individual child level required as part of an intervention program to accommodate to a range of information-processing, emotional regulation, or shared understanding processes that govern the selection of children's strategies within social tasks are also being developed.

Finally, the appropriateness of the developmental perspective applied to children at risk and those with developmental disabilities and the compatibility of associated interventions to improve children's peer relations within the framework of developmentally appropriate practices has been established (see Guralnick, 1993a).

Process Approaches

This general contemporary approach that emphasizes the importance of underlying processes can be illustrated by focusing on "shared understanding," a process that is central to virtually all social tasks. This process refers to a set of mutually agreed on interaction patterns and expectations in the peer context that become established, usually regarding thematic play, social roles, or social rules (Guralnick, 1992a). Shared understanding, a process of particular concern for children with developmental disabilities, may operate to facilitate social play interactions among children by evoking "scripts" or structures that can help guide sequences of peer-related social interactions (Schank & Abelson, 1977). Generally speaking, scripts constitute a shared understanding of a conceptual structure and typically represent common events or routines such as those that occur in circle time or in specific themes found in sociodramatic play. In essence, these scripts also constitute goals that are represented by a particular theme. Of special importance is that scripts are part of children's memory structures, help define roles and expectations, and provide the basis for interpreting and sequencing events across an extended social interaction. Potentially of most value from a social development perspective is that scripts allow a smoother flow of exchange to occur yet offer participants considerable flexibility and opportunities to elaborate on their social exchanges.

Available research is in fact consistent with the notion that a shared understanding in the form of scripts can assist young children to interact more competently with one another. Nelson and Seidman (1984) observed that the sequences of play of typically developing children that could be identified as scripted were associated with longer episodes of play than nonscripted sequences. Similarly, Furman and Walden (1990) created dyads of 3-, 4-, and 5-year-olds, matching children on the basis of chronological age, gender, and specific knowledge of four different scripts. Their analysis revealed that communication failures occurred proportionally less often when scripts were more familiar but only for older children. With regard to the length of play episodes, results revealed that more interactive turns occurred in the context of the more familiar scripts but only for the younger children. This latter finding suggests that scripts may be particularly valuable in extending social exchanges between peers for those children whose social/communicative skills are most fragile, a potentially important finding when considering intervention programs for children with disabilities.

Comprehensive assessments focusing on the various dimensions of shared understanding have been developed (Guralnick, 1992a, 1992b). From an intervention perspective, it may be possible to facilitate interactions between children experiencing difficulties by establishing shared scripts in some structured, even didactic, manner (see DeKlyen & Odom, 1989). This is precisely the approach taken by one group of investigators in an effort to improve the peer interactions of young children with behavior disorders and language delays (Goldstein, Wickstrom, Hoyson, Jamieson, & Odom, 1988). Script training focusing on a sociodramatic play sequence took place during 15-minute lesson periods over the course of approximately 2 weeks. Triads of children were involved consisting of one child with developmental problems and two typically developing children or composed entirely of children with developmental problems. Clinicians directly taught the sequence of events for scripts by modeling appropriate interactions and prompting children to participate. Children were encouraged to assume different roles

established in the sociodramatic script, and all reached a minimum criterion of performance. Evaluations of the effects of this training protocol during structured free play revealed only a modest increase of thematically appropriate social interactions. However, when clinicians began to prompt children to remain in their roles or to adopt others, the number of thematic interactions did increase. Other evidence suggested that role prompting was in fact necessary for these interactions to be maintained.

We cannot be certain of the extent to which the social interactions of the children with developmental problems were appropriate and effective in this context. The reliance on clinicians to prompt interactions is of concern, but it may be seen as a beginning point for building extended social exchanges. Of importance, there was evidence that some of the children exhibited spontaneity in their interactions, because a number of nonscripted but thematically consistent social exchanges were observed. In general, it may well be that some form of direct training within a script framework will constitute a core component of intervention efforts for children with established developmental problems.

Similarly, beyond processes related to shared understanding, investigators working with typically developing children have recognized the importance of a more process-oriented approach to intervention in the area of children's peer-related social competence. For example, Mize and Ladd (1990) developed adult-mediated coaching techniques for children who held positions of low social status designed to address underlying information-processing difficulties, including social knowledge, the ability to translate that knowledge into actual social interactions with peers, and the ability to monitor social interactions during exchanges with peers. The training technique involved the use of hand puppets to provide direct instruction and feedback to children and to assist in rehearsal of social interactions as well as in role playing. However, the materials were demanding from a cognitive perspective. Although the results of this study were equivocal and did not individualize training to a significant extent, the study nevertheless represents an important effort to consider core processes (e.g., higher order processes related to monitoring social interactions) when developing intervention programs. A major challenge for the future will be to evaluate the effectiveness of these newly emerging approaches in the peer context and to integrate them with strategies that involve families and communities in connection with expanding children's peer social networks.

CONCLUSION

This chapter has attempted to provide a rationale for establishing social competence as a central feature of early intervention programs. As described, social competence is conceptualized as a valued outcome of early intervention, analogous to facilitating a child's cognitive or communicative competence. Unquestionably, this is an essential message of this chapter, one that is consistent with conducting second-generation research in the field of early intervention (Guralnick, 1989, 1993b). However, it was also suggested that a focus on children's social competence can be useful as a means of organizing and providing coherence to the many seemingly disparate activities found under the rubric of early intervention.

With regard to this latter point, it is well recognized that selecting an array of principles and practices that provide a framework for early intervention programs tends to be a difficult process. Numerous models and approaches compete for the attention of program developers. Nevertheless, considerations of a child's developing social competence can provide a systematic basis for organizing and structuring the core components of an early intervention program. For example, the list below represents key principles and practices that emerge from or are consistent with the social competence framework described in this chapter. In accor-

dance with this framework, early intervention programs would be guided to do the following:

1. Focus on longer term goals.
2. Address the ways skills and abilities associated with more basic developmental dmains are integrated in a social context in a meaningful way (i.e., in the service of a social task).
3. Recognize the value of conceptualizing assessment and intervention activities within a developmental model that considers the influence of various contexts.
4. Emphasize parent–child social and emotional relationships rather than parent–child instructional or didactic types of relationships.
5. Utilize the construct of social competence to provide a framework for organizing discrete curricular activities often associated with individual developmental domains.
6. Require consideration of the importance of underlying processes such as those related to attention, shared understanding, and emotion regulation, and develop any adaptations and adjustments that may be required.
7. Emphasize strategies and adaptations in context rather than specific behaviors.
8. Establish the value and contributions of participation in natural environments to a child's development.
9. Develop support systems for families that emphasize both close relationships and involvement of the broader community.
10. Encourage not only the creation of stimulating and interesting environments but also the ways in which knowledge obtained from those environments can be incorporated into shared experiences that form the foundations for socially competent exchanges.

Many or even most of these principles or practices can be derived from other frameworks in the field of early intervention. In addition, there are important aspects of early intervention programs that benefit little or not at all from considerations of children's social competence. Nevertheless, a refined and well-articulated construct of social competence may well have the unusual capacity for encouraging new approaches and organizing perhaps the most important features of the early intervention enterprise.

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