CHAPTER 3

Social Competence with Peers: Outcome and Process in Early Childhood Special Education

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The excitement, tension, and high drama that characterize the social play of young children with their peers serve to focus our attention on what is now regarded as a vital developmental process. Even during the infant and toddler periods, children strive to establish meaningful and productive relationships with their peers. This process continues throughout the life cycle, but it is during the preschool years that peer relations and the beginnings of friendship become so central to young children's daily activities.

The ebb and flow of peer interactions reveal that young children are, in fact, struggling to solve a series of important problems of a social nature. For example, children must figure out how to initiate play with another child or to enter into a group in which many peers are already participating in an activity with a well-developed theme. They must resolve conflicts precipitated by ownership surrounding toys and materials or the "truth" of the assertions of others; they must learn how to defend their own domain yet allow others access; and they must somehow manage the dynamics of sustained social play with its repeated intrusions and demands. The ability of young children to accomplish their interpersonal goals in these and other social problem-solving contexts in an appropriate and effective manner constitutes the core of what is referred to as peer-related social competence (Guralnick, 1990c). Moreover, as will be discussed, the outcomes and processes associated with peer-related social competence appear to apply equally well to children with and without special needs (Guralnick, 1992a; in preparation).

Even casual observations of children's social play with their peers

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reveal its complexity. In the context of important social tasks such as entering into a peer group, young children must set and maintain over-arching goals, continually judge the intentions of others, rapidly adapt to changing circumstances, deal with their own fears and anxieties, particularly around issues of rejection, and manage their emotional reactions to incursions into their space or to attacks on their possessions. It is evident that to achieve outcomes that are considered to be socially competent, children must continually rely on virtually their entire array of relevant skills and abilities, and must invoke a variety of pro-cesses to integrate, organize, and sequence effective and appropriate social strategies during interactions with their peers.

The importance of peer-related social competence to development is based in part on the fact that competent peer interactions enable access to critical experiences in a child's life. Gaining entry into estab-lished playgroups, and later finding a role in the peer structure, is related to a child's evolving sense of self. Preferences for specific peers also emerge and, if reciprocated, allow friendships to flourish with all the advantages of support and intimacy that characterize these special relationships (Ginsberg, Gottman, & Parker, 1986; Rubin, 1980). Simi-larly, competent peer interactions enable young children to gain access to interesting materials and to adventures with peers, thereby establish-ing the potential for engaging in creative and novel forms of play. In view of this, it is not surprising that many researchers and theorists have indicated that interactions with one's peers promote a young child's language and communicative development, contribute to moral development and the socialization of aggression, and facilitate overall prosocial behaviors and social–cognitive processes (Bates, 1975; Gar-vey, 1986; Hartup, 1978, 1983; Rubin & Lollis, 1988). In contrast, failure to establish competent interactions with peers during the pre-school years, particularly manifested by peer rejection, tends to be a stable feature of development and is predictive of later adjustment problems (Parker & Asher, 1987).

In this chapter, both the outcomes and the processes of peer-related social competence will be examined. First, key features in the develop-ment of young children's peer interactions will be discussed, with a special emphasis on the strategies children use to solve the social tasks of peer-group entry, resolving conflicts, and maintaining play. This analy-sis of outcomes will be followed by a description of the processes in-volved in generating strategies considered socially competent. The third section will begin with a brief discussion of the problems children expe-rience in establishing relationships with their peers and then address assessment and intervention issues. The final section will discuss how

an understanding of the underlying processes governing peer-related social competence is applicable to children both with and without special needs.

OUTCOMES

Assessing Social Competence

How can young children's peer-related social competence be characterized? Put another way, what constitutes reasonable assessment of outcomes for this important aspect of development? Researchers and theorists have grappled with this issue repeatedly with only limited success (Anderson & Messick, 1974; Foster & Ritchey, 1979; O'Malley, 1977), and it is apparent that observational data as well as the perspectives of teachers, parents, and peers must be considered (Connolly & Doyle, 1981; Ladd & Mars, 1986). We can expect, of course, that children's developmental patterns in connection with their associations with peers would reflect increasingly sophisticated degrees of social competence. In fact, the broad developmental changes that characterize children's interactions with their peers from the toddler period through the preschool years have been investigated extensively (Bakeman & Brownlee, 1980; Parten, 1932; Rubin, Watson, & Jambor, 1978). As might be anticipated, a pattern of increasing participation with peers is observed as children tend to engage in progressively greater amounts of group play with their peers across the preschool years. Increased activities with peers occur in conjunction with a corresponding decline in nonsocial play, particularly solitary activities and being unoccupied. Parallel play, however, remains quite variable across children and tends not to decline appreciably over the years. Apparently, children move freely within each developmental period between the safer haven of parallel play and the more demanding requirements of group play (Bakeman & Brownlee, 1980; Howes & Matheson, 1992).

Increased levels of group play are, in fact, correlated with greater degrees of peer-related social competence, particularly when social competence is assessed by one's peers (e.g., Goldman, Corsini, & DeUrioste, 1980; Howes, 1988). Nevertheless, the correspondence is relatively modest and does not account for the findings that many children who tend to prefer solitary play appear to be highly socially competent (e.g., Rubin, 1982). Consequently, a child's tendency to associate with peers in group activities is a reasonable but clearly imperfect index of peer-related social competence.

An alternative developmental perspective is to focus primarily on the structural complexity of children's play as an index of the growth of peer-related social competence. This approach has been adopted by Howes and Matheson (1992) in a recent longitudinal study that began when children were between 13 and 24 months of age and extended for 3 years. The developmental scale applied to children across the extensive age range was especially interesting. The scale's lowest level consisted of parallel play, and then an awareness of others during parallel play, followed by simple social play (talking, offering, and receiving toys). Complementary and reciprocal play was the next highest level and focused on the importance of role reversals in shared activities (e.g., run and chase games). The final two levels of the scale focused on pretend play, initially when children simply enacted complementary roles and, at the highest level of complexity, when children communicated about the pretend activities and roles in order to plan and sustain the play.

This developmental sequence did hold generally across time, these various organized levels of complexity emerging as children became older. Of importance to the issue of social competence was the finding that, for the most part, the emergence of or greater proportion of complex play manifested by individual children in earlier developmental periods was associated with higher levels of peer-related social competence in later developmental periods based on a wide array of measures of social competence (Howes & Matheson, 1992). However, once again the magnitude of these relationships was relatively modest.

Consequently, these overall developmental sequences focusing on children's associations with one another and the structural complexity of their play provide important sources of information about young children's emerging social competence with their peers, and establish an essential developmental framework. Nevertheless, a more complete understanding of peer-related social competence will require an approach that can incorporate the patterns of actual interactive skills and strategies that can be drawn on by individual children to meet the increasing demands that accompany more sophisticated forms of peer interaction. For example, we must be able not only to determine the extent to which children engage in group or complex social pretend play but also to account for the skills and abilities that enable them to do so when social play with peers is of interest to them. This is, in fact, the approach I adopted (Guralnick, 1990c) along with others who view social competence with peers as the "*ability of young children to successfully and appropriately carry out their interpersonal goals*" (p. 4; emphasis in original). These goals are best framed as social tasks, and

the social strategies children employ can be evaluated in terms of their effectiveness and appropriateness. In essence, it is the selection and implementation of these strategies in the context of social tasks that enable children to engage in group or complex social pretend play when they choose to do so. We turn now to a discussion of social tasks and social strategies as indices of peer-related social competence.

Social Tasks and Social Strategies

The notion that young children establish social tasks for themselves is an important concept in the field of peer relations (Dodge, Pettit, McClaskey, & Brown, 1986). It suggests that children determine their interpersonal goals, consider the complexities of the existing social situation, and then utilize an array of social strategies to achieve those goals. It is this framework provided by social tasks that appears to create the psychological meaning for the child and allows observers to more readily interpret the effectiveness and appropriateness of social strategies (i.e., peer-related social competence). In addition, as discussed shortly, a strong correspondence exists between children's abilities to carry out these social tasks and measures of peer-related social competence.

The three social tasks to be discussed are (1) peer group entry, (2) conflict resolution, and (3) maintaining play. Each of these social tasks has been thoroughly investigated and linked directly to children's peer-related social competence (see Guralnick, 1992a, 1992b). In the following sections, social strategies correlated with peer-related social competence for each social task will be discussed.

Peer Group Entry. Children are frequently confronted with the task of entering into already existing groups of children in order to participate in ongoing activities. This ability is not only important for newcomers (Fox & Field, 1989; Shea, 1981), but is a circumstance that occurs repeatedly in preschools as children shift from one activity to another. The importance of this task is also apparent as it is the key to subsequent opportunities for extended social contact with peers.

The complexity of the entry task should not be underestimated. In fact, as many as half of all entry attempts are rejected or ignored by host children (Corsaro, 1981). Consequently, young children must persist in their efforts utilizing strategies that somehow "persuade" their peers to allow them entry into the ongoing play activities. In view of the complexity and importance of the task to children's peer relations, it comes as little surprise that social strategies employed during peer-

group entry are strongly associated with overall measures of peer-related social competence, particularly peer sociometric status (Dodge et al., 1986; Putallaz, 1983; Putallaz & Wasserman, 1990). In fact, the associations with overall measures of peer-related social competence are much greater for strategies utilized during social tasks than for children's global participation in groups or in social pretend play with peers, again highlighting the significance of strategies that are part of key social tasks.

Based on extensive research, it is now clear which strategies are most effective and appropriate for the peer-group entry task (Black & Hazen, 1990; Corsaro, 1981; Dodge, Schlundt, Schocken, & Delugach, 1983; Hazen & Black, 1989; Putallaz, 1983; Putallaz & Gottman, 1981; Putallaz & Wasserman, 1989). Specifically, the child must somehow communicate initially to the host children that he or she is seeking to join the existing flow of activities and is not interested in redirecting those activities. To accomplish this, strategies relevant to and harmonious with the hosts and hosts' activities are essential. Successful specific strategies typically include maintaining proximity to the hosts, gaining attention through eye contact or gesture, imitating aspects of the hosts' play, producing some variation of their activities, or showing or offering a toy related to the hosts' game or project. Nondemanding requests for access, sharing information relevant to the play theme, and even reasonable direct requests for entry are often effective.

A similar set of strategies can be developed for successive efforts should initial failure occur. The ability of the child to vary the intrusiveness of strategies is important here, as these strategies should differ depending on the nature of the hosts' responses to the initial social bid (e.g., rejecting, ignoring, or postponing). Beyond variations in intrusiveness, successful children refrain from redirecting the activities, from making self-statements that are not relevant, and from utilizing disagreeable or negative strategies. In general, relevance and connectedness characterize the behavior of children rated high in peer-related social competence as they interact with their peers during the entry task.

Conflict Resolution. Conflicts and their resolution are ubiquitous and essential features of social relationships and a central aspect of children's evolving peer-related social competence (Hay, 1984; Shantz, 1987). Disputes over possessions or space are dominant during the toddler and early preschool period (Hay & Ross, 1982), and are gradually supplemented by conflicts arising from disagreements over assertions,

ideas, rule violations, or general social control (Dawe, 1934; Eisenberg & Garvey, 1981; Killen & Turiel, 1991). Conflicts can arise in any context, including those associated with other social tasks. Strategies within the conflict-resolution social task often are analyzed in the context of directive episodes in which one child fails to obtain some goods or services from another child and then persists in order to achieve this interpersonal goal (Guralnick & Paul-Brown, 1984; Levin & Rubin, 1983). In essence, conflicts preempt other activities and must be resolved in some manner prior to proceeding with other tasks.

Observers of conflicts among preschool-age children have been able to identify those strategies (outcomes) that are closely associated with peer-related social competence (Eisenberg & Garvey, 1981; Genishi & Di Paolo, 1982; Hartup, Laursen, Stewart, & Eastonson, 1988; Phinney, 1986). As will be discussed in a later section, the key to competent conflict resolution appears to hinge on the ability of children to recognize the rights, obligations, and needs of their companions and to consider those factors when selecting a strategy. As Garvey (1975) points out so well, young children are clearly aware of these factors, and they frequently comment on violations of these presumed shared understandings or rules. Consequently, as we would expect, simple insistence (or slight modifications of the original request), although by far the most frequently used strategy, is least effective in ending a conflict episode successfully (Eisenberg & Garvey, 1981). Insistence provides no new information (Eisenberg & Garvey, 1981) and fails to communicate that the companion's perspective through a shared understanding has been recognized. Without this occurring, children easily fall into a cycle of repetitive exchanges often resulting in an escalation of the conflict or complete disengagement.

Conciliatory strategies — that is, ones that do consider the perspective of others — are difficult for preschool-age children. However, as Eisenberg and Garvey (1981) note, though they occur at a modest rate, success in resolving the conflict is quite high. Providing a reason for a specific request, again reflecting consideration of the other child's perspective, also contributes to a higher rate of success. In general, offering an alternative, even with conditions attached, is an essential feature of competent strategies in resolving conflicts. Similarly, maintaining connectedness (Asher, 1983), such as responding to a companion's proposal or request for clarification, constitutes another important dimension associated with successful and appropriate resolutions of conflicts. Outright rejections of others' suggestions without any further efforts are certain to lead to failure (Hazen & Black, 1989).

Maintaining Play. Our understanding of the strategies associated with the ability of young children to maintain play with peers has less of an empirical basis than other social tasks. Nevertheless research by Gottman (1983), Hartup et al. (1988), and Howes (1988) focusing on friendship development provides important insights into the strategies likely to maintain play. One cluster of strategies relates to the ability of children to conform to role and activity structures during play situations by remaining within the theme or role. In essence, as was the case for the other two social tasks, strategies that consist of a general agreeableness to the suggestions of others and a responsiveness to information requests within the play context are key elements for sustaining play. Strategies that reflect connectedness are typically those that are judged to be socially competent.

The second cluster of strategies associated with maintaining play is best referred to as management strategies. Dynamic changes in intensity characterize children's play, especially social pretend play. Demands placed on the players increase, roles and activities become more defined and even restrictive, and rules tend to become more complex. Sometimes conflicts arise from these increasing demands, temporarily preventing play from continuing. Consequently, children who are able to maintain play successfully have been able to develop a series of strategies in which they either de-escalate the play prior to conflict or disengage momentarily when conflicts or intrusions reach a critical point. However, they remain in proximity to the play area and peers. Similarly, children who are able to maintain play can also escalate play to increase its interest value. Accordingly, repairing a play sequence by matching one's behavior to that of the peer in order to reestablish interest or otherwise maintain the association constitutes an important strategy.

PROCESSES

As we have seen, an array of strategies can be identified for each of three psychologically meaningful social tasks that are closely associated with children's peer-related social competence. Strategies that were relevant to the ongoing activity of the host children and that varied appropriately in intrusiveness over the course of the episode were associated with success in the peer-group entry task. For conflict resolution, strategies that considered the rights, obligations, and needs of one's peers were found to be most appropriate and effective. Finally, strategies that conformed to the role and activity structure of play and that could

manage variations in intrusiveness were found to be of value in maintaining play. Consequently, it is important to consider how children can be encouraged to use those strategies as they interact with their peers.

We can, of course, simply attempt to teach the strategies that have been identified through direct or indirect methods, framed within the context of a social task. This approach, focusing on the strategies themselves, can be and has been extremely helpful (McEvoy, Odom, & McConnell, 1992), but it is uncertain what children actually learn beyond the context-specific social skills that are selected to be taught. A somewhat different framework that can guide the assessment and intervention approach to be discussed in a subsequent section of this chapter may be of even greater value. Specifically, as has been suggested, peer-related social competence can best be conceptualized as a problem-solving task in the social domain. Consequently, as is the case for nonsocial problem-solving situations, this suggests that children utilize a series of *processes* to generate strategies when faced with a particular task that requires problem solving of a social nature. If those processes can be identified and intervention techniques developed that consider specific processes of concern, it is possible that children will learn to generate competent strategies that will generalize to the myriad of situations they will inevitably confront even within the context of specific social tasks.

Recent research and theoretical developments have suggested that four interrelated processes are involved in the generation of strategies (see Guralnick, 1992a, 1992b, 1993). Two processes are referred to as *foundation processes*—processes that form the essential bases for peer-related social competence. The first foundation process is the ability of the child to maintain a "shared understanding" of events, activities, rules, and so forth, with their peers. Without a shared understanding, connectedness and therefore competent social exchanges are not possible. The second foundation process involves the way in which children regulate their emotions during a social task. Anxiety, anger, or unusually rapid (impulsive) responding can interfere with the appropriate and effective selection of strategies even when children have well-developed social–cognitive processes. Third, social–cognitive processes themselves are vital, especially during specific social exchanges with peers, as they govern the way that children think about the social problem they are confronting in a manner that ultimately leads to the selection of a specific strategy. Finally, a series of higher-order processes are involved that serve to guide and integrate the operation of the other processes as well as provide the mechanism for integrating, organizing,

and sequencing social strategies over the various cycles of exchange within a social task. Figure 3.1 illustrates these relationships, and additional details are presented below.

Shared Understanding

This foundation process is composed of a series of separate "understandings" that together constitute a necessary circumstance for the connectedness of social/communicative exchanges. Among the components of shared understanding are mutually agreed on social rules such as ownership (Newman, 1978) and turn-taking, as well as a recognition of the rights and obligations of others (Garvey, 1975). Sharing a common cognitive structure for everyday experiences and events (e.g., birthday parties, baking) is also essential for establishing roles and expectations during pretend and nonpretend play sequences. Representa-

Figure 3.1. A Model Illustrating Processes Associated with the Selection of Social Strategies
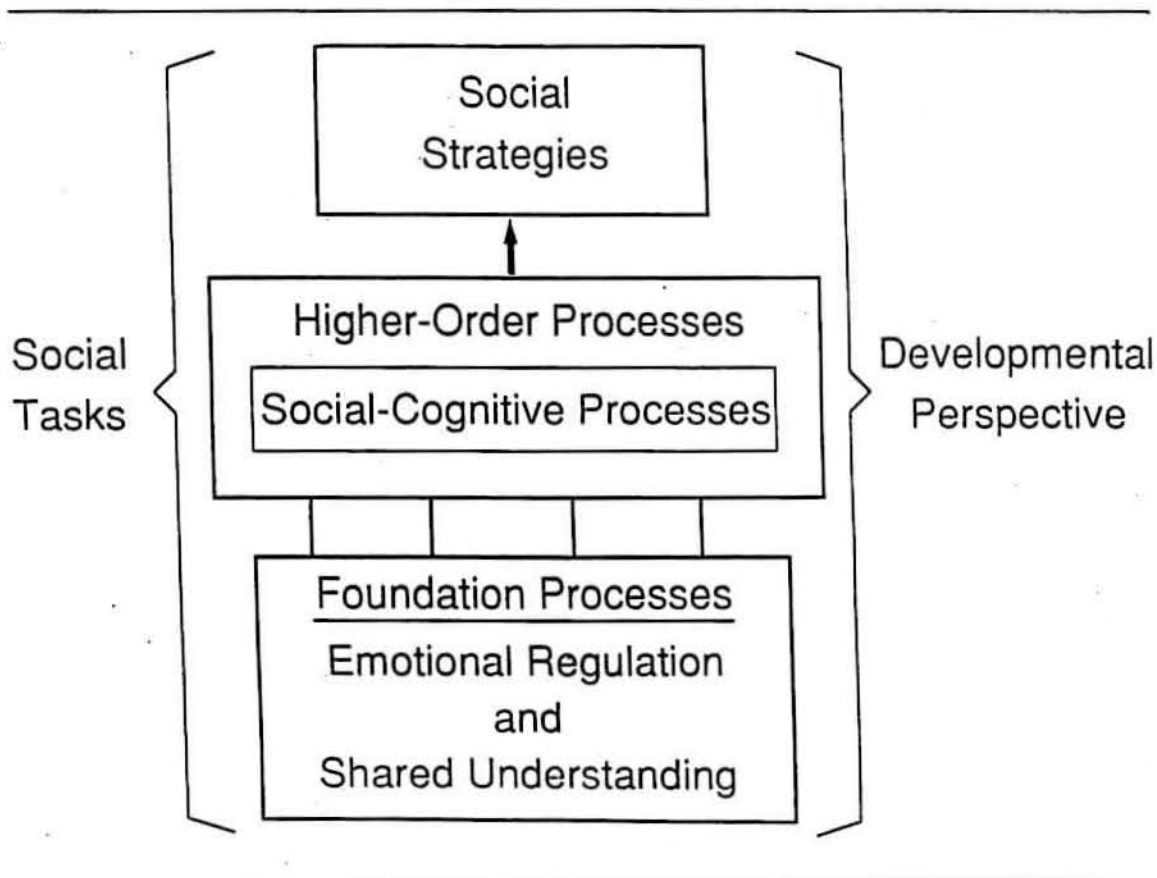
tions of these everyday experiences appear to organize conceptually in terms of "scripts" (Nelson, 1986; Schank & Abelson, 1977), a fact that has important implications for both assessment and intervention (Guralnick, 1993). In any case, shared understanding of the social context with peers provides a foundation for the selection of effective and appropriate social strategies during social tasks.

Emotional Regulation Processes

Social tasks are often stressful events for young children. Many children become uncomfortable, even anxious, in play situations, tending to withdraw especially in circumstances involving unfamiliar peers (Kagan, Reznick, & Snidman, 1990). Others react to the slightest rejection or provocation with upset or anger and have difficulty returning to some equilibrium point (Campbell, 1990). It is these reactions as well as positive responses, including warm and exuberant expressions, that provide the affective and energetic quality so evident and vital in children's peer relations.

Children's ability to regulate their emotional reactions during play with peers is an essential feature of the development of inhibition of action that helps organize one's behavior. The importance of emotional regulation processes to peer-related social competence is clearly captured in Gottman and Katz's (1989) description of emotional regulation as the ability of children to "(a) inhibit inappropriate behavior related to the strong negative or positive affect, (b) self-soothe any physiological arousal that the strong affect has induced, (c) refocus attention, and (4) organize themselves for coordinated action in the service of an external goal" (p. 373). As Figure 3.1 implies, failure to properly regulate one's emotions can also directly alter higher-order processes by affecting the integration, organization, and sequencing of social strategies (related to an external goal), and can also influence each of the component social–cognitive processes.

Social–Cognitive Processes

As suggested in Figure 3.1, once children elect to engage in a particular social task they proceed to generate strategies based on available information. From the perspective of social–cognitive processes, Dodge et al. (1986) suggest that at least four component processes are involved. First, children must encode information that is relevant to the social task. In the peer-group entry task, for example, this means that attending to and encoding cues related to the play themes that the hosts are

engaged in is especially important (Putallaz, 1983), as this component of the social–cognitive process is essential for establishing a shared frame of reference. Second, the encoded cues must be properly interpreted. In a situation in which play is being maintained, for example, children who have had a history of using aggressive strategies frequently interpret rather benign acts (e.g., accidentally knocking over blocks) as purposeful attacks (see Dodge et al., 1986). Another example from the peer-group entry task would be a child interpreting a host's cues of postponement in response to an initial entry strategy as a flat rejection. These interpretations then give rise to the third component social–cognitive process in which a number of alternative strategies are generated. To a substantial degree, the strategies that arise at this point are connected to prior interpretations of encoded cues, but typically consist of an array of alternatives. The range of possible strategies for each social task, especially those judged to be competent, was discussed in the previous section of this chapter. Finally, and perhaps most important, children must then evaluate the situation and select a specific strategy.

This last component process, evaluation, is in fact most critical because it is here that children must consider the understanding that is shared among interacting children and recognize the impact of existing social relationships (e.g., friend vs. nonfriend or older vs. younger) in selecting a strategy. This is one important way in which shared understanding affects other processes. As noted, shared understanding can include a mutual understanding of the activities engaged in as well as the underlying rule structures, particularly those associated with turn-taking and ownership. For example, the selection of a strategy will vary depending on whether the child believes he or she "owns" an object in a possession dispute (i.e., ownership confers a special status and implies a corresponding set of appropriate strategies). Similarly, unless the interactors share a common understanding of the roles as part of a theme, a disconnected (and therefore likely to be considered less competent) strategy may well emerge. Dodge et al. (1986) suggest that these processes operate in a rapid fashion, often without the awareness of the individual. However, a variety of creative experimental techniques using videotaped vignettes of social task situations have enabled these investigators to tease out the individual contributions of each of these components and relate them to children's peer-related social competence.

The foundation process of emotional regulation also exerts considerable influence on social–cognitive processes. For example, children unable to inhibit inappropriate behavior fail to properly evaluate

which strategies might be most effective and appropriate and have difficulty refocusing their attention; they are often judged to be responding impulsively. Moreover, those who cannot right themselves emotionally often selectively bias the encoding and interpretation components of social–cognitive processes so that certain cues, especially ambiguous ones, are more likely to be detected and interpreted in a manner consistent with their (often negative) emotional reaction. Consequently, less competent strategies may become preeminent, and emotional arousal may increase as the social exchange proceeds.

Higher-Order Processes

For the most part strategies generated through the operation of social–cognitive and emotional regulation processes have been discussed in terms of a specific cycle occurring within the context of an extended social task. But, of course, peer-related social competence requires the long view, as Asher (1983) has pointed out. Consequently, it is essential that some process be postulated in which the ultimate goal is kept in perspective while the episode unfolds. This requires not only planning but monitoring of one's own and others' behavior. It is particularly important, as illustrated in Figure 3.1, that children first recognize that they are, in fact, challenged by a social task. It is this framework, then, that guides the subsequent series of exchanges. So-called executive processes have been identified in the literature on cognitive development in recent years and provide the structure for integrating component processes (Sternberg, 1985). Although conceptualized primarily for nonsocial tasks, these processes appear to be highly relevant as mechanisms for guiding social tasks.

PEER INTERACTION PROBLEMS: ASSESSMENT AND INTERVENTION

In view of the complexity of the strategies that are the substance of peer-related social competence, and particularly the underlying processes governing the appropriate and effective selection of those strategies, it is not surprising that so many young children experience difficulties interacting with peers. It has been estimated that as many as 10 percent of children without disabilities enrolled in regular early childhood programs manifest substantial problems in terms of their peer-related social competence (Asher, 1990). In view of the dependence of peer-related social competence on virtually every aspect of develop-

ment, one can anticipate that biologically and/or environmentally based problems will filter their way through the peer interaction system to adversely influence one or more of the underlying processes that have been discussed. There are, of course, numerous self-righting tendencies that can compensate for factors that threaten the integrity of the child, but the increase in emotional and economic stressors on family life associated with significant adverse biological and environmental influences will eventually have an impact. These factors include family-child interaction patterns (Booth, Rose-Krasnor, & Rubin, 1991), child maltreatment (Alessandri, 1991), prenatal exposure to alcohol and drugs (Zuckerman & Bresnahan, 1991), and prematurity and low birth-weight (Bennett & Guralnick, 1991; Ross, Lipper, & Auld, 1990). Of equal importance is that difficulties in children's peer relations are often the first consistent signs observed by teachers suggesting that significant problems lie ahead. It appears that the unpredictability of the peer situation and its typically unstructured nature create special challenges for young children who have been compromised in some manner.

For children with established disabilities, this peer-relations problem appears to be even more severe, involving far more children than the 10 percent estimated for children without established disabilities. It has now been well established that young children with disabilities manifest deficits or lags in the peer domain that extend *beyond* those that would be expected simply based on the child's overall developmental level. This is particularly the case for young children with general cognitive delays (see Guralnick & Bricker, 1987, for definition of this population), a finding that has been demonstrated repeatedly in a range of settings (Guralnick & Groom, 1985, 1987a, 1987b, 1988a). These special difficulties hold for other groups of children with established disabilities as well (see Guralnick, 1986).

Assessment

Accordingly, in consideration of the importance of peer-related social competence to so many aspects of a child's development, it is essential that a systematic assessment and intervention program be available to teachers and clinicians working with young children. With regard to assessment, we must recognize that an evaluation of a child's peer-related social competence is highly subjective, situationally specific, and culturally determined. Attempts to quantify this domain have been notably unsuccessful, and developmental checklists provide only minimal confidence that reliable and valid measures are being employed (see Bailey & Wolery, 1989; Guralnick & Weinhouse, 1984).

Nevertheless, sufficient observational methods and developmental checklists are available to teachers, parents, and service personnel to enable them to at least reach a reasonable consensus that indicates a concern about a particular child's peer-related social competence. Once this decision has been reached, a more systematic assessment can follow.

The recently developed *Assessment of Peer Relations* (APR; Guralnick, 1992b) is designed to provide an assessment approach consistent with the model of peer-related social competence described above that views social strategies and their underlying processes within the context of critical social tasks as the central focus. In the APR, observations of children's social play are, in fact, structured within the social tasks of peer-group entry, resolving conflicts, and maintaining play. The assessment first leads the teacher or clinician to arrive at a perspective of the child's ability to use the array of strategies associated with each social task. Those carrying out the assessment are then guided to blend their knowledge of the special characteristics of each child with their observations of peer play to arrive at an identification of processes that may be interfering with the focal child's peer-related social competence. Knowledge of the unique developmental characteristics of the focal child and their influence on underlying processes related to peer relations constitutes a separate segment of the APR. It is here that the impact of special cognitive, language, motor, or affective problems are considered. Although each analysis must be based on the individual characteristics of the child being considered, an example of assessment based on the general features of children with Down syndrome has been described elsewhere in connection with the APR (Guralnick, 1993). It is within this framework of special considerations that teachers and clinicians identify those processes associated with children's peer-related social competence that are most likely to be affected.

Included among the possible processes are the social–cognitive components of encoding, interpreting, generating alternative strategies, and the role of a shared understanding in evaluating which strategies to select. Of course, shared understanding in relation to everyday events, social rules and pretend play, themes, roles, and complexity are assessed separately. Emotional regulation processes focus on reacting too quickly, thereby short-circuiting consideration of alternative (presumably more appropriate) strategies, delayed responding to peers, angry or negative reactions compounded by difficulties reestablishing equilibrium, and social withdrawal (often related to disorganization of behavior). Higher-order processes related to social task recognition and planful behavior are also identified.

Finally, a related aspect of the APR includes its "Inventory of

Resources," a mechanism that serves to help bridge assessment and intervention. The inventory is designed to identify those social (e.g., preferred or most responsive playmates) and environmental (e.g., preferred play times or materials) factors that will maximize peer interactions, and to establish which play opportunities within the early childhood program's format might best be utilized when interventions are initiated.

Intervention

Interventions ultimately intended to improve children's peer-related social competence through enhancing their ability to solve social tasks are best implemented by organizing programs at two separate levels: involvement and enhancement. Within the APR approach, information for involvement is first summarized into three areas:

1. Special considerations that must be addressed based on information from the child's developmental profile
2. The nature of any emotional regulation issues that require intervention
3. Specific areas in which a shared understanding must be established or enhanced

Relying on the Inventory of Resources, activities are designed to address concerns in one or more of these areas. Interventions at this level are characterized by considerable teacher or clinician structuring, efforts to maximize the interest value and responsiveness of the social and physical environment in relation to interactions with peers, experimentation with techniques to foster social play, and designing adaptations in the play situation that address directly the child's special considerations (e.g., greater use of pantomime in play for children with severe expressive language disorders).

No attempt is made at the level of involvement to address the focal child's ability to utilize appropriate and effective strategies in the context of social tasks through process-guided interventions. However, many of the level-of-involvement interventions are likely to influence processes of concern in related contexts, and help prepare the teacher or clinician for focused efforts in the second level.

For second-level interventions, referred to as enhancement, intervention approaches based on the assessment of strategies and processes related to specific social tasks become the primary area of interest. It is at this stage that strategies are encouraged that foster the child's ability

to solve particular social tasks. By both adapting to special considerations related to the underlying processes and developing techniques to directly enhance those processes of concern whenever possible (e.g., strategies for anger management), a long-term approach designed to improve a child's peer-related social competence is established.

Involvement. Fortunately, an array of techniques that can increase the peer-related social interactions of young children are available to teachers and clinicians. Utilized in conjunction with the APR Inventory of Resources to determine the preferences of the child, specific toys and materials that encourage and invite interactive play can be selected (Quilitch & Risley, 1973; Rubin, Fein, & Vandenberg, 1983; Stoneman, Cantrell, & Hoover-Dempsey, 1983). Similarly, capitalizing on certain activity structures, maximizing the familiarity and responsivity of peers available, and arranging for smaller predictable social groups can yield important beneficial effects on children's overall interactions with their peers (Doyle, Connolly, & Rivest, 1980; Harper & Huie, 1985; Kohl & Beckman, 1984; Sainato & Carta, 1992). Techniques related to emotional regulation issues can be addressed in this context as well. For example, anger control and coping mechanisms (Guevrement, 1990) as well as relaxation and calming techniques (see Hinshaw, Henker, & Whalen, 1984) may be needed as problems arise in these play situations.

Particularly during the early phases of the first level, it may be advisable to implement more structured activities for the child that are teacher-mediated. In fact, for many youngsters these activities provide the structure necessary to expand the shared context between themselves and others in the preschool. The use of scripts associated with play activities can be especially valuable (Furman & Walden, 1990; Nelson & Gruendel, 1979; Nelson & Seidman, 1984), and have been successfully applied to children with disabilities (e.g., Goldstein, Wickstrom, Hoyson, Jamieson, & Odom, 1988). Often these techniques are used in conjunction with the direct involvement of peers whose assistance has been solicited by the teacher. With prior training of peers, these peer-mediated techniques are capable of increasing the responsivity of those peers and providing the child with many opportunities to respond to the social bids of others (Strain & Odom, 1986).

The use of peers as agents of change to facilitate a child's social/ communicative interactions (see Guralnick, 1984) suggests a more general principle. Specifically, we can expect that by arranging highly responsive social environments for young children, substantial increases should be observed in their level of social/communicative interactions.

This may be particularly the case for children with disabilities, especially because peer-mediated techniques usually involve children without disabilities as the agents of change. Assuming that higher levels of social stimulation and responsivity are associated with children without disabilities (see Guralnick, 1990b), benefits to children with disabilities should be evident as a result of their participation with these more socially and communicatively active children. This is precisely what is obtained when the social/communicative interactions of children with disabilities placed in inclusive preschool programs (mainstreamed settings containing primarily children without disabilities) are compared with those of children placed in segregated settings (Guralnick, 1990a; Guralnick & Groom, 1988b; Strain, 1983). In many respects, then, the involvement of children with disabilities in inclusive programs constitutes a valuable first-level intervention.

Despite the well-established validity of these techniques, the fact remains that greater degrees of involvement that result tend to have limited generalizability. This, of course, is to be expected because the changes that occur in children's social behavior utilizing these techniques are presumably externally driven and supported. Nevertheless, first-level interventions allow teachers and clinicians to gain a better understanding of the child's individual developmental characteristics and how they influence interactions with peers, enhance the shared context as needed, and generally focus on activities that will improve children's play with their peers. In essence, successful first-level interventions provide the initial framework for the challenging task of improving children's peer-related social competence by altering the child's ability to solve social tasks effectively and appropriately.

Enhancement. Interventions seeking to improve the selection of children's social strategies within the context of specific social tasks by utilizing process-related information have not been nearly as well documented as the level-of-involvement techniques. Nevertheless, encouraging information is emerging suggesting the value of this process-oriented approach (Mize & Ladd, 1990). Once the shared understanding, emotional regulation, social–cognitive, or higher-order processes of concern are identified, the complexity of this intervention effort becomes apparent. One challenge is that social problem-solving processes must be applied to numerous and generally unpredictable situations. The structure provided by social tasks, however, creates the opportunity for organizing intervention activities. As was the case for the first level, considerable adult involvement may be needed initially. Coaching, modeling, role playing, scripting activities, and the use of specially

designed vignettes addressing problems of concern are all part of the structure. Often, however, numerous naturally occurring activities provide the context for interventions related to social tasks. Moreover, the information derived from the Inventory of Resources can be of value in identifying those contexts and events that conform to aspects of social tasks of concern.

After the social task context has been identified or arranged, teachers and clinicians can then implement techniques that take process information into consideration when designing ways to improve social strategy selection within social tasks. As was the case for level-of-involvement interventions, a range of techniques derived from various disciplines is available and should be applied in a manner adapted to the special characteristics of children. These techniques have been summarized elsewhere (Guralnick, in preparation), and detailed descriptions are well beyond the scope of this chapter. However, it should be noted that social task recognition is an essential element, as it provides the goal structure for the remaining social exchanges in the sequence, thereby encouraging direction by higher-order processes. The child's ability to encode and interpret relevant information, to generate alternative strategies, and to select one that is appropriate all must occur within that structure. In essence, scripting or scaffolding provides the essential structure within which these many processes operate.

The entry task can provide a sense for this general approach. For social–cognitive processes, the ability of the focal child to encode relevant information can be facilitated through helping the child label specific activities or select toys that match hosts' activities before proceeding with an entry attempt. This practice can then be applied to less familiar play themes. Similarly, attempts to correct faulty bias in interpreting cues might focus on teaching the focal child that only specific facial expressions and related statements or gestures are associated with rejection, with a more benign interpretation provided for other responses of peers. It may be necessary to teach a series of alternative positive strategies directly in the peer-group entry context using modeling and demonstration and then linking possession rules or other shared context issues to the choice of those strategies.

As noted, a variety of techniques are available to help children regulate their emotions, particularly anger (Guevrement, 1990; Hinshaw et al., 1984). Techniques that may have been used in the first level of interventions in more general circumstances can now be applied directly in the context of specific social tasks. In the peer-group entry situation, rejection or even postponement of social bids for entry may generate inappropriate strategies as a consequence of negative emo-

tional arousal. Vignettes based on a child's actual experiences invoking relaxation and calming techniques can be of value.

INTEGRATION OF EARLY CHILDHOOD AND SPECIAL EDUCATION

A major theme of the preceding discussion is that both the outcomes and the processes associated with children's peer-related social competence apply equally well to children with and without disabilities. The approach described in this chapter emphasizing social tasks, social strategies, and underlying processes was clearly rooted within a developmental framework, fully expecting that general developmental principles, processes, and the means by which environmental and biological factors influence development would provide the necessary framework for all children. In fact, research continues to confirm the applicability of the developmental model for widely heterogenous groups of children, particularly those with general (cognitive) delays (Cicchetti & Beeghly, 1990; Hodapp, Burack, & Zigler, 1990). In terms of peer relations, the organization and general course of development appear similar (though delayed) for children with a range of disabilities (see Guralnick & Groom, 1987a, 1987b; Guralnick & Weinhouse, 1984). In general, although the extent, number, and configuration of processes that may be affected will certainly vary between children with and without disabilities, these differences are essentially quantitative, not qualitative.

It is further anticipated that educational/developmental practices and techniques that emerge from this framework would be of value to children with and without disabilities. It can be argued that contemporary approaches designed to facilitate the peer-related social competence of young children are consistent with developmentally appropriate practices (Bredekamp, 1987). The goals and priorities, approaches to assessment and planning, and techniques for intervention and structuring of situations to foster peer-related social competence seem to fit well within early childhood practices based on developmental principles (Guralnick, in preparation). Some concerns exist regarding the degree of structure that may be needed for some children under some circumstances, but the integrity of practices that are developmentally appropriate remains intact.

Moreover, the focus on processes and strategies within the context of social tasks provides a framework for considering how children's

special characteristics may affect their interactions with peers. This approach can accommodate the relatively mild but important articulation problems experienced by many young children, as well as the severe expressive language problems that are common to children with Down syndrome (Fowler, 1990); it can accommodate highly prevalent attentional problems that cause many children to fail to recognize accurately the intent of their peers (Barkley, 1990), as well as the unusual difficulties experienced by children with autism in recognizing that others can actually hold intentions that are different from their own (Baron-Cohen, Leslie, & Frith, 1985); and it can accommodate the wide variations in planning, sequencing, and organization often found in preschool children (Casey, Bronson, Tivnan, Riley, & Spenciner, 1991), as well as the unusual higher-order processing problems experienced by children with early treated phenylketonuria (Welsh, Pennington, Ozonoff, Rouse, & McCabe, 1990).

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