Social Competence and Early Intervention

MICHAEL J. GURALNICK
University of Washington

This article explores the relationship between young children's social competence and the goals of early intervention programs. Social competence is seen as a central organizing construct in development, and competence with peers during the preschool years is examined in detail. Specifically, the peer-related social competence difficulties of handicapped children are discussed from a developmental perspective. The nature of assessment and intervention strategies and the importance of the social context are described as part of a general program to improve the peer-related social competence of handicapped children. It is concluded that the social context provided by mainstreamed programs establishes essential conditions for promoting the peer-related social competence of handicapped children.

Understanding and promoting the social competence of young handicapped children may well be the most important challenge to the field of early intervention in the decade of the 1990s. In the discussion that follows, I will attempt to provide a rationale for this statement and urge that issues related to social competence be considered an integral part of the design of all early intervention programs (see Guralnick, 1988; Guralnick & Bennett, 1987a).

To help focus my comments, a component of the more general construct of social competence—social competence with peers—will serve as an organizing framework. Within this structure, a number of interrelated issues will be discussed. First, the meaning and significance of social competence, especially peer-related social competence, will be examined. Second, the peer social competence skills and abilities of young handicapped children will be reviewed from a developmental perspective. Next, the components of a meaningful assessment of a child's peer social competence will be briefly discussed in order to establish a basis for the design of an appropriate set of intervention activities. Finally, young handicapped children's social competence with their peers will be related to the context in which social interactions occur. Of specific interest will be the influence of interactions on the qualitative and quantitative features of peer relationships between handicapped and nonhandicapped children. The social contexts of mainstreamed and integrated programs will provide the framework for these analyses.

think about and take a stand on the *appropriateness* of children's interactions (Guralnick, 1981a; Taylor & Asher, 1984). Both the goals that are selected and the means toward an end are important, and we must consider the context, cultural expectations, prior experiences, and similar factors in any evaluation of appropriateness. If we fail to do so, we risk not attending to many variables that could influence the *acceptance* of handicapped children by their peers. Socially competent behavior, of which appropriateness is a major component (see Asher, 1983), is one key to social acceptance by peers. As has been demonstrated repeatedly, young children base their decisions about other people's competence on observations of their behaviors, and subsequent acceptance depends on these judgments. Even though such decisions are often made rapidly, fortunately young children are also forgiving. Accordingly, if we can effect changes in competence through our early intervention programs, we may be able to increase the acceptance of handicapped children, which may result in their later closer involvement in the lives of others and in the life of their social community. (The link between social competence with peers and peer acceptance reflects a reality of preschool life. Other strategies to improve acceptance include fundamental changes in the value systems of the participants. Promoting respect and understanding of the diversity of children's skills and competence is a philosophically complementary approach [see Taylor, 1988].)

By way of partial summary, social competence is seen as a central concept in development. It is dynamic; it depends on integration across all developmental domains; it demands that children organize their skills and knowledge over time; and it respects variability in behavior and recognizes the ability of young children to compensate for deficits in specific domains. Moreover, a social competence framework is useful in that it can highlight problems that assessments of more static constructs cannot, and it focuses not only on *effectiveness* but also on how *appropriately* children go about gaining their ends. It has also been suggested that social competence must be interpreted in the context of social tasks—not only global tasks like making friends, but also specific ones such as gaining entry into a group. Finally, the importance of social competence, specifically peer competence, to later adjustment, to acceptance by others, and ultimately to one's quality of life argues for its significance in the design of early intervention programs.

Arguing that social competence should play a more central role in early intervention programs is not to criticize existing efforts that are more domain-specific. Gains in cognitive, motor, and language development are important correlates of improved social competence. Moreover, in practice, the majority of early intervention activities are, in fact, well integrated with one another, an observation which speaks to the issue of social competence. Furthermore, what I am advocating is not really new, as many educators, developmentalists, clinicians, and researchers have suggested that more attention must be paid to the broad area of social competence in early intervention (e.g., Zigler & Trickett, 1978). What I want to do is take this a step further by making this relationship more concrete and by providing a developmental framework.

PEER COMPETENCE OF YOUNG HANDICAPPED CHILDREN

In this section, the descriptive data that have been gathered on the development of the peer social competence of handicapped

children will be briefly summarized. Unfortunately, the overwhelming theme of the findings from this research points to the many peer interaction difficulties experienced by young handicapped children. In fact, as will be seen, the severity, magnitude, and scope of the problems that have been identified have created a sense of urgency in the field to develop appropriate intervention programs. To give readers a sense of the nature of these deficits, I will present some of the major results from the research program that I have directed for the past few years, focusing on the peer social competence of young developmentally delayed children.

Descriptive information was collected in a series of short-term longitudinal and cross-sectional studies of the social and communicative interactions of primarily mildly and moderately delayed preschool-age children (see Guralnick & Bricker, 1987, for the characteristics of this population). Overall, there have been four different samples involving approximately 250 children. In general, the samples appear to be representative of the general population, drawing upon children served by primary service providers in major communities and carefully defining those samples. Community-based settings have usually consisted of specialized programs, but the research program has also included samples who participated in a series of mainstreamed playgroups. An important feature of these playgroup studies was the use of multiple assessment procedures, with special attention given to assure the reliability and validity of the observations. Based on these studies, the following patterns have been identified.

(1) Most delayed children have difficulties engaging in group play. These difficulties are far more extensive than expected on the basis of children's levels of cognitive development. Moreover, the distribution reflecting the proportion of time children engage in group play is quite skewed. Specifically, 20 to 25% of children account for approximately 60% of the episodes of group play, revealing that a surprisingly large proportion of delayed children engage in virtually no group play whatsoever. Related to this pattern is the fact that many young children tend not to be able to extend peer interactions beyond simple two-unit initiation-response sequences. Solitary play is the predominant form of play, even among 4- and 5-year-old delayed children (Guralnick & Groom, 1985, 1987a; Guralnick & Weinhouse, 1984).

(2) There is an unusual absence of specific social behaviors with peers that are typically associated in the literature with peer-related social competence. These include an inability to direct and organize peers or to use them as resources (Guralnick & Groom, 1985, 1987a).

(3) Delayed children exhibit an atypical developmental pattern. Cross-sectional studies have shown that, though gains in peer interactions occur across a school year, there is a substantial decline when the summer intervenes or new classmates are introduced (Guralnick & Weinhouse, 1984).

(4) Delayed children find it extremely difficult to form reciprocal friendships. They are highly interested in their peers, discriminate among them, and develop preferences for specific playmates. However, these unilateral friendships are rarely reciprocated, as few playmates whom they choose as friends choose them in return. Perhaps of more concern is that there are certain developmental advantages associated with play with friends, such as more elaborate forms of play (see Hartup & Sancilio, 1986). Unfortunately, even for those delayed children who do form unilateral friendships, evidence suggests that they do not benefit as much as nonhandicapped peers from these developmental advantages (Guralnick & Groom, 1988a).

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(5) We are currently analyzing data on the sequences of interactive exchanges of delayed children in an effort to examine the social/communicative processes children use in important social tasks. The task we have selected consists of directive episodes in which children persist in seeking to obtain some goods or services from another child (see Guralnick & Paul-Brown, 1984). Overall, our data-base contains more than 100,000 utterances. It should be noted here that our interest is in understanding specific social processes. As described in the section on the nature of social competence, this type of analysis can only be accomplished through assessments of *sequences* of social exchanges.

Preliminary findings from our work suggest that, indeed, in comparison to appropriately matched groups of nonhandicapped children, developmentally delayed preschool-age children do not effectively use important social processes. For example, requests tend not to be mitigated, often creating a confrontational atmosphere. There is little variation in follow-up requests, only minor evidence of compromise or negotiation has been found, and delayed children tend not to accept alternative proposals very readily. The relative absence of important processes of connectedness of social exchange and the inability of delayed children to resolve conflicts effectively are of concern as well (Guralnick, Paul-Brown, & Groom, in preparation). Clearly, this research tells us much about how appropriate the strategies of young delayed children are in comparison to those of nonhandicapped children, and problems are certainly evident. Furthermore, the specific process used by socially competent nonhandicapped children may be especially instructive in providing a framework for the design of intervention programs.

(6) Finally, it should be pointed out that it is not just researchers, clinicians, or teachers who see these peer interaction deficits; other children do as well. Research conducted in mainstreamed settings has revealed that, in comparison to nonhandicapped peers, delayed children are rated lower on peer sociometric measures, tend to be chosen less frequently as play partners by their peers (i.e., there are clear elements of segregation), are used less frequently by their peers as resources, and serve as models for others less often. Interactions tend not to be overtly hostile, but disagreements in which delayed children are involved are quite common, much more so than when only nonhandicapped children interact (Guralnick & Groom, 1987a; Guralnick & Paul-Brown, in press).

Accordingly, the peer social competence landscape for young developmentally delayed children is a distressing one. Nevertheless, the scope and magnitude of these problems have helped to capture our attention and directed educators, clinicians, and researchers from many disciplines to focus on this critical area of development.

FRAMEWORK FOR INTERVENTION

In recent years, considerable advances have been achieved in understanding the origins of peer social competence and its relation to early adult–child interactions (see Guralnick, in press-a; Parke, MacDonald, Beitel, & Bhavnagri, 1988; Rubin & Lollis, 1988). Similar advances in family-focused early intervention (Guralnick, 1989; Guralnick & Bennett, 1987b) are encouraging in that there is some potential for preventing some of the initial peer competence problems young preschool children exhibit.

However, even the best efforts of preventive programs, extensive family support, other counseling, and parent and child educational efforts are not likely to eradicate the peer social competence deficit that has been

described. There are always certain to be areas in which preventive intervention has not been successful, as family stresses and limited resources cannot be overcome completely. There are intrinsic child variables as well, often related to the existence of a handicap, that can contribute to this deficit, especially aspects of temperament and autonomic nervous system dysfunction, which can affect emotional regulation.

What then are our options as educators and clinicians seeking to assist preschool-age children entering group experiences who begin to demonstrate, almost immediately, significant discrepancies between their peer interactions and their developmental levels? I would argue that any improvement in peer social competence is going to require the same level of inquiry as any other developmental domain. By that I mean we must develop an assessment procedure and developmental profile that allow us to understand the likely nature of this deficit. Is it related to minor behavior problems? Are we dealing with anxiety, passive behavior, or aggressive interactions? Are children's initial and follow-up entry strategies too intrusive? Are sequences of behavior in conflict episodes allowed to escalate? Are the perceptions by one's peers, perhaps due to prior experiences or the physical characteristics of the child in question, significant barriers to peer interactions? Is the social environment conducive to productive peer interaction? Is the child responsive to the approaches of others? If the frequency of initiations is reasonable, perhaps children engage in interactions for purposes that are primarily negative or acquisitive, or use strategies (as noted earlier) that do not seem appropriate or consistent with the ways other children approach social problems. The child's temperament or behavioral style should also be considered as a possible contributor to this deficit.

An analysis of cognitive functioning is in order as well, since difficulties can arise in many of the basic steps in social information processing (Dodge et al., 1986). In my view, we must analyze a profile generated by such a comprehensive assessment to gain a clear direction for designing intervention strategies. As noted earlier, there is now some very valuable research that has provided insight into the social processes that govern peer social competence (e.g., Gottman, 1983). The extraordinary cost in time and money to analyze social processes is likely to be more than compensated for in the application of findings to intervention programs. Some preliminary versions of assessment constructs are available that capture the elements of this approach, but the development of a systematic, comprehensive, and well-validated assessment-intervention program that considers these factors remains to be established.

MAINSTREAMING AND INTEGRATION

In this final section, the social context will be considered in relation to intervention programs designed to improve the peer social competence of young handicapped children. The primary social context of interest is that provided by one's peers and the characteristics of those peers. Clearly, the nature and characteristics of children's peers will differ if services are provided to handicapped children in mainstreamed or integrated settings as opposed to segregated, specialized ones (Guralnick, 1986a).

As is well known, the concept of mainstreaming has proven to be highly controversial, even at the preschool level. It is a concept that has many facets, including impact on important dimensions such as self-esteem, cognitive development, and social competence. There are problems in its im-

plementation, as a liberal and meaningful interpretation of the principle of least restrictive environments requires new administrative structures and new forms of interagency cooperation. It also challenges some long-cherished beliefs about the nature of human diversity held by many in the field. It is not possible in this article to provide a detailed account of the state of early childhood mainstreaming, of course, but I do wish to tie my comments on mainstreaming and integration directly to the issues of peer social competence.

Before doing so, however, let me take the liberty of making a somewhat gratuitous point. In my view, there are now a sufficiently large number of community-based mainstreamed programs of various forms that have evaluated outcomes comprehensively for both handicapped and nonhandicapped children and are considered to be successful. Earlier reviews such as that by Peck and Cooke (1983) noting a range of effective demonstration programs have been corroborated by the proliferation of creative and successful mainstreamed programs found in virtually every state. Descriptions of these programs are found repeatedly throughout the literature and are described in detail at professional meetings. These programs represent best educational practices, have extensive experience in these matters, and can call upon sound developmental and educational practices and common sense to support the notion that mainstreamed programs can be effectively carried out in virtually every sense of the term (e.g., educationally, socially, administratively).

Accordingly, in my view, the overall larger question as to whether mainstreaming is appropriate and feasible has been answered in the affirmative. We are now at the level of the details; it is the hard, basic work of testing systematic variations for children, resources,

settings, and outcomes that demands our attention.

The Social Context
Having said that, let me return to the major issue of the ways in which the social context can affect peer-related social competence. Even with an outstanding peer assessment instrument and a good understanding of the factors that seem responsible for a child's peer interaction deficit, the social context of any intervention strategy will ultimately govern the limits of its effectiveness. It is quite clear now that the social environment provided by nonhandicapped peers is far more supportive of peer social competence than a social environment containing primarily other handicapped children. From numerous studies carried out by many investigators, we know that, in comparison to segregated, specialized programs, mainstreamed or integrated programs yield interaction patterns that are more responsive to a handicapped peer's initiations, are more socially interactive overall, place important and developmentally appropriate social demands on the children, and provide extensive opportunities for observational learning (see Guralnick, 1986a, for a review). Moreover, not only do handicapped children model the behavior of nonhandicapped children more frequently, handicapped children prefer to interact with nonhandicapped playmates; when they do so, their play is at higher cognitive levels (Guralnick & Groom, 1987a, 1988b).

The nature of the communicative environment provided by nonhandicapped children to their handicapped classmates has also been evaluated. In a series of studies, we have found that important aspects of the syntactic, semantic, pragmatic, and discourse characteristics of nonhandicapped children's language are adapted appropriately to the cognitive and linguistic charac-

teristics of the handicapped children in the setting (Guralnick & Paul-Brown, 1977, 1980, 1984, 1986, in press). As a consequence, a mainstreamed preschool appears to provide a challenging and developmentally appropriate social/communicative environment for the handicapped child, one that cannot be replicated in specialized programs due to the linguistic and other limitations of the handicapped children themselves.

Evidence supporting these observations of community-based group settings or specially arranged groups of children can be found in studies of selected pairs of young children as well. In studies of dyads, the developmental status of the partner of a handicapped child can be systematically varied. When the social play of pairs of children differing in developmental status is observed, it is once again clear that pairing a handicapped with a nonhandicapped child (particularly with one of similar age) yields far higher levels of social play than when a handicapped child is paired with another handicapped playmate (Guralnick & Groom, 1987b). It is likely that increases in the social behavior of handicapped children can be attributed to the more proactive social initiations by the nonhandicapped children and the positive regard in which handicapped children hold their nonhandicapped classmates. Our analysis suggests that nonhandicapped children apparently take responsibility for organizing play and maintaining it to some degree when it is flagging, filling in precisely in those areas that characterize the peer social competence deficits of handicapped children (e.g., directedness) described earlier.

It should be noted that these nonhandicapped children are not like parents taking primary responsibility for the social interaction; rather they show some of the features of parents and of true peers in the egalitarian sense. This intermediate status apparently has many positive effects on social play. In addition, it is not only the initiations and directiveness of nonhandicapped peers that make a difference. An elegant series of studies demonstrated that, after peer confederate training activities to increase the peer interactions of autistic children, it was the social setting to which the children returned that held the key to the maintenance of any gains (Strain, 1983). If children were returned to a specialized setting, no increases in peer interactions were found. However, if nonhandicapped children were included in the follow-up setting, peer interactions generalized to that setting. Responsiveness of the peer social environment in conjunction with some form of peer intervention program appear to be the crucial elements.

In many respects, then, what appears to be one of the most important aspects of mainstreamed settings is that they can be seen as excellent substrates for promoting peer-related social competence. This does not mean that peer competence deficits are "cured," however. In fact, though some gains can occur simply with placement of handicapped children in mainstreamed settings, mere placement is no substitute for thoughtful intervention. It should also be noted that for many groups of children even curricula designed to prompt children to interact, to reinforce appropriate social activities, or to arrange conditions to foster interactions such as cooperative games are also likely to reach their limits of effectiveness rapidly. To promote peer social competence, we must develop an assessment profile similar to the one discussed earlier and design individualized interventions around those evaluations. A mainstreamed setting appears to provide the type of socially supportive and even challenging environment needed to facilitate systematic intervention programs in the

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area of peer-related social competence (Guralnick & Groom, 1988b).

Cautions and Concerns

If we value peer social competence as an important outcome of early intervention programs for handicapped children, then there is every reason to encourage extensive involvement with nonhandicapped peers. But one must ask, are there consequences of mainstreaming that are unpleasant or that counteract potential benefits? Are there other processes operating that would suggest we are doing harm? For example, the fact is that handicapped children are socially separated in mainstreamed or even integrated programs. This pattern emerges no matter how we index social separation, as handicapped children are found to be a socially separate subgroup (e.g., Guralnick & Groom, 1987a). Moreover, the social status of handicapped children as judged by non-handicapped children is lower based on sociolinguistic analyses of their communicative exchanges. For example, handicapped children are the recipients of more imperative request forms; and fewer request forms are mitigated or softened by providing explanations, using tag questions, or embedding the request in some way (Guralnick & Paul-Brown, 1984, in press). Similarly, standard peer sociometrics reveals that the handicapped children as a group are more often rejected and less often accepted.

To some, this repeated finding of social separation in particular is an indictment of mainstreaming. Frankly, however, if we look more closely at the situation, it becomes far less ominous. One reason for social separation is tied closely to peer competence. It is essential to note that, though handicapped children who are less competent socially find themselves less well regarded, so do less socially competent normally developing children. Socially separate subgroups form

along many dimensions, including common social backgrounds, sex, chronological age, and of course, peer competence (e.g., Feitelson, Weintraub, & Michaeli, 1972; Goldman, 1981). The issue is not separation alone, because this phenomenon is a fact of preschool life. Even if the separation is more severe for handicapped children than for appropriately matched comparison groups of nonhandicapped children, and I know of no studies on this matter, the point is that it is not handicapped status per se that is a root cause, but associated factors, particularly social competence with peers. Fortunately, children are flexible and will alter their perceptions and interactive patterns when the social competence of their play partners is altered.

Accordingly, despite this social separation and related concerns, I would argue that it would be a grave disservice to handicapped children if we let the fact and expected occurrence of social separation in mainstreamed settings be a decisive factor in placement considerations. *As has been suggested, participation in mainstreamed programs is an essential component for improving the peer social competence of young handicapped children.* Issues of social competence, particularly in view of the long-term adverse consequences of inadequate peer relations on interpersonal adjustment, must receive high priority. We also should keep in mind that handicapped children generally prefer to interact with nonhandicapped children in many settings and that social separation is far less apparent in more passive activities such as parallel play (Guralnick, 1980; Guralnick & Groom, 1987a). As a consequence, opportunities for observational learning from nonhandicapped peers are prominent features of mainstreamed programs. Perhaps more supportive and informed ways of preparing both handicapped and nonhandicapped children for main-

streaming, more careful consideration of programmatic factors (Guralnick, 1981b), and more effective strategies for adapting the preschool environment and curriculum will help maximize social integration. This is an area worthy of further research.

In this analysis of the social context, I have tried to make certain generalizations about mainstreaming and to extract principles that make sense and give us direction. In doing so, it is easy to gloss over important factors such as issues of the nature and severity of a child's disability and the existence of behavior problems. These factors all figure in the decisions we make about the support and classroom modifications that are necessary to provide a quality program and can alter the role and value of the peer context as well. We also know little about the phenomenology of mainstreaming: issues of self-esteem, the emotional states engendered, and perceptions by others of handicapped children. The concerns noted earlier regarding the lower social status of handicapped children and associated problematic interactions must be taken seriously as well. Our research group at the Child Development and Mental Retardation Center at the University of Washington hopes to address these and related issues in the near future.

CONCLUSION

Admittedly, the field of social competence, especially peer social competence, is unusually challenging and complex. But this certainly should be expected, as peer social competence is a central organizing construct in development; it has important, long-term consequences; and in my view, it will be the major challenge to early intervention programs in the next decade. It is in a very real sense a point of contact among many disciplines—education, developmental and clinical child psychology, communication and language, occupational and physical therapy, social work, and family interaction specialists. Furthermore, if we take this peer social competence construct seriously and design assessment instruments and intervention strategies within that framework, then we must confront immediately the issue of the social context (i.e., one's peers). As has been suggested in this article, the only way early intervention programs addressing the important issue of peer social competence of handicapped children can be successful is in the social context provided by mainstreamed programs.

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Address correspondence to Michael J. Guralnick, Director, Child Development and Mental Retardation Center, University of Washington, Seattle, WA 98195.