Chapter 8
Developmental Factors Related to the Assessment of Social Skills

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A developmental perspective is critical when assessing children's social skills. The behaviors that foster peer acceptance and those that elicit peer dislike change with age. Concurrently, the cognitive capacities that children bring to bear when analyzing and solving their social problems undergo significant qualitative transformations. Dramatic changes also occur in the nature of the social contexts that children navigate at different ages. All of these factors affect the degree to which particular behaviors and cognitions are adaptive socially and, hence, affect the operational definition and assessment of social skills at various ages (Bierman & Montminy, 1993). This chapter begins with an overview describing the influence of development on social competence and social skills. Then, in separate sections, we characterize the nature of peer interactions, social-cognitive reasoning, and peer group organization at three key developmental periods: (1) the preschool years (ages 3–6), (2) middle childhood (ages 7–11), and (3) adolescence (12–17). Implications of these developmental changes for social skill assessment are discussed.

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DEVELOPMENTAL OVERVIEW

Developmental research indicates that significant normative changes take place during the preschool, grade school, and adolescent years in (1) the focus and duration of peer interactions and corresponding nature of peer-approved (and disapproved) behaviors, (2) the complexity of children's social reasoning and emotional understanding, and their capacity for self-regulation, and (3) the organization of the peer group and the extent and nature of peer influence. These developmental changes affect the determinants and characteristics of socially skillful behavior and therefore warrant attention when assessing social skills.

When social skill assessment and training models first began to emerge in the 1970s, clinical researchers focused on identifying and measuring specific behaviors that were associated with effective social interaction. LaGreca (1993) called this a "molecular" approach to social skill assessment, as social skills were being defined as discrete behaviors that were (ideally) standard and universal indicators of social effectiveness (such as maintaining eye contact when speaking with someone, following standard greeting and introduction protocols when meeting someone). However, this approach to social skill assessment proved unsatisfactory. As it turned out, it was quite difficult to establish the validity of molecular skills, and researchers concluded that social skills could not easily be reduced to a static boilerplate of effective discrete behaviors (Bierman & Welsh, 2000; Dodge & Murphy, 1984).

Part of the difficulty lay in the fact that the same behaviors may be more or less effective and appropriate depending upon the context in which they are expressed. Particularly salient to this chapter topic, the importance of certain social behaviors (and the inappropriateness of others) develops over time, leading to systematic changes in the behavioral correlates of social competence at different ages. Making social skill assessment even more complex is the fact that social competence has to be viewed functionally, in terms of a child's ability to organize social behavior in a way that attracts positive responses (and avoids negative responses) from others in various social contexts and in a manner congruent with existing social conventions and mores (Dodge & Murphy, 1984; Rubin, Bukowski, & Parker, 1998). Hence, social competence requires the capacity to draw from a repertoire of appropriate social behaviors and use them flexibly in response to ongoing social feedback and stimuli. This process involves social-cognitive capabilities and self-regulation skills that permit children to select and engage in social behaviors sensitively and appropriately in different situations (Sroufe, 1996). In turn, these social-cognitive and self-regulation skills develop with age.

In addition, the complexity of peer relations themselves change with age, and development affects how peers value and respond to different social behaviors. Whereas preschool peer relations are characterized primarily along a dimension of acceptance, by gradeschool, peer relations become more multifaceted. New, refined, and divergent sets of social skills are needed to form close friendships, to avoid rejection, and to protect against victimization, as well as to maintain group acceptance. By adolescence, the peer context becomes more complicated yet, as peer cliques and crowds emerge (Brown & Klute, 2003). Most children in America transition from small, open preschool groups to structured and larger elementary classrooms between the ages of 4–7. Then, between the ages of 11–14, they make a second transition from self-contained elementary classrooms to the larger, fluid multi-class organization of the middle or junior high school. At each of these transitions, the onion representing the peer group gains additional layers of relationships and social influences, creating demands for additional social skills to navigate new levels of social complexity.

In summary then, development has a central impact on multiple skill domains that operate interactively to support (or impede) effective social functioning. It affects the normative

nature of various social behaviors, the sophistication of children's social reasoning, emotional functioning, and self-regulation, and the complexity of the peer context and social demands (Parker, Rubin, Price, & DeRosier, 1995; Rubin et al., 1998; Sroufe, 1996). The next sections describe the prototypical social demands and skills associated with preschool, elementary, and adolescent social competence.

Domains of Developmental Change Affecting Social Skill Assessment

Behavioral Correlates

- The acceptability of various social behaviors
- The correlates of peer liking and disliking

Social Cognitions and Emotional Functioning

- The complexity of social reasoning about others
- The characteristics of self-appraisal processes
- Capacity for self-regulation

Peer Group Organization

- The quality of peer interactions and the nature of friendships
- The size and organization of the peer group

THE PRESCHOOL YEARS

Even as early as the toddler years, most children show a specific interest in other children and make efforts to initiate contact (Hartup, 1983). However, it is not typically until the preschool years that children begin to engage in sustained and ordered play patterns with other children and begin to use the word "friend" in a meaningful way (Furman, 1996). Normatively, most preschool children are highly motivated to move beyond adult–child interactions and begin to explore and take pleasure in the cooperative and shared fantasy play offered by peers (Gottman, 1983). As play partners, preschool peers provide an important context for socialization, offering companionship, entertainment, and unique opportunities for interpersonal learning and the development of social skills (Hartup, 1983). Preschool peer interactions are grounded in fantasy play that stimulates imagination and allows children to explore and consolidate their understanding of various social roles, social routines, and conventions (Mize & Ladd, 1990; Parker et al., 1995). In order to sustain friendly exchanges, children are challenged to master the "golden rule" of reciprocity; they must learn to engage, cooperate, and compromise (Parker et al., 1995). By age 4, individual differences in social skill and social impact can be measured reliably by teacher ratings and observations, and these differences predict peer acceptance both concurrently (in preschool) and predictively (into grade school) (Ladd & Profilet, 1996; Ladd, Price, & Hart, 1988).

Behavioral Correlates of Social Competence

Emerging prosocial skills are of central importance during the preschool years. Well-liked preschoolers participate in pretend play and share toys in a reciprocal manner (Eisenberg & Fabes, 1992). They approach others with positive affect and friendly overtures, and they respond positively to peer initiations (Denham & Burton, 2004; Eisenberg & Fabes, 1992).

They are able to sustain interactive, reciprocal play, by paying attention to their play partner, and responding in ways that support their partner or elaborate the play (Gottman, 1983; Hartup, 1983). Specific skills associated with peer acceptance include expressing positive affect, attending to one's play partner, initiating nurturing behaviors (helping, sharing), being agreeable, and mastering reciprocal play sequences (turn taking, role playing). Engaging in shared play is important, because it is in this concrete play context that children identify common ground interests (e.g., "we both like cars") and develop mutual affective bonds (Gottman, 1983). In addition, the ability to communicate clearly in play fosters sustained interaction (Gottman, 1983). Interestingly, compared with children who are less prosocially engaged in preschool, children who show high rates of prosocial play also tend to show high levels of academic school readiness, including competence motivation, attention, persistence, and positive attitudes toward learning (Coolahan, Fantuzzo, Mendez, & McDermott, 2000).

In addition to their association with concurrent peer acceptance, the emergence of cooperative play skills in preschool also predicts positive school engagement and positive peer relations after elementary school entry (Ladd & Price, 1987). Conversely, preschool children who show low rates of prosocial engagement are at increased risk for anxious-withdrawn and/or aggressive-disruptive behavior problems, and stable peer difficulties during the transition into grade school (Ladd & Profilet, 1996).

During the late toddler and early preschool years, children begin to develop the skills needed to effectively inhibit and redirect impulsive and aggressive behaviors. In general, aggressive behavior is not uncommon when children first enter preschool and attempt to play with others (age 2–3). Normatively, however, rates of aggression decrease sharply during the preschool years, as children develop the verbal, emotional, and social skills that allow them to inhibit their first impulses, comply with social protocol, and "use their words" to voice dissatisfaction and resolve disagreements (Ladd, 1990; Vitaro, Tremblay, Gagnon, & Boivan, 1992). Elevated rates of aggression are less likely to disturb peer relations during the preschool years than in elementary school (Hartup, 1983). In fact, socially effective and dominant preschool children often show moderate levels of aggressive or coercive behavior, which they use to access resources or influence play (Vaughn, Vollenweider, Bost, Azria-Evans, & Snider, 2003). As Vaughn et al. (2003) note, highly sociable children naturally encounter more frequent conflicts than children who are less engaged. Theorists have speculated that the aggressive exchanges that occur around resource control and dominance during the preschool years represent normative opportunities for learning to manage conflict and promoting social-emotional learning (Shantz & Hartup, 1992). For this reason, the presence of prosocial skills and positive social engagement (rather than the rate of aggressive-disruptive behavior) is the primary index of social competence during the preschool years. However, the capacity to control aggression becomes increasingly important to peer relations during these years. Across the course of the preschool years (as children move from 3 to 5 years), those who continue to show high rates of disruptive and argumentative behavior are increasingly likely to experience peer rejection and retaliation (Ladd et al., 1988; Olson, 1992). During the preschool years, it is normative for children to exhibit some aggressive-disruptive behavior. However, aggressive-disruptive behaviors are cause for concern when they are expressed at very high rates, without accompanying prosocial skills, and when they do not decline over time with accumulating opportunities for learning self-regulation and conflict resolution skills.

Social Cognitions and Emotional Functioning

In preschool, children have limited capacity to manipulate and compare concepts mentally (Fischer, 1980). Their social perceptions are concrete, unidimensional, and heavily

influenced by recent personal experiences (Peevers & Secord, 1973). Preschool children are just beginning to notice and describe themselves and others, and their descriptions tend to focus on a few concrete features, such as sex and hair color. "Friends" are people who play with them or go to their school (Furman & Bierman, 1983). These friendships exist primarily in the "here and now", with squabbles emerging and resolving easily among friends. For example, it is not unusual for a preschool child to announce he/she has made a new friend after a brief interaction, or to decide he/she is no longer friends with someone after an altercation. Altercations are often short-lived, with friendships revived (and the altercation forgotten) after a brief period of time.

Preschool children have trouble thinking about multiple dimensions at one time, and find it difficult to integrate conflictual information about others. For example, Burns and Cavey (1957) asked young children to describe the emotions of characters in pictures where the character's facial expression was inconsistent with the situation (e.g., a child frowning at a birthday party.) Until the ages of 5–7, children based their inferences exclusively on the situational cues, and failed to even notice that the facial cues were inconsistent. Similarly, Gollin (1958) showed children movies in which central characters performed "good" acts in two scenes and "bad" acts in two scenes. When asked to retell the story, the younger children often remembered selectively that the character engaged in one type of act – either good or bad. They denied that the other actions happened or attributed them to other story characters. Young children cannot mentally compare what they are thinking with information about other persons and deduce how others' thinking may differ from their own (Fischer, 1980). Hence, overall, their social perceptions are egocentric, global and undifferentiated, and concrete. Until children become able to mentally compare and manipulate concepts, they are not very good at understanding cause-and-effect sequences or predicting others' social behavior. This means that social concepts that seem basic to adults are often beyond the understanding of preschool children. Parents and teachers sometimes try to foster social understanding by encouraging children to consider complex motives or use self-reflection to guide future behavior. For example, a teacher might encourage a child to forgive a peer because "he did not do it on purpose, it was by accident"; a parent might plead with the child to share her toys with a visiting peer by asking "how would you feel if you were at her house and she wouldn't let you play with her toys?" However, these reflective and comparative types of social reasoning are not available to preschool children. In general, they are operating within a much more immediate, and self-focused social world, where the critical social-cognitive skills for social acceptance involve the capacity to recognize proper social behaviors (take turns, share toys, do not hit or bite) and the capacity to differentiate and label basic emotions in oneself and others.

Socially effective preschool children do show greater knowledge of socially appropriate strategies for solving everyday social conflicts than children who have peer difficulties. For example, Dodge, Bates, and Pettit (1990) interviewed children prior to school entry, and showed them pictures of everyday conflicts (e.g., a child who wanted to swing, when someone was already on the swing). Children who could generate several ideas about how to get a turn on the swing appropriately (e.g., without using aggression) were more likely to gain peer acceptance when they entered grade school, whereas children who generated few ideas and relied on aggressive solutions tended to show higher levels of aggressive behavior and develop peer problems in grade-school.

Socially competent preschool children (as rated by both teacher and peers) also show higher levels of emotional understanding than less effective children – they are better able to accurately identify emotional expressions in pictures and to recognize events that elicit particular emotional reactions (Denham & Burton, 2004). Indeed, one study found that the ability to recognize and label emotional expressions measured in preschool predicted parent

and teacher ratings of social behavior and adjustment 4 years later, when children were in middle childhood (Izard et al., 2001).

Theorists have speculated that developing social reasoning and related executive function skills (e.g., working memory, attention control, behavioral inhibition) play a particularly important role in fostering social competence during the preschool years. These skills provide a foundation for self-regulation, particularly under conditions of emotional arousal. Observational research suggests that socially competent preschoolers are better able to regulate affect and behavior when excited or upset (Eisenberg & Fabes, 1992) and can inhibit their behavioral impulses through self-distraction in tasks that require delay of gratification (Raver, Blackburn, Bancroft, & Torp 1999). Preschool play often involves mild frustrations (e.g., waiting in line, sharing a prized toy) and can be very stimulating emotionally, both exciting and disappointing. Well-liked children are able to weather the emotional ups and downs of peer interaction, maintaining their own emotional equilibrium and recovering from mild setbacks and disappointments (Eisenberg & Fabes, 1992). In contrast, children who are often irritable and unhappy, easily annoyed by others, and emotionally reactive in the face of conflict or frustration are less rewarding as playmates and have more difficulty gaining acceptance by their peers (Eisenberg & Fabes, 1992).

Peer Group Organization

Preschool children show distinct preferences for certain classmates, and some develop consistent close friendships that are sustained over time (Gottman, 1983). However, in general, peer interactions are more fluid, and sociometric status is more variable among preschool children than at older grade levels (Parker et al., 1995). Relatively small events (e.g., a dispute over a toy) can disrupt a preschool child's affections for a peer, but grudges are short-lived and positive interactions are corrective. The degree of closeness experienced in preschool peer relations is influenced heavily by the frequency of interactions, and children rarely differentiate levels of friendship, other than having one or two special playmates. Finer distinctions (such as best friend, other close friends, friends, acquaintances) do not emerge until later in grade school. Cross-gender friendships and play interactions are more common than at later ages (Hartup, 1983).

THE GRADE-SCHOOL YEARS

As children move into grade school, the context for peer relations changes in significant ways. In preschool, most of the time is spent in a relatively open classroom, with an action-based curricula that allows children to navigate through activities and peer interactions with a fair amount of autonomy. Large group activities are relatively infrequent, and support for social skill development is viewed as a primary school goal. In contrast, in the elementary context, the classroom is more structured, and large group activities dominate. In general, peer interactions, both during the school day and during extracurricular activities, are also more structured and rule based than in preschool, often involving larger peer groups in coordinated play (e.g., games, sports, group activities.)

The transformation from preschool to elementary social structure is made possible by children's developing social-reasoning skills, which both enable and reflect the rule-based culture of the grade school peer context. The social skills required for successful adaptation are affected, as self-control skills and the ability to inhibit disruptive behavior and engage in rule-governed play join prosocial play skills as critically important for

attaining acceptance and avoiding rejection by peers. In addition, as children begin to organize for large group play, multiple dimensions of peer relations emerge, with distinct correlates. These include close friendships, group acceptance, peer rejection, and peer victimization.

Behavioral Correlates of Social Competence

Whereas parallel play and dramatic play were modal during the preschool years, peer interactions become more organized, elaborate, and rule governed in grade school. Prosocial skills (sharing, helping, cooperation), which emerged as the primary correlates of peer acceptance in preschool, continue to predict peer acceptance in elementary school. Prosocial attitudes (e.g., being viewed as kind, considerate, and empathetic) join the behavioral descriptors as correlates of acceptance (Parker et al., 1995).

The capacity to control aggressive-disruptive behavior and engage in self-regulated behavior began to emerge in the late preschool years as correlates of peer acceptance. By elementary school, self-regulation and the capacity for rule-governed behavior take center stage, becoming critical skills for effective peer integration in the rule-based play of elementary students. Indeed, by second grade, aggressive-disruptive and hyperactive-inattentive behaviors become the strongest predictors of peer rejection (Parker et al., 1995). Rule-based game play requires behavioral inhibition, focused attention, and the capacity to delay gratification. Understanding and honoring the principles of fair play, handling the pressures of competitive play, and following complex rule structures are key to successful participation in the grade school games that frequently involve multiple players and specific protocols.

In general, children are transitioning between preschool and elementary play structures between the ages of 5 and 7, with more structured play characterizing the majority of large group peer interactions by age 8. Correspondingly, rough-and-tumble play and overt aggression continue to decline normatively in kindergarten and first grade, reaching low levels by second grade (Hartup, 1983). At the same time, peer censure for aggressive behavior increases, particularly for reactive and outburst anger, and norm-breaking behaviors, such as rule violations, cheating, and poor sportsmanship. Whereas most preschool aggression is overt, older grade school children begin to use more indirect and relational aggression, including exclusion, ignoring, and rumor spreading, as forms of social control and domination (Bjorkvist, Lagerspetz, & Kaukiainen, 1992). Children who show high rates of relationally aggressive behavior also risk peer censure and rejection (Crick & Grotpeter, 1995).

Social Cognitions and Emotional Functioning

Between ages 4 and 7, as children are transitioning into grade school, they are also making the important cognitive transition from “preoperational” to “concrete operational” thinking. This transition tends to occur somewhat later in the domain of social-emotional reasoning than cognitive reasoning, contributing to notable shifts in social-emotional reasoning near the end of this developmental window (e.g., around 6–7 years of age) (Harter, 1998). During the early grade-school years, children master the ability to mentally consider relationships among concepts. They can represent a series of actions (rather than just a single concept or action), describe concepts in relative terms (rather than in the absolutes of the younger child), and consider part-whole relationships. Lawfulness, logic, and rules enter

the social world as children become able to combine, integrate, and organize concepts along dimensions of time and space.

Grade-school children provide longer descriptions of others and show more differentiation among descriptions of themselves and others than do preschool children (Peevers & Secord, 1973). Children become able to make behavioral comparisons between two people and between a person's behavior and a general norm of behavior (e.g. "Billy runs a lot faster than Jason" or "She is the best artist in our whole class"; Barenboim, 1977). Such comparisons provide the foundation for the construction of abstract inferences about individuals' behavioral dispositions and personality traits ("He's stubborn" "He is always trying to boss others around.")

The emerging ability to make inferences about covert psychological traits enables children to construct more stable perceptions of others that can accommodate different concrete behaviors. In Gollin's (1958) study, for example, 10-year-olds who were shown film characters engaging in two inconsistent behaviors did not deny one of these behaviors as did the 6-year-olds but were able to form aggregated impressions in which they recognized the presence of the two divergent behaviors. On the positive side, these capabilities allow children to sustain friendships over time, to withstand disagreements, and to support higher level commitments to their friends (loyalty, empathy). Conversely, they are also able to sustain negative reputational biases, harbor sustained grudges against disliked peers, and organize campaigns of peer exclusion.

By grade school, children are able to make social predictions based on past experience. They exhibit biased attributions and expectations which make their social world more predictable but, unfortunately, also serve to crystallize social status and reduce opportunities for social mobility (Hymel, Wagner, & Butler, 1990). For example, Dodge (1980) set up a study in which grade school peers observed a social event with a negative outcome. When they were told that the perpetrator was a peer who had a reputation for being aggressive, they were likely to assume a malicious intention (he did it on purpose, to be mean), whereas they were more likely to attribute benign intentions if the perpetrator was a nonaggressive peer (it was an accident) (Dodge, 1980). In general, the expectations and attributions of grade school children serve to support the "status quo", resulting in negative reputational biases and negative peer treatment for disliked children.

Social-cognitive development also fosters the emergence of self-monitoring and social comparison capabilities. With development, children become increasingly capable of accurately reporting their social behavior and its effects on others and taking the perspective of others. They also become more competent at anticipatory planning and social problem solving, becoming able to generate multiple alternative solutions to social problems and evaluating the appropriateness of each prior to acting (Ladd & Mize, 1983). Children who continue to show deficits in emotional understanding and emotion regulation are particularly likely to show impulsive and reactive anger and aggression in grade school and become especially vulnerable to peer rejection and victimization. The relationship between emotion dysregulation and peer victimization becomes cyclical. That is, children who are victimized are often emotionally overreactive and report low self-esteem and high levels of social insecurity and anxiety; being excluded or attacked increases these feelings of insecurity and emotional reactivity (Hodges & Perry, 1996; Schwartz, Dodge, & Coie, 1993). Although some grade school children continue to use aggressive behavior strategically to gain social dominance, more commonly, aggressive grade school children are rejected by their peers. Emotion dysregulation, including irritability, moodiness, emotional volatility, low levels of emotional understanding, and angry outbursts tend to fuel more negative peer reactions and treatment (Bierman, Smoot, & Aumiller, 1993; Schwartz et al., 1993).

Peer Group Organization

During middle childhood, peer relations become more multilayered. At one end of the spectrum, children begin to develop special, best friendships, which are distinguished from other friendships on the basis of their emotional depth and commitment. At the other end of the spectrum, group relations become more differentiated as well. Peer acceptance becomes more distinct from peer rejection, as some children are neither liked nor disliked by peers (neglected children), whereas others are actively disliked (rejected children). Peer victimization also emerges as a distinct feature of peer relations during grade school.

The stable best friendships or "chumships" that begin to emerge during the later elementary school years are marked by a unique sense of affection for and commitment toward each other (Furman, 1996). Both in their expressed expectations and in their observed behaviors, grade school children differentiate their "best friends" from other friends and classmates. Theorists have speculated that these close relationships play a special role in development, providing a foundation for emerging skills needed in later life to sustain close romantic relationships, including self-disclosure, intimacy, loyalty, and the provision of emotional support (Parker et al., 1995).

As children begin to interact in the context of larger peer activities and become able to conceptualize comparative social relations across time, they can conceive of peer relations "in layers". In addition to recognizing their own friends, they become aware of the general group status of their classmates and can identify those who are liked or disliked by many peers. Correspondingly, social status becomes more crystallized, and peer acceptance and peer rejection become quite stable from year to year.

Grade school also marks the emergence of targeted victimization – the singling out of particular children for strategic bullying. In preschool and kindergarten, the likelihood that children will be victimized is determined by their exposure to aggressive peers, rather than a particular set of characteristics that makes them vulnerable to peer abuse (Monks, Smith, & Swettenham, 2005). By middle childhood, bullies become more selective and focused, targeting certain children for chronic victimization (Monks et al., 2005). Children who are emotionally volatile, isolated, and submissive are at increased risk for peer victimization (Hodges & Perry, 1996).

ADOLESCENCE

In early adolescence, most children experience a dramatic shift in the social structure of their school context, as they migrate from small, self-contained elementary classrooms to large, heterogeneous middle or junior high schools (Eccles, Wigfield, & Schiefele, 1998). With this shift, the peer context becomes much larger, adult monitoring is reduced, and new cliques and crowds emerge as prominent structures of peer affiliation and influence (Brown & Klute, 2003). Increasingly, social interactions occur in mixed-gender groups, and romantic relationships begin to emerge. Correspondingly, the capacity to interact comfortably in heterosocial contexts emerges as another facet of social competence.

Behavioral Correlates of Social Competence

In adolescence, most peer interactions still revolve around shared activities, but these activities become quite diverse, including organized sports, interest or hobby clubs, music

groups, religious youth groups, shopping, homework, or just "hanging out". Friendships become particularly important as youth enter adolescence, where they experience strong desires for personal validation through interpersonal intimacy (Furman, 1996). Close friendships provide companionship and emotional support, serving as a scaffold that allows adolescents to move away from their emotional dependence upon their parents and toward autonomous functioning as adults. These friendships are clustered within cliques of mutual friends, who spend time together, which are loosely connected in social networks that represent the crowd structures of many middle and high schools (e.g., the "popular group," the "jocks," the "brains," etc.) (Brown & Klute, 2003).

The changing social structure of the adolescent peer group and growing importance of friendship support place heightened demands on social perspective-taking skills and conversational skills. Communication (e.g., talking) surfaces as a major focus of peer relationships, and friendship expectations center on issues of intimacy, self-disclosure, and trustworthiness (Hartup, 1983). Conversely, social withdrawal and disengagement are increasingly costly to one's peer acceptance and vulnerability to victimization (Laursen, 1996; Rubin et al., 1998). By adolescence, social withdrawal is less normative than at younger ages and often represents a reaction to negative peer interactions experienced at younger ages. It is typically accompanied by feelings of social anxiety and inadequacy, and can elicit a cycle of peer exclusion, victimization, followed by heightened insecurity and further withdrawal (Rubin et al., 1998).

The movement from elementary schools to larger middle and high schools is associated with a dramatic increase in bullying and victimization (Juvonen, Nishina, & Graham, 2000). Up to three-quarters of young adolescents experience some victimization, with as many as one-third of the students in middle school reporting more extreme forms of peer harassment (Juvonen et al., 2000). Hence, the capacity to recognize and navigate the complex social structure, to access friendship support and find social niche comfort zones, and to cope confidently and effectively with peer pressures and peer hassles all become critical aspects of adolescent social competence.

Although aggressive-disruptive behaviors continue to elicit rejection by "mainstream" peers, the larger social structure of middle and high schools allows for the aggregation of "deviant" peer groups – peer groups that are characterized by the affiliations of youth with common, antisocial orientations. Fostered by academic tracking that places disengaged, poorly performing youth together, as well as by the tendency for aggressive youth to enjoy the high stimulation and risky behaviors of like-minded peers, these deviant groups often reinforce antisocial behavior and encourage covert activities, such as truancy, stealing, and substance use (Dishion, Andrews, & Crosby, 1995).

In adolescence, the phenomenon of "perceived popularity" also emerges. Unlike sociometric popularity (e.g., children who are nominated by many peers as "liked" and by few peers as "disliked"), children who are labeled "popular" by peers are those who have high levels of social impact as a function of their leadership positions in popular crowds. These youth are not necessarily well-liked, and in some cases, they use proactive aggression to attain peer dominance; but, they have high levels of social influence and visibility (Cillessen & Rose, 2005). Children, particularly girls, high in "perceived popularity" may also use relational aggression (exclusion, rumor spreading) effectively to maintain social dominance ("popular" status), but these behaviors reduce likability ratings by peers (Salmivalli, Kaukiainen, & Lagerspetz, 2000). Whereas sociometric popularity (being well-liked by most classmates) typically reflects a high level of prosocial skills and social competence, being perceived by others as "popular" does not convey the same information about a youth's social skill but rather reflects his/her social visibility and dominance.

Social Cognitions and Emotional Functioning

Parallel to developmental changes in the nature and structure of adolescent peer relations are significant transformations in children's social expectations and reasoning abilities. Between the modal ages of 11 and 14, as children are moving through puberty, their capacity for abstract and formal reasoning also begins to emerge. With these abstract skills, youth begin to think about others in terms of their personality characteristics and traits, as well as concrete behaviors. For example, adolescents describe their friends with trait descriptors, such as "good sense of humor," "enthusiastic," "cheerful," "athletic," and "intelligent." Adolescents still look for mutual interests among their friends, but they are concerned not only with what their peers can do but also with the kind of persons they judge their peers to be. Adolescents become more comfortable with diversity and social relativity; they can move beyond the more rigid rule-based or conventional expectations of grade school children and consider social standards that may vary depending upon the circumstances and individuals involved.

As youth develop the capacity for more abstract and formal reasoning, they increasingly evaluate themselves in comparison with their peers rather than in comparison to absolute standards (i.e., comparative appraisals). Their emerging capacity for recursive reasoning allows them to recognize that peers are also evaluating them, prompting concern with the content and valence of these evaluations (i.e., reflected appraisals) (Parker et al., 1995). Correspondingly, susceptibility to peer influence increases during adolescence, particularly in domains of preferred apparel and social behavior. Acceptance or rejection by peers often weighs heavily in adolescents' evaluations of their own self-worth. For example, when asked about the impact of potential rejection by peers, preadolescents and adolescents alike felt that they would miss the companionship, stimulation, and support provided by peers. But, middle school students, compared with 5th graders, were more likely to view peer rejection as an indication of their unworthiness as an individual ("If they don't accept you, you might feel like something's wrong with you – that you're not good enough"; "you just feel tossed away." – interview excerpts, O'Brien & Bierman, 1988).

Along with the increasing complexity of the social context, the adolescent's capacity for abstract and self-reflective thinking plays a role in promoting new levels of social distress. In addition to loneliness, socially disconnected adolescents may experience more complex feelings of distress, including anxiety, guilt, and alienation. Indeed, rates of social anxiety (e.g., an excessive fear of interpersonal scrutiny and potential embarrassment) begin to climb significantly in the preadolescent and early adolescent years, fueling increases in the onset of social phobia disorder, which peaks at age 15 (Mancini, Van Ameringen, Bennett, Patterson, & Watson, 2005). Whereas grade school children could "get by" socially by participating in group games and activities, the complex and relationship-based adolescent social structure requires more active efforts at social initiation, engagement, and conversation (Parker et al., 1995). These skills require a high level of self-regulation and social regulation, including the capacity to sustain interpersonal attention, regulate negative affect, and maintain positive interpersonal interest and orientation. Too much concern about what others think can inhibit engagement efforts. A negative developmental spiral can ensue, in which youth who are concerned and uncomfortable in the middle or high school social context withdraw and avoid social interaction, making them more vulnerable to victimization and limiting important peer socialization opportunities, thereby impeding the development of prosocial interaction skills.

Adolescent girls often report higher levels of social anxiety than boys (Nishina, Juvonen, & Witkow, 2005), and they are also more likely than boys to discuss their worries extensively

with their friends, revisiting problems and focusing on negative feelings in a pattern of co-rumination that may increase distress (Rose, 2002). Conversely, however, boys react more negatively to socially withdrawn behavior, making adolescent social withdrawal a more serious indicator of psychological risk for boys, for whom it is associated with low social and cognitive competence, moodiness, and low self-esteem (Morrison & Masten, 1991). Boys are also likely to experience more frequent and more severe physically aggressive victimization in middle school than girls (Juvonen et al., 2000).

Peer Group Organization

The social hierarchies that define adolescent peer groups develop in response to both the larger size of the peer group and as a function of the more sophisticated social reasoning and social awareness of the adolescents. For example, when elementary students were asked to describe the "groups" in their school, they had difficulty with the concept and often looked for discrete indicators to identify group membership ("Groups – what do you mean? Do you mean like reading groups?" – 5th grade interview, O'Brien & Bierman, 1988). By middle school, youth could easily describe social groups – group membership, crowd names, and descriptions of the modal norms and attitudes of various crowds (e.g., the brains who are smart and committed to academic achievement; the jocks who are athletic and into sports and dating) (O'Brien & Bierman, 1988). In addition, there is reasonable agreement among crowd members regarding their consensual norms and standards, as well as the reputations of various members within and across groups. Not all individuals become part of a crowd, whether by rejection or choice, between 10 and 40% of adolescents are not crowd members (Brown & Klute, 2003). Longitudinal data suggest that high-quality friendships, social inclusion, and positive engagement in school-based and extracurricular social activities are the critical protective aspects of social engagement in adolescence, rather than a specific crowd affiliation or social standing. Social isolation, peer victimization, and deviant peer affiliation signal social risk.

IMPLICATIONS FOR SOCIAL SKILL ASSESSMENT

Assessing a child's social competence requires a multifaceted approach at any age (Bierman, 2004). Children experiencing significant social maladjustment may show behavioral excesses or deficits, affective and motivational features, and social-cognitive deficits or biases. In addition, a child's social success is not determined by these features alone but also by the nature of the social context, peer expectations and responses. Developmental changes affect all of these domains of functioning, thereby fundamentally influencing social skills across the preschool, middle childhood, and adolescent years.

Progressing Social Challenges and Transformations

Preschool Years

- Core skills: Prosocial initiation, cooperative play, inhibiting aggression
- Peer context: Dyadic/small group fantasy and constructive play
- Social challenges: Initiating interactions, gaining peer acceptance

Grade-School Years
- Core skills: Add following rules/fair play, self-control, friendship support
- Peer context: Dyadic/small group friendships, large-group competitive and cooperative play
- Social challenges: Gaining acceptance, avoiding rejection and victimization, forming mutually-supportive close friendships

Adolescence
- Core skills: Add conversation skills, skills for intimate relationships (loyalty, empathy), skills for social decision-making (perspective-taking, problem-solving)
- Peer context: Intimate friendships, interest/activity groups, cliques, and crowds
- Social challenges: Navigating social groups, sustaining intimate friendships, finding social niches, avoiding victimization, responding appropriately to peer influence

In this chapter, we have described the modal changes that occur developmentally in the behavioral and social-cognitive correlates of social competence, as well as the transformations that occur in the structure, organization, and demands of the peer context. One clear implication is that the aspects of social skills targeted for assessment must be adjusted developmentally.

Specifically, in the preschool years, social skills assessment should focus on children's prosocial initiation and cooperative play skills – their capacity to initiate and sustain play interactions and to inhibit high rates of aggression (occasional squabbles and aggressive responses to conflict are still within norms). The capacity to join with others comfortably in play, take turns, respond to peer comments and requests, and enjoy being with peers represent the core skills associated with preschool social competence. Emotional understanding (e.g., recognizing and labeling basic feelings) and knowledge of prosocial strategies for resolving conflicts (particularly strategies for sharing toys and materials, and handling disagreements in play) support competent social behavior in preschool. Hence, these behaviors and social-cognitive skills should be targeted in assessments. Teacher ratings, behavioral observations, and parent ratings are useful assessment strategies.

In the grade school years, the importance of prosocial skills for peer acceptance continues. In addition, self-regulation and aggression control become increasingly important. Grade school games often require an understanding of and adherence to rules, routines, and principles of fair play, so the capacity to attend to and comply with these principles takes center stage in peer interactions. Assessments of social skills need to broaden to cover the domains of emotion regulation and frustration tolerance, attention and concentration skills, aggression control (covert and relational), as well as prosocial skills. Assessments of the positive dimensions of peer relations should include the number and quality of close friendships a child has, as well as their status in the school peer group (acceptance and rejection). In addition, an assessment of peer victimization becomes important, as some children are targeted for peer harassment during the grade school years. As children move into formal schooling, parents are typically much less useful reporters of their social behavior and interaction skills than teachers, who are able to observe them regularly in a peer context. Teachers continue to be good sources of information about a child's social behavior, and peer assessments (sociometric nominations and ratings) begin to provide unique information about social standing that complements teachers' behavioral descriptions. Self-reports, particularly of the qualitative features of a child's friendship (the degree of support and closeness they feel in their friendships), loneliness, and victimization are useful indices of

a child's social experiences and perceptions. Self-reports do not replace teacher and peer-ratings; however, as self-reports and other reports of these dimensions of social adjustment are not highly correlated and hence provide complementary (rather than redundant) sources of information.

Assessments of social competence in adolescence, as in middle childhood, should include behavioral descriptions of functioning in domains of prosocial behavior, emotion regulation and frustration tolerance, attention and concentration skills, and aggression control. These skills continue to provide a basic foundation for effective social interaction as children age. In addition, however, assessments should include a specific focus on conversation skills and decision-making skills. Conversation skills become central to adolescent friendships, and decision-making skills (including appropriate assertiveness and peer resistance skills) support youth as they navigate the difficult challenges of increased autonomy and peer invitations for involvement in risky behaviors. Whereas "perceived popularity" is not an index of social adjustment, peer-reported acceptance (indexing the availability of peer support and affiliation) continues to serve as a marker of social competence. Youth need not be "popular" to be socially competent (indeed, "perceived popular" status carries some risks), but having a solid social niche of accepting peers and friends does reflect social competence and indicate positive social adjustment. As in middle childhood, the assessment of victimization (peer-reported and self-reported), loneliness, and friendship quality are valuable. In addition, assessment should include exposure to and involvement with deviant peers – a risk factor in adolescence.

It is also important to note that the utility of certain assessment methods changes over time. In general, strategies for assessing social skills and peer relations include behavioral observations, teacher ratings, peer ratings, and self ratings. Together, multiple informants provide a better prediction of adjustment than any single informant alone (Bierman & Welsh, 2000). However, during the preschool years, when positive peer relations are determined primarily by the child's ability to join in and play prosocially with others, behavioral observations and teacher ratings provide the most valid basis for assessment of social skills and peer relations, whereas peer and self-ratings are less useful (Ladd & Profilet, 1996). Although preschool children can identify children they like or do not like to play with, their social-cognitive limitations make it difficult for them to describe peer experiences like victimization, which require more complex representations of the peer group. As children get older, their social-cognitive capabilities foster more differentiated and complex social representations. Peer interactions become more complex as well, and more often occur in more private settings, making accurate and representative behavioral observations more difficult. Conversely, peer ratings become more accurate and predictive, both for identifying children experiencing peer difficulties, as well as for describing the nature of those difficulties. By adolescence, peer relations are quite complex and often occur in private settings, outside of the view of teachers or observers. Hence, peer and self-reports become quite important. Self- and peer-ratings of significant social events, such as victimization, are only moderately correlated, but both peer-reported and self-reported victimization contribute to feelings of loneliness, social anxiety, depression, and somatic complaints by the time children reach adolescence (Juvonen et al., 2005). By adolescence, a child's subjective feelings of comfort, intimacy, and support within their social relationships make unique predictions to their mental health and psychological adjustment, along with the nature and quality of their social interactions.

In summary, children's social skills undergo dramatic developmental changes as they progress through the preschool, middle childhood, and adolescent years. These changes require developmental adjustments to both the content and process of social skill assessments.

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