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Abstract

Language is drawn on extensively in friendships but has received scant attention in the developmental literature. This study compared friendship quality in 16-year-old adolescents with and without specific language impairment (SLI), testing the extent it is predicted by individual differences in social behaviours and language ability. Participants were 120 adolescents with SLI and 118 typically developing (TD) adolescents. After considering the effects of nonverbal IQ and prosocial and difficult behaviour, language measures were found to be associated with friendship quality. The TD participants enjoyed normal friendships, whereas the participants with SLI were more likely to exhibit poorer quality (although 60% experienced good quality of friendships). Longitudinal analyses identified early language difficulties as predictive of poorer friendship quality in adolescence.

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Friendships are a vital dimension of child development. They are key markers of the selectivity of interpersonal relations, providing social and cognitive scaffolding (Hartup, 1996) and serving variously as sources of support and information as well as buffers against many of life's problems, with enduring implications for self-esteem and well-being (Hartup & Stevens, 1999; Shulman, 1993). Children and adolescents without friends, or with poor friendship quality, are at risk of loneliness, stress, and concomitant developmental psychopathologies (Bagwell et al., 2005; Hartup & Stevens, 1999; Ladd, 1990; Ladd, Kochenderfer, & Coleman, 1996; Silverman, 2005).

Friendship relations are complex, and this reflects in part the ways in which they interweave with other developmental processes, such as developing interpersonal and communicative skills, increasing social cognitive competence, and changing personal needs. For example, very young children form friendships largely on the basis of proximity and shared activities, during middle childhood friendships involve greater levels of interchange and awareness of individual attributes, and in adolescence many people seek via friendships to satisfy psychological needs for intimacy, shared outlooks, and identity formulation (Buhrmester, 1990, 1996; Hartup & Stevens, 1999; Parker & Gottman, 1989; Steinberg & Morris, 2001).

Many factors are involved in the development of friendships, and these are addressed in a large research literature. However, one ability that is drawn on almost universally in initiating, managing, and sustaining friendships has received scant attention: language. Surprisingly, despite the recognition that communication is central to any close relationship (Asher, Parker, & Walker, 1996), relatively little research has addressed the extent to which language ability bears on friendship quality in young people. In this article, we examine the relationship between language abilities and friendship in two groups of young people: a group of typically developing 16-year-olds and a group of adolescents of the same age with a history of specific language impairment (SLI). We draw also on longitudinal data available for the latter group, which enable us to investigate the predictive relationship between language abilities and friendship quality, from childhood to adolescence. In this way, we are able to examine both the influence of variations in language skills and the impact of exceptional linguistic difficulties, including the long term implications from middle childhood to midteens.

Friendships, Communication, and Language

By definition, friendships entail bidirectional interpersonal processes (Asher et al., 1996; Fujiki, Brinton,

Hart, & Fitzgerald, 1999). Hartup (1996, p. 4) suggests that reciprocity constitutes the "deep structure" of friendships. To achieve reciprocal relationships, it is essential to communicate. For typically developing children, a natural means of communication is readily available: talking to each other. Language skill is very important to peer interactions (Asher & Gazelle, 1999; Black & Logan, 1995; Brinton & Fujiki, 2002).

Although language may not be the only way in which to express oneself and to share interests or feelings, it is certainly characteristic of and integral to most children's interactions with their preferred peers. When the situation requires, children tend to spend more time conversing, negotiating, and sharing plans with friends than they do with nonfriends (Fonzi, Schneider, Tani, & Tomada, 1997). Furthermore, language use in friendships is qualitatively different from that in other social contexts. For example, talk between child friends involves more frequent repetition of each others' assertions and more mutually oriented utterances than does talk with nonfriends (Hartup, 1996; Newcomb & Bagwell, 1995).

Adolescent friendships, in particular, draw on skills in initiating interactions, attending to others' perspectives and needs, providing social support, and self-disclosure (Buhrmester, 1996; Rose & Asher, 2000; Steinberg & Morris, 2001). Language is integral to these social phenomena and often underpins them. For example, self-disclosure, an important social activity through which adolescents solicit self-assurance about social acceptability and seek to bolster self-esteem, necessitates time spent talking to others (Franzoi & Davis, 1985). Among typical young people, talk with friends increases dramatically during early to midadolescence (Raffaelli & Duckett, 1989).

Friendships and Social Behavior

As stressed above, although language is interwoven through most human social relations, other individual characteristics and behaviors bear importantly on the development of friendships (Cillessen, Jiang, West, & Laskowski, 2005; Hartup, 1996). How one behaves toward others is of particular salience. For example, children who display higher levels of problem behavior tend to have poorer peer relations and fewer friends (Bagwell, Brooke, Pelham, & Hoza, 2001; Dishion, Andrews, & Crosby, 1995); if antisocial children and adolescents do form friendships, they tend to be with other antisocial individuals and the relationships tend to be more acrimonious and shorter lived (Dishion et al., 1995).

On the other hand, prosocial behavior is positively associated with friendship. Prosocial behavior is expected and valued among friends (Berndt, 2002). In typical development, directing prosocial behavior especially toward friends is increasingly characteristic from early adolescence (Berndt, 1982). Self ratings of prosocial behavior were related in one study of midadolescents to positive ratings of friendship quality; in turn, participants who rated themselves higher on prosocial behavior had friends who rated their relationship as high on helping, closeness, and security (Cillessen et al., 2005).

SLI, Social Behavior and Friendships

Children with language impairments are at a disadvantage in peer relations from at least their preschool days. They engage less in active conversational interactions than typically developing peers, enter less frequently into positive social interactions, are less sensitive to the initiations offered by others, have poorer discourse skills, manifest situationally inappropriate verbal responses, achieve fewer mutual decisions, and are more likely to have their bids to influence others prove unsuccessful (Brinton, Fujiki, & McKee, 1998; Craig, 1993; Craig & Washington, 1993; Grove, Conti-Ramsden, & Donlan, 1993; Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996; Hadley & Rice, 1991; Vallance, Im, & Cohen, 1999). In short, the communicative basis for close reciprocal relationships is circumscribed by SLI.

Communicative abilities are not the only factors that may impede peer relations in children and adolescents with SLI. These children tend also to score lower than typically developing children on a range of measures of social skills, social cognitive abilities, and emotional and behavioral self-regulation (Cohen et al., 1998; Fujiki, Brinton, & Clarke, 2002; Fujiki, Brinton, & Todd, 1996; Lindsay & Dockrell, 2000; Marton, Abramoff, & Rosenzweig, 2005). Young people with SLI tend to be rated as more withdrawn than age-matched comparisons (Brinton & Fujiki, 1999; Cohen et al., 1998; Fujiki et al., 1996; Fujiki, Brinton, Isaacson, & Summers, 2001; Redmond & Rice, 1998) yet they are at heightened risk for exhibiting externalizing problems and antisocial conduct disorders (Beitchman et al., 2001; Brownlie et al., 2004; Conti-Ramsden & Botting, 2004).

Children with SLI are less likely to exhibit skilled prosocial behavior. Fujiki, Brinton, Morgan, and Hart (1999) reported that participants (aged 5 to 13 years) with language impairments were rated significantly below typical peers on teacher ratings of prosocial behavior. Detailed case studies presented by Brinton, Fujiki, Montague, and Hanton (2000) suggest that language difficulties, social withdrawal, and a lack of

prosocial skills are compounded, with the outcome that children find it difficult to work in collaborative peer groups. Stevens and Bliss (1995) found that children with SLI were less likely to propose prosocial (cooperative) solutions to conflicts. Thus, deficits in other fundamental interpersonal capacities appear to be associated with SLI.

Fujiki, Brinton, Hart et al. (1999) point out that linguistic and social cognitive difficulties have implications for two aspects of peer relations in childhood: peer acceptance and friendship. Peer acceptance reflects the general orientation of the peer group toward the individual, whereas friendship concerns specific, mutual relationships in which each party recognizes the other as a friend (see also Asher et al., 1996; Rubin, Bukowski, & Parker, 1998).

Several studies indicate that children with SLI tend to be less socially accepted than other children. Both adult and peer impressions are less favorable (Burroughs & Tomblin, 1990; Rice, 1993; Rice, Hadley, & Alexander, 1993; Rice, Sell, & Hadley, 1991). Children with SLI are less liked by peers and less frequently invited to take part in social activities (Craig, 1993; Fujiki et al., 1999 Gertner, Rice, & Hadley, 1994). They are more likely to be socially excluded or victims of bullying (Conti-Ramsden & Botting, 2004; Savage, 2005). By early adolescence, children with SLI tend to have negative views of their own social competence and low self-esteem (Jerome, Fujiki, Brinton, & James, 2002).

Children with SLI also have fewer friends and are less satisfied with peer relationships compared to age-matched classmates (Fujiki et al., 1996). Fujiki et al. (1999) conducted a detailed examination of peer relations in eight children aged 6 to 11 years with SLI attending mainstream schools. Peer sociometric ratings and reciprocal friendship nominations were collected from the target children and their classmates. Strikingly, five of the eight children with SLI were not named by any child as a best friend; two of the children with SLI who named other children as their best friends received the lowest possible ratings on the sociometric scale. In short, these children appeared not only to have impoverished friendship relations but, in some cases, had inaccurate perceptions of the status of their relationships with others.

Accumulating evidence confirms that social and behavioral difficulties in this group are not short-term problems. A pattern of social difficulties is characteristic not only of relatively early peer relations but remains marked through later childhood and adolescence (Brinton, Fujiki, & Higbee, 1998; Brinton, Fujiki, Spencer, & Robinson, 1997; Conti-Ramsden & Botting, 2004; Fujiki, Brinton, Robinson, & Watson, 1997; Stevens & Bliss, 1995) and into adulthood (Clegg, Hollis, Mawhood, & Rutter, 2005; Howlin, Mawhood, & Rutter, 2000). However, in the context of conduct disorders and other manifest problems, relative impoverishment of friendship development may be less salient for caregivers and teachers (Conti-Ramsden & Botting, 2004).

The Present Study

Although there are several studies pointing to problems in peer acceptance and friendship formation among children with SLI, much less is known of the patterns in adolescence, notwithstanding the widely acknowledged heightened importance of peer relations at this stage of life. More generally, there is a dearth of longitudinal study of friendships and the factors that influence them (Hartup, 1996), especially in relation to children with SLI (Farmer, 2000). The present study aimed to compare friendship quality in adolescents with and without SLI and to test the extent it is predicted by individual differences in social behaviors and language ability. In the case of the participants with SLI, we aimed also to examine longitudinal associations between language impairments and later friendship quality.

Previous research led to the expectation that young people with a history of SLI would exhibit poorer quality of friendships in midadolescence than would peers with typical development. In young people in general, a tendency toward problem behaviors was expected to be associated with poorer friendship quality, whereas a tendency toward prosocial behavior would be associated with more favorable friendship quality. If, as argued above, language has an integral role in the negotiation and maintenance of friendships, then it follows that deficits or impairments in language abilities should impact negatively in this respect; hence, it was expected that language abilities would contribute additionally to explaining the variance in friendship quality. Finally, because SLI is an early emerging developmental disorder, which some studies indicate has enduring implications, we sought to examine the relationship between language ability in middle childhood and the quality of friendships at midadolescence; we expected that the more severe the disorder, the poorer the long-term social outcomes.

Method

Participants

Adolescents With SLI

The young people with SLI were originally part of a wider longitudinal study, the Conti-Ramsden Manchester Language Study (Conti-Ramsden & Botting

1999a, 1999b; Conti-Ramsden, Crutchley, & Botting, 1997). The initial cohort was originally recruited from 118 language units attached to English mainstream schools. Language units enrolling children with global delay or hearing impairments were excluded. The remainder provided a list of Year 2 children attending language units for at least 50% of the week. Across England, approximately 500 children fitted this criterion. All language units were asked to participate; two declined this invitation. Subsequently, approximately half of the eligible children in each unit were sampled randomly. This resulted in an initial study cohort of 242 children. The age range was 7 years 5 months to 8 years 9 months and comprised 186 boys and 56 girls (girls forming 23.1% of the cohort). These children were reassessed 1, 3, 7, and 9 years later (i.e., at approximately 8, 11, 14, and 16 years of age).

From the original cohort of 242 children, 139 (57.4%) agreed to participate in the present stage of the study. Of those who did not participate, contact had been lost with 51 (21.1%), and 52 (21.5%) did not consent to take part. A sample of adolescents was then selected for the present study based on longitudinal data that showed that all met criteria for SLI at least at one time point (7, 8, 11, or 14 years) prior to the final data collection at age 16. These criteria comprised:

1. Performance IQ (PIQ) of 80 or more and at least one concurrent standardized language test score > 1 *SD* below the population mean at one of the longitudinal assessment stages.
2. No sensory-neural hearing loss.
3. English as a first language.
4. No record of a medical condition likely to affect language.

In total, 120 adolescents with SLI (72.5% male/27.5% female) fit these criteria and thus participated in the present study. They were aged between 15 years 2 months and 16 years 9 months (mean age 15 years 9 months).

Typically Developing (TD) Adolescents

A comparison group of adolescents from a broad background participated in the study at approximately age 16. Census data as per the 2001–2002 General Household Survey (Office of National Statistics) were consulted to target adolescents who would be representative of the range and distribution of households in England in terms of household income and maternal education. Initially, TD adolescents from the same schools as the participating adolescents with SLI were targeted. This was followed by a second wave targeting schools in areas where we required more representation in terms of particular household income/maternal education brackets.

TD adolescents were matched in terms of age and socioeconomic status (SES; household income and maternal education) to the sample with SLI described above. They had no history of special educational needs or speech and language therapy provision. In total, there were 118 TD adolescents (64% male) aged between 15 years 2 months and 16 years 7 months (mean age 15 years 11 months).

Data were collected from the participants' parents in order to ascertain levels of maternal education (minimal to degree level; Table 1) and household income (<£5,200 to >£52,000 per year; Table 2). This information was available for the majority of adolescents (maternal education, SLI $n = 117$ [98%]; TD $n = 117$ [99%]; household income, SLI $n = 117$ [98%]; TD $n = 118$ [100%]). No significant difference was found between TD adolescents and adolescents with SLI in maternal education levels, $\chi^2(2) = 1.76$, $p = .416$, or household income bands, $\chi^2(3) = 4.39$, $p = .222$. Importantly therefore, the TD adolescents were similar to the adolescents with SLI in terms of key SES indicators. Further, the household income of both groups ranged from the lowest bracket found in the 2001–2002 General Household Survey (Office of National Statistics) to the highest bracket and was representative of the household income distribution found in England as a whole. This is a particular strength of the study, as the comparison TD came from a broad socioeconomic spectrum (see also results below on current language status of TD adolescents).

Tests and Materials

Concurrent Psycholinguistic Test Battery

Receptive and expressive language. Receptive language was assessed using the Word Classes subtest of the Clinical Evaluation of Language Fundamentals-Revised (CELF-R; Semel, Wiig, & Secord, 1987). In this test, the child is required to identify two words that are related by semantic class, opposites, or spatial or temporal features from a list of four words read out by the examiner.

Expressive language was assessed using the Recalling Sentences subtest of the CELF-R. This is a test designed to assess recall and reproduction of surface structure as a function of syntactic complexity. The child is required to repeat sentences of increasing complexity given verbally by the tester.

Table 1
Maternal Education Levels of Adolescents With SLI and TD Adolescents

	Mothers of adolescents with SLI (n = 117; %)	Mothers of TD adolescents (n = 117; %)
No educational qualifications	23.9	17.1
GCSE/O-levels/A-levels/college	62.4	66.7
University/polytechnic/postgraduate education	13.7	16.2

Thus, receptive and expressive language skills were measured by single tasks that formed part of a longer assessment, that is, CELF-R. These specific subtests were chosen as they are used widely in the literature and are considered good indicators of these skills (Conti-Ramsden, Botting, & Faragher, 2001; Gillon & Dodd, 2005; Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998). We were also mindful of the length of the sessions for the TD participants. The adolescents with SLI did receive a full CELF-R assessment including all the subtests for both the expressive scale (Formulated Sentences, Recalling Sentences, and Sentence Assembly) and the receptive scale (Oral Directions, Word Classes, and Semantic Relationships). Given the availability of these data, we repeated all the analyses involving the SLI group using the full CELF-R measures. The results reported below were unchanged. Thus, we report findings involving the single subtests, as this was the common measure across groups.

Reading. Reading comprehension was assessed by the Reading Comprehension subtest of the Wechsler Objective Reading Dimensions (WORD; Wechsler, 1993). This is a series of printed passages and orally presented questions designed to tap skills such as recognizing stated detail and making inferences. The child reads a passage and is then verbally asked a question by the tester.

Nonverbal ability. Performance IQ was assessed using the full form of the Wechsler Intelligence Scale for Children (WISC-III; Wechsler, 1992). This widely used assessment comprises Picture Completion, Coding, Picture Arrangement, Block Design, and Object Assembly subtests.

Table 2
Household Income Bands (Pounds per Annum) of Adolescents With SLI and TD Adolescents

	SLI households (n = 117; %)	TD households (n = 118; %)
<5,200–10,400	17.1	12.7
10,401–20,800	29.9	24.6
20,801–36,400	31.6	29.7
36,401–>52,000	21.4	33.0

Earlier Psycholinguistic Battery at 11 Years

Receptive and expressive language. Receptive language was assessed using the Test for Reception of Grammar (TROG; Bishop, 1982). This is a multiple-choice test designed to assess understanding of grammatical constructions. Expressive language was assessed using the Clinical Evaluation of Language Fundamentals Revised–Word Associations (CELF-wa; Semel et al., 1987). This test assesses accuracy and fluency of word recall from long-term memory through timed naming of items in semantic categories.

Nonverbal ability. Performance IQ was assessed using a short form of the WISC-III as described above.

Earlier Psycholinguistic Battery at 7 Years

Receptive and expressive language. Expressive language was assessed using the Bus Story Test (BS; Renfrew, 1991). In this test, the child is required to retell a story using pictures as cues. Receptive language was assessed using the TROG as described above.

Reading. British Ability Scales–Word Reading subtest (BAS-wr; Elliot, 1983). Children are presented with a list of single words and asked to read them aloud. This assessment measures only single word sight-reading.

Nonverbal ability. Performance IQ was assessed using Ravens Coloured Matrices (Ravens; Raven, 1986). This is a test of nonverbal ability where children are required to select the missing piece from an incomplete pattern.

Additional tests. The British Ability Scales–Naming Vocabulary subtest (BAS-nv; Elliot, 1983) is a test of expressive vocabulary in which the child is asked to name a series of pictures everyday items.

The Goldman–Fristoe Test of Articulation (GF; Goldman & Fristoe, 1986) is a test of articulation and phonology, in which children are asked to name a series of everyday items.

The Illinois Test of Psycholinguistic Ability-Grammatic Closure subtest (ITPA; Kirk, McCarthy, & Kirk, 1968) is a test of expressive syntax in which the examiner reads an incomplete sentence that the child must finish in a grammatically correct manner.

Social-Emotional Functioning

The Strengths and Difficulties Questionnaire – self-report (SDQ; Goodman, Meltzer, & Bailey, 1998) was completed by the adolescents. The SDQ is a behavioral screening questionnaire that can be completed by 11- to 16-year-olds; it provides coverage of young people's behavior, emotions, and relationships. It asks about 25 attributes, some positive and others negative, and requires an answer of "not true," "somewhat true," or "certainly true." The 25 items are divided into five subscales of five items each, generating scores for conduct problems (e.g., "I get very angry and often lose my temper"), hyperactivity (e.g., "I am restless, I cannot stay still for long"), emotional symptoms (e.g., "I worry a lot"), peer problems (e.g., "I am usually on my own. I generally play alone or keep to myself"), and prosocial behavior (e.g., "I am helpful if someone is hurt, upset, or feeling ill"). The conduct problems, hyperactivity, emotional symptoms, and peer problems subscales are summed to generate a total difficulties score that can range from 0 to 40.

Friendships

Quality of friendships was measured using the Friendships and Social Relationships section of the Social-Emotional Functioning Interview (SEF-I; Howlin et al., 2000). This section involves a detailed interview designed to examine aspects related to quality of social interactions in adolescents/adults. It was originally designed to interview two groups of young adults: a group with a history of SLI and a group with a history of autism spectrum disorders. The interview has two versions: self-report and informant report. The self-report version was administered to the adolescents and the informant version was administered to their parents. Each interview had three items that directly examined friendship relationships: perception of acquaintances, description of current friendships, and conception of friendships/quality of friendships.

The interviewer used probe questions to elicit specific examples/scenarios that were then coded following the detailed guidelines provided. The wording of these questions was tailored depending on whether the young person was providing a self-report or whether parents were answering about the young person. For perception of acquaintances, the respondent was asked "How easy do you find it to get on with other people? For example, if you were at a party or social gathering, would you try to talk to people you had not met before? What would you talk about? Do you have any acquaintances in the neighbourhood that you talk to? What about in shops or on buses?" Responses were coded "0" when there was a normal range of nonintimate social relationships, "1" when the interactions were limited in scope or number, and "2" when there was little or no making of acquaintances. For current friendships, the respondent was asked "Do you have any particular friends whom you see? Who are they? Are they the same age as you? Do these people ever come to your house or do you usually meet them a club, center, etc.?" Responses were coded "0" when there was evidence of one or more friends of the young person's own age with whom he or she shared a variety of interests and social activities, "1" if there was evidence of "friends" but with little spontaneous and/or stereotyped socializing, "2" if there were acquaintances with whom the young person talked to or shared activities with but not met spontaneously, and "3" if there were no particular friends with whom the participant shared activities. For concept of friendships/quality of friendships, the respondent was asked "What is special about friends? What does being a friend mean? What is different about a friend? What do you talk about when you are together? Would you ever confide in a friend about how you are feeling or if you are worried?" "Has the friend ever done anything to give you particular pleasure?" Responses were then coded "0" if there was evidence of initiative in seeking contact with others and definite qualities of shared enjoyment or exchanged confidences as well as selectivity of the relationship, "1" if there was limited sharing of activities and feelings of enjoyment, "2" if there were people with whom they shared activities but no evidence of shared enjoyment or exchange of feelings (such as one-sided relationships), and "3" if there was no indication of concept of friendship and no evidence at all of pleasure in people's company or exchange of feelings.

For self-report by the adolescents, Cronbach's alpha for these three items was .84. The same alpha was obtained for parent report of the adolescents' functioning. The overall alpha for the six items was .89. In addition, self-report and parent report were highly correlated, $r = .73$. This pattern was consistent when the groups were examined separately ($r = .67$ for the SLI group) and 101/116 identical responses (87.1%) agreement for the TD group. Correlations

were not appropriate for the TD group given the restricted range of scores for this group, namely mainly 0 or 1. We computed a combined participant/informant friendship index through summing the six items above. This yielded a friendship index with a minimum score of 0 and a maximum score of 16. A score of 0 represented good quality of friendship. Conversely, a score of 16 represented severely restricted quality of friendship. The distribution was found to be positively skewed (skewness 1.186, *SE* .231, kurtosis .480, *SE* .459). Following a square root transformation, skewness was .686 (*SE* .231) and kurtosis −.681 (*SE* .459). This transformed SEF-I based friendship index was used in the relevant analyses below.

Procedure

The TD adolescents and adolescents with SLI were assessed and interviewed either at home or school on the above measures as part of a wider battery. Assessments took place in a quiet room with only the participant and a trained researcher present. Each testing session lasted for either a morning or afternoon with appropriate breaks. The parents of the young people were interviewed separately at home for a single period of about 2 hr.

Results

PIQ, Language, and Behavioral Profiles

Psycholinguistic data were available at age 14 years for 80/120 (67%) adolescents with SLI. The remainder (40/120, 33%) had identical concurrent psycholinguistic data available at 16 years. For ease, no distinction will be made between these data and they will be referred to as concurrent data. All 118 TD adolescents had concurrent data available from the present stage of the study. The reading comprehension measure was available for approximately half the TD adolescents ($n = 63$, 53.4%).

The psycholinguistic and behavioral (SDQ) profiles of the adolescents are shown in Table 3. Mean psycholinguistic scores for the TD adolescents were within the normal range for age whereas the scores for the adolescents with SLI fell below.

As expected, one-way ANOVAs revealed that TD adolescents performed significantly better than adolescents with SLI on tests of receptive language, $F(1, 235) = 69.08$, $p < .001$, partial $\eta^2 = .23$, expressive language, $F(1, 235) = 208.34$, $p < .001$, partial $\eta^2 = .47$, reading comprehension, $F(1, 178) = 62.06$, $p < .001$, partial $\eta^2 = .26$, and nonverbal IQ, $F(1, 233) = 55.85$, $p < .001$, partial $\eta^2 = .193$. In addition, adolescents with SLI were found to have more overall behavioral and emotional difficulties, $F(1, 233) = 46.35$, $p < .001$, partial $\eta^2 = .166$, and to be less prosocial, $F(1, 236) = 13.55$, $p < .001$, partial $\eta^2 = .054$, than TD adolescents.

Table 3
Ability Profiles (Psycholinguistic Standard Scores and Social/Emotional/Behavioral Functioning) of Adolescents With SLI and TD Adolescents at 14–16 Years

	SLI ($n = 118$)		TD ($n = 120$)	
	M	*SD*	*M*	*SD*
CELF-R Receptive subtest (Word Classes)	83.7	16.5	99.9	13.3
CELF-R Expressive subtest (Recalling Sentences)	73.6	10.3	97.5	14.9
WORD Reading comprehension[a]	75.8	14.2	92.2	11.4
WISC-III PIQ	84.3	18.8	101.0	15.2
SDQ Total difficulties score	13.6	5.9	8.9	4.4
SDQ Prosocial score	7.8	1.9	8.6	1.5

[a] $n = 63$ for TD adolescents.

Current Language Status

Adolescents with SLI were classed as currently impaired if, at the time of the study, they met the following criteria for SLI: performance IQ (WISC-III; Wechsler, 1992) of 80 or more and concurrent expressive or receptive language standard score (CELF-R Expressive language [Recalling Sentences]/Receptive language [Word Classes]; Semel et al., 1987) less than 85. It is important to note that these concurrent criteria are identical to the criteria used for the selection of study participants using the longitudinal data.

When the specific criteria described above were used, exactly half the adolescents with SLI (59/118) were classified as meeting criteria for SLI at the time of the study (14- to 16-year-olds). The remaining 50% had all met the established SLI criteria at some point in the last 9 years. Of this group, 15 (13% of the total) demonstrated concurrent normal nonverbal and language ability and 41 (35% of the total) showed nonverbal and language ability in the impaired range. It is now documented that a subgroup of children with SLI has declining performance IQ across time (Botting, 2005). Thus, the profile of some of the children (nonverbal and language ability in the impaired range) was likely to be due to their performance IQ

scores dropping since they were recruited to the study. There is evidence to suggest that children with this profile (low performance IQ and language ability) perform in important ways much like children with SLI with nonverbal IQ within the normal range (Leonard, 2003). In addition, there were 3 (3%) adolescents with impaired nonverbal abilities but normal language scores. Therefore, at the time of the study, a total of 100 out of 118 adolescents (85%) had current language difficulties indicated by scores at least 1 *SD* below the mean on standardized tests of expressive and/or receptive language.

In terms of the wider educational profiles of these adolescents, the majority were placed in supported educational placements during their high school years (88% at 11 years, 80% at 14 years, and 78% at 16 years). Further, the majority were identified formally as having special educational needs during secondary schooling (81% at 11 years, 73% at 14 years, and 73% at 16 years). It is important to note that of the 18 adolescents without current language difficulties as measured by our concurrent psycholinguistic battery as described above, 10 had a statement of Special Educational Needs (SEN). Of those without a statement of SEN, 2/8 were placed with support in school. In sum, the vast majority of the adolescents with SLI participating in the study had recognized academic problems that required special support in school at the time of the study. Thus, we are confident that the adolescents participating in this study were a group of young people with a history of SLI.

Of the TD adolescents, 86/118 (73%) had normal PIQ and language scores (as defined above). In addition, 25/118 (21%) had normal PIQ but low expressive or receptive language, and 4/118 (3%) had normal language but low PIQ. There were 3/118 (3%) with both low PIQ and language. Thus, regardless of PIQ, 90 of 118 (76%) TD adolescents appeared to have normal language functioning. It needs to be noted that the 28 TD individuals who did not appear to have normal language functioning (using our psycholinguistic battery) had no history of special educational needs or speech and language therapy provision and were considered by schools to be typically developing adolescents. The study aimed to recruit a TD comparison group that was representative of England as a whole and thus included representation from individuals whose parents belonged from the lowest to the highest income brackets as per census data. Nevertheless, it could be argued that these 28 individuals may have influenced the results unduly. With this in mind, all the analyses involving the TD group were repeated excluding these 28 individuals. The results were unchanged. Hence, we report the findings involving the full sample of TD adolescents because they are representative of the range of household income and maternal education and are matched on key variables to the adolescents with SLI.

Predicting Quality of Friendship in Adolescents Generally

Hierarchical regression was conducted using the transformed friendship index as the outcome variable. The first block of the regression consisted only of concurrent nonverbal IQ. The second block added the SDQ total difficulties and prosocial scales. The third block added concurrent measures of expressive language, receptive language, and reading comprehension. The regression model was significant at step one, $F(1, 165) = 11.21$, $p < .01$, at step two, $F(3, 163) = 11.97$, $p < .001$, at step three, $F(6, 160) = 9.56$, $p < .001$.

Table 4 shows the results of the hierarchical regression analysis for predicting quality of friendship in adolescents. At Step 2, after for nonverbal IQ was accounted for, prosocial skills and behavioral and emotional difficulties contributed significantly to quality of friendship. At Step 3, expressive language made a significant contribution over and above the nonverbal IQ and SDQ measures.

After considering the effects of nonverbal IQ (6%), we found that SDQ total difficulties and SDQ prosocial measures added a significant amount of variance (11%) to the model. Over and above this, language and literacy measures were found to account for 7% of variance, which is considered a small effect size ($f^2 = 0.09$; Cohen, 1988). Overall, the model explained 24% of the variance in quality of friendships in the adolescents, with concurrent SDQ measures and

Table 4
Hierarchical Regression Analysis for Concurrent Variables Predicting Friendship Quality in Adolescents at 16 Years

Variable	B	*SE* B	β
Step 1			
WISC PIQ	−.01	.00	−.25**
Step 2			
SDQ Total difficulties score	.03	.01	.24**
SDQ Prosocial score	−.08	.03	−.20**
Step 3			
CELF Expressive subtest	−.01	.00	−.27**
CELF Receptive subtest	.01	.00	.14
WORD Reading comprehension	−.01	.01	−.20+

Note. $R^2 = .058$ for Step 1 ($p < .01$); $\Delta R^2 = .106$ for Step 2 ($p < .001$). $\Delta R^2 = .072$ for Step 3 ($p < .01$).
+$p = .057$. **$p < .01$.

language making the most contribution to concurrent friendship quality.

Are There Differences in Quality of Friendship in Adolescents With SLI Versus TD Adolescents?

Recall that quality of friendship was measured through a combined self-/parental SEF-I report with a range of 0 (*good quality of friendship*) to 16 (*severely restricted quality of friendship*). For the adolescents with SLI, the mean untransformed score for this measure was 3.1 ($SD = 3.5$). In this group, there was a wide range of scores (minimum 0, maximum 14). Thus, the adolescents with SLI were fairly heterogeneous in terms of their quality of friendship. In contrast, the TD adolescents were less widely distributed on this measure ($M = 0.2$, $SD = 0.5$). They showed a narrower range of scores (minimum 0, maximum 2), with most TD adolescents exhibiting normal quality of friendship (i.e., a score of 0 on each of the six items making up the composite score). One-way ANOVA revealed a significant difference between groups on the composite friendship measure, $F(1, 223) = 77.09$, $p < .001$, with a large effect size, partial $\eta^2 = .257$ (Cohen, 1988). Thus, as predicted, the adolescents with SLI showed poorer quality of friendships than the TD adolescents.

In terms of the three areas making up this composite score, striking differences were observed between groups. Taking the mean score of self- and parental report, 92% of the TD adolescents compared to 54% of adolescents with SLI reported a normal range of nonintimate social relationships. In terms of current friendships, all TD adolescents reported having one or more friend with whom they shared interests. This was in comparison with 61% of adolescents with SLI. Finally, 98% of TD adolescents reported having one or more relationship involving sharing and seeking contact. In contrast, only 64% of adolescents with SLI reported this level of quality of friendship.

The factors associated with friendship quality were examined separately for each group (SLI and TD). Hierarchical regression was conducted with the friendship index as the outcome variable. The first block for each regression consisted only of concurrent nonverbal IQ. The second block added SDQ total difficulties scale and prosocial scale. The third block added concurrent expressive and receptive language and reading comprehension.

For the TD adolescents, the regression model was not significant, $F(6, 56) = 1.715$, $p = .134$. There were no independent variables significantly associated with quality of friendship.

For the adolescents with SLI, Step 1 of the model was not significant, $F(1, 102) = 2.36$, $p = .128$. Step 2 of the model was significant, $F(3, 100) = 3.62$, $p < .05$, and Step 3 was of borderline significance, $F(6, 97) = 2.11$, $p = .059$. The only independent variable associated with quality of friendship in SLI was the prosocial score at Step 2 ($p = .043$). Overall, the model accounted for 6% of the variance in friendship quality in SLI.

In summary, the TD adolescents showed good quality of friendship, with the vast majority reporting normal social interaction. There were no key associations with quality of friendship in terms of concurrent performance IQ, language, or behavioral and emotional factors. In contrast, as a group, the adolescents with SLI had poorer quality of friendships overall. Prosocial behavior appeared to be weakly associated with quality of friendship in the adolescents with SLI. There was remarkable heterogeneity in friendship outcome among adolescents with SLI, with over half these young people experiencing good quality of friendship but many not so fortunate.

What Predicts Good Versus Poor Quality of Friendship in Adolescents With SLI?

A strength of this study was the availability of longitudinal data on the same young people with SLI at 7 years of age. This afforded the examination of early predictors of adolescent quality of friendship in this population.

The adolescents with SLI were grouped depending on whether they had good quality of friendships at 16 years (a score of 0, 1, or 2 on the friendship index) or poor quality of friendships at 16 years (a score of at least 3 on the friendship index). This cutoff point was selected on the following criteria. In the study by Howlin et al. (2000) using the SEF-I, a composite score was employed where 0 or 1 represented good to fair quality of friendship. We applied this criterion for the six items included in this study and required that participants with good quality of friendships should have at least four scores in the good range (score = 0) with a maximum of two scores in the fair range (score = 1). This cutoff coincided with the observed range of scores in the TD adolescents (0–2). Approximately 40% of participants with SLI had poor quality of friendships. This is roughly comparable to the findings of Howlin et al. (with their much smaller sample), who reported 32% with "no particular friends with whom any shared activities."

This resulted in a group of 65 adolescents with SLI with good friendships and a group of 44 adolescents with SLI with poor friendships. It is of interest to examine the interview responses of the adolescents with SLI with good friendships. It was found that 32

(49%) had entirely normal functioning in the areas of acquaintances, friends, and concept/quality of friendships as reported by both themselves and their parents. These adolescents had a normal range of nonintimate social relationships, had one or more friends of their own age, and showed evidence of seeking contact with others and qualities of shared enjoyment or exchanged confidences.

There were some adolescents (n = 20, 31%) with "fair" rather than "good" functioning in one of the six areas (three areas by two types of report) and some (n = 13, 20%) with "fair" functioning in two of the six areas. When examining the specific areas in which these adolescents were found to have slight difficulties, it was found that the most common was perception of acquaintances. Nonintimate social interactions were reported to be limited in scope or number by 14 (22%) of the adolescents themselves in the good friendships group and 16 (25%) of the parents of these adolescents.

There was evidence of friendships but with little spontaneous socializing for a very small number of this group (self-report n = 3, 5%; parent report n = 3, 5%) and limited sharing of activities and feelings of enjoyment (self-report n = 4, 6%; parent report n = 6, 9%). However, it needs to be noted that these were isolated slight difficulties in the context of otherwise normal friendship functioning in adolescence. In this group, there was good evidence of same-age friendships and pleasure interacting with others.

The friendship profile of the SLI good friendship group can be compared with that of the TD adolescents. A larger proportion of the latter group, that is, 101 (86%), had entirely normal functioning in the areas of acquaintances, friends, and concept/quality of friendships as reported by both themselves and their parents. In the TD group also there was some evidence of slight isolated difficulties. Nonintimate social interactions were reported to be limited in scope by 10/118 (8%) of the TD adolescents and by 3/118 (3%) of the parents of these adolescents. One parent reported that there was little or no making of acquaintances in her or his offspring. In terms of current friendships, all of the TD adolescents reported that they had at least one friend of their own age and 3/118 (3%) of their parents reported that there was evidence of friendships but with little spontaneous socializing. Finally, in terms of concept/quality of friendships it was reported that there was limited sharing of activities and feelings of enjoyment for a small number of the TD adolescents (self-report n = 3, 3%; parent report n = 2, 2%).

Table 5 shows the early language, literacy, and nonverbal IQ profiles of adolescents with SLI who were identified as having good or poor friendships at 16 years. Significant differences were observed between good and poor friendship groups on early language (receptive and expressive) as well as nonverbal skills.

Logistic regression procedures were employed to determine the link between possible predictive factors at age 7 and outcome at age 16 years in terms of the experience of good or poor quality of friendship. Young people who had scored above or below 2 *SD*s from the mean were removed from all remaining analyses (a total of 6 cases, 2 from the good friendships groups and 4 from the poor friendships group; all cases were 2 *SD* above the mean). A forward stepwise procedure was used with significance levels for entry set at p = .05. Outcome was coded as 0 (good friendship outcome) and 1 (poor friendship outcome). Logistic regression coefficients were used to estimate the odds ratios for each of the independent variables in the model.

The first block for the regression consisted of nonverbal IQ at 7 years. The second block added receptive and expressive language at 7 years. Table 6 presents the odds-ratio per unit of each independent variable for the regression analysis that predicted outcome into good and poor quality of friendship groups.

After adjusting for the effect of nonverbal IQ, receptive language at 7 years was identified as a significant predictive factor for friendship outcome at 16 years. The individual odds ratio for receptive language was .93, suggesting that for every one standard score increase on this test at 7 years, risk of poor outcome at 16 years is reduced by 7%. For every 5 standard score increase, risk is reduced by 29%, for every 10 standard score increase, risk is reduced by 50%, and for every 15 standard score increase (equivalent to one standard deviation), risk is reduced by 64%.

It is important to note that although expressive language was not a significant independent early predictor of friendship quality, the presence of difficulties in language understanding (receptive language) is usually accompanied by difficulties in expressive language. Indeed, the presence of receptive language difficulties only (in the context of good expressive skills) is very rare in SLI (Bishop, 1997) . In the sample studied here, expressive and receptive skills were highly correlated in the SLI group at 7 (r = .45), 11 (r = .55), and 16 years (r = .56). Thus, receptive language skills are a good proxy for language skills generally and the above results suggest that early language skills at 7 years are predictive of later friendship quality at 16 years.

Recall that in the overall analysis, behavioral/emotional difficulties and prosocial behavior were

Table 5
Profiles of Adolescents With SLI at 7 Years With Good and Poor Friendships at 16 Years

	Good friendship group (n = 65)			Poor friendship group (n = 44)			
	M	*SD*	95% CI	*M*	*SD*	95% CI	Sig.
PIQ (Ravens)	109.0	12.9	105.6–112.5	102.4	15.5	98.1–106.7	.02
Receptive language (TROG)	87.2	10.2	84.4–90.0	82.4	12.7	79.1–85.8	.03
Expressive language (BS)	85.4	11.0	82.8–88.0	81.9	9.5	78.7–85.1	.09
Expressive vocabulary (BAS-nv)	92.0	12.7	88.7–95.3	88.8	14.6	84.7–92.8	.22
Single word reading (BAS-wr)	87.4	11.5	84.3–90.5	85.5	12.7	81.6–89.3	.44
Articulation (GF)	98.3	20.0	93.1–103.5	96.6	22.5	90.2–103.0	.69
Expressive syntax (ITPA)	84.2	18.2	79.2–89.3	82.9	20.5	76.9–88.9	.74

found to be associated with friendship quality at 16 years. A question of interest is whether the poor versus good friendship groups differ in social/emotional abilities at 7 years of age. Is this factor an independent predictor of friendship quality or is it a manifestation or consequence of language difficulties? At 7 years we had data available from the Rutter Behavioural Scale (Rutter, 1967). This is a tick-box emotional/behavioral measure, completed by the children's teachers. There are 26 items, with a score of 9 or more considered to represent "extreme" behavior. The good friendship group had a mean score on the Rutter Behavioural Scale at 7 years of 6.8 (SD = 5.5) and the poor friendship group had a mean score of 9.0 (SD = 6.2). This difference between groups was of borderline statistical significance, $F(1, 104)$ = 3.09, p = .05, partial η^2 = .035.

The logistic regression carried out above was repeated controlling for Rutter Behavioural Scale scores at 7 years. Interestingly, the results remained unchanged, with receptive language at 7 years being the only significant predictor of good versus poor friendship in adolescence. Thus, emotional/behavioral difficulties appear to be associated with SLI but they do not appear to play a key role in predicting quality of friendship development in SLI.

Table 6
Factors Entered Into Logistic Regression Analysis Predicting Good and Poor Friendship Outcome in Adolescents With SLI at 16 Years

	Odds ratio	95% CI
PIQ (Ravens) at 7 years	.98	0.94–1.01
Receptive language (TROG) at 7 years	.93*	0.88–0.99

*p < .05.

Does the Pattern of Poorer Language in Poor Friendships Remain Consistent Across Time?

Table 7 presents the profiles of the adolescents with SLI at 11 years of age and 16 years of age (concurrent). These data, taken together with data presented in Table 5 at 7 years of age, suggest marked developmental consistency in the pattern of poor language for the poor friendship SLI group across a 9 year span, from 7 through to 16 years of age. Thus, relatively low language, particularly receptive language, appears to be a continuous characteristic of poor friendship quality in SLI.

Discussion

The present study aimed to investigate the possible implications of language ability for friendship quality in midadolescence. Friendship is complex, and many factors intrinsic and extrinsic to the participants bear on the quality of the relationship. In the light of previous findings, we expected that, among young people in general, a tendency toward problem behaviors would be associated with poorer friendship quality whereas a tendency toward prosocial behavior would be associated with more favorable friendship quality. This was borne out: After considering the effects of nonverbal IQ, it was found that SDQ total difficulties and SDQ prosocial measures did add a significant amount of variance (11%) to the regression model accounting for quality. Rather less attention has been paid in previous research to the role of language in friendship quality. We found that, in the sample as a whole, language and literacy measures accounted for an additional 7% of variance. Language ability is predictive of adolescents' friendship quality even when other behavioral characteristics known to

Table 7
Profiles of Adolescents With SLI at 11 and 14–16 Years With Good and Poor Friendships at 16 years

	Good friendship group (n = 65)			Poor friendship group (n = 44)			
	M	*SD*	95% CI	*M*	*SD*	95% CI	Sig.
PIQ at 11 (WISC-III)	93.2	20.1	87.9–98.5	77.0	25.4	70.5–83.4	.00
Receptive language at 11 (TROG)	90.1	15.1	86.5–93.8	82.7	13.4	78.2–87.2	.01
Expressive language at 11 (CELF-wa)	94.0	17.0	89.7–98.2	86.0	16.4	80.8–91.2	.02
PIQ at 16 (WISC)	86.5	15.7	82.2–90.9	77.7	19.3	72.3–83.1	.01
Receptive language at 16 (CELF-wc)	84.5	14.6	81.6–89.3	78.4	16.5	73.6–83.2	.03
Expressive language at 16 (CELF-rs)	74.3	9.8	71.9–76.9	71.7	10.0	68.7–74.8	.19

be influential in peer relations (problem behavior, prosocial behavior) are controlled for.

Comparing the friendship quality of typically developing 16-year-olds with that of young people of the same age with a history of SLI revealed marked differences. The typically developing participants almost invariably enjoyed good friendship relations, whereas the participants with SLI were more likely to exhibit poorer quality of friendships. Specific language impairment is a risk factor for poorer friendship development.

SLI is an early emerging developmental disorder. Its correlates and consequences are wide ranging and enduring. It is known to be associated with social problems in childhood and adolescence, and it is reasonable to assume that these bear on peer relations and friendship development. At the same time, there are individual differences in the nature and severity of problems experienced. Although we found that the group of participants with SLI as a whole scored less favorably on our measure of friendship quality, they also showed considerable within-group heterogeneity, and many (60%) had good scores. About 40% had poor quality of friendships.

Within the SLI group, we examined the extent to which early (age 7 years) measures of language predicted the likelihood of obtaining a good or poor friendship score at age 16 years. After adjusting for the effect of nonverbal IQ, receptive language at 7 years was identified as a significant predictive factor for friendship outcome at 16 years. As noted previously, receptive language is virtually always accompanied by difficulties in expressive language in SLI. In contrast, expressive difficulties in SLI can occur in the context of good language comprehension skills. Thus, the mix of expressive and receptive problems in some adolescents with SLI is indicative of a more severe impairment and seems to be predictive of friendship quality in adolescence. This relationship held after controlling for measures of emotional and behavioral difficulties at 7 years. It appears that early language and not necessarily early emotional/behavioral difficulties are predictive of quality of friendships development in SLI. This outcome is consistent with other research indicating that early language problems are predictive of persistent social difficulties over the long term (Beitchman et al., 1996; Howlin et al., 2000). Strikingly, for the poor friendship SLI group, poor language remained quite stable across a 9-year span, from 7 through to 16 years of age, particularly as indexed by receptive skills.

Our findings generally parallel other results concerning the social competence of children with SLI (Brinton & Fujiki, 2002). These children perform significantly more poorly than peers with typical skills, but not as poorly as children with a primary socioemotional diagnosis (Cohen et al., 1998). However, individuals with poor linguistic skill and more serious socioemotional difficulties are, by definition, not diagnosed as SLI. In many ways this puts a "ceiling" on the severity of these socioemotional problems measured in children who are classified as having SLI. Why should language ability impact on friendships? In one respect, language itself is neutral with respect to the valence of social relations: Positive or negative affect, or indifference, can all be expressed verbally. Nevertheless, language serves many functions in social interaction, and there is evidence that it is used in distinctive ways in friendships. Friends spend more time talking to each other than do nonfriends, and the nature of friends' interactions entails greater linguistic reciprocity (Asher & Gazelle, 1999; Hartup 1996). Difficulties in respect of language use put individuals at greater risk of poor friendship quality.

One possibility is that poor language skills that include poor receptive ability are associated with poor theory of mind (ToM) development, which in turn impacts on social relationships. The ability to infer others' perspectives and to appreciate possible differences in knowledge or beliefs from one's own

may well bear on the development of skills in social selectivity and on perceived congeniality. However, previous findings on theory of mind in individuals with SLI have been mixed. Several studies have found that children with SLI perform as well as typically developing peers on ToM tasks (Leslie & Frith, 1988; Perner, Frith, Leslie, & Leekam, 1989; Ziatas, Durkin, & Pratt, 1998). On the other hand, Clegg et al. (2005) reported that adult participants with a history of developmental language disorders performed less well on more subtle measures of ToM than both their siblings and IQ matched adults (neither of the latter groups had language disorders). The nature of the relationship between ToM and social adaptation in individuals with SLI remains in need of further investigation. Relatively little attention has been paid, for example, to the ways in which ToM may intersect with emotional knowledge/emotion understanding in SLI. It may be that awareness of others' feelings and reactions is more pertinent to friendship than is awareness of others' cognitions per se, and language impairments may impact on this subtle dimension of interpersonal sensitivity. A second, related but broader possibility is that there is a more general impact of language ability on social cognitive processing. It is certainly plausible that language difficulties that include problems with language understanding would give rise to general difficulties in "tuning in" to others' verbally expressed interests, needs, and expectations. If so, then minor to major discrepancies in understanding or discomfort and breakdowns in communication, could be expected, and these should impact on how secure individuals with SLI feel in social relations as well as on how they are perceived and responded to by other people. Expressive language difficulties in the context of good comprehension are more readily observed by others but perhaps for this reason are more readily accommodated. That is, one can appreciate why an interaction with a person with an expressive deficit is problematic. Empathy with a person with evident difficulties could promote friendship in some cases; puzzlement at a person who does not seem to understand and has general difficulties communicating could instigate avoidance. Future research could usefully address the ways in which different types of language impairment are experienced and evaluated by peer interactants. In practice, expressive and receptive abilities are often correlated, but the present findings suggest that those with impairments that include receptive skills are at greatest risk of losing out in the dynamics of friendship formation and maintenance. Finally, it is important to note that there may be a number of factors that may underlie both the difficulty with language and quality of friendships. It is possible that other factors (e.g., poor social-cognitive or ToM skills or information processing capacity) may underlie both the difficulty with language and the quality of friendships observed in some young people with SLI. Future research examining such possibilities would throw light into our understanding of potential underlying causes of poor language and poor social skills in SLI.

Together, the present findings underscore not only the fact that language abilities bear on friendship quality, seemingly with long-term implications, but also that early confirmation of language impairment may serve as an indicator of a child's at-risk status in this respect. In terms of intervention services for children with language impairment, there is a continued need to galvanize early language remediation in schools to include receptive as well as expressive skills. The findings also support previous arguments that concentration on language skills and academic support is not sufficient (Fujiki et al., 1999; Howlin et al., 2000). There is a need for schools and speech–language treatment services to provide social skills training (e.g., modeled on strategies developed by Shure, 1996, 2000) to support the development of social self-esteem. It would be desirable to consider ways to facilitate friendship quality (Asher & Gazelle, 1999; Brinton & Fujiki, 1999; Cohen et al., 1998; Conti-Ramsden & Botting, 2004).

It is important to bear in mind that language problems are not a guarantee of social problems (Brinton & Fujiki, 2002). Indeed, although social difficulties may distinguish children with SLI from their typical peers, they are not usually in the clinical range (Botting & Conti-Ramsden, 2000; Redmond & Rice, 1998). Children with SLI are heterogeneous in terms of their language characteristics, and this holds true for their social abilities, too: Some children with SLI achieve high levels of peer popularity (Brinton & Fujiki, 2002; Fujiki et al., 1999). In the present large sample, a very positive finding is that some 60% of adolescents with SLI had reported friendship quality in the good range. This provides parents and professionals with the reassuring news that successful peer relations are indeed possible. Although better language ability contributes part of the explanation of these favorable outcomes, it is clear that other factors are involved and possible that strengths in one or more of these can mitigate any effects due to impaired language. Prosocial behavior, for example, can compensate for other characteristics (such as chronic illness) that place a child at a social disadvantage (Alderfer, Wiebe, & Hartmann, 2001). Fujiki et al. (1999) found that some children with SLI enjoy high

levels of acceptance and popularity—and these children tended to be able to perform well in cooperative tasks.

There is a pressing need to develop an integrated account of the myriad factors influencing friendship and the consequences of individual differences (Hartup, 2005). To this end, the patterns among children with exceptional development are of particular interest. They shed light on both typical and atypical processes and illuminate the contributions of developing capacities, such as language, that might otherwise be overlooked. Longitudinal studies of children with developmental disorders help address the complex issues of the directionality of effects and the durability of differences. Research into the friendship quality of this population has direct implications for the provision of services. Finally, the fact that many young people with language impairments do achieve successful friendships testifies to the priority attached to this specific social bond even in the face of potent impediments.

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