

RESEARCH REPORT

Exploring concepts of friendship formation in children with language disorder using a qualitative framework analysis

Lenka Janik Blaskova  | Jenny L. Gibson 

Faculty of Education, Centre for Research on Play in Education, Development and Learning (PEDAL), University of Cambridge, Cambridge, UK

Correspondence

Lenka Janik Blaskova, School of Education, University of Exeter, Exeter, UK.

Email: l.janik-blaskova@exeter.ac.uk

Funding information

LEGO Foundation; Cambridge Trust

Abstract

Purpose: Sociometric studies and adult reports have established that children with Language Disorder (LD) are at risk of peer relationship difficulties. However, we have limited knowledge of how children with LD understand friendship, whom they deem as a good or bad friend, and what role their friendship concepts play in their relationships with peers. This exploratory study aimed to conduct a qualitative investigation into the friendship concepts that children with LD hold and to explore their strategies for making friends.

Methods: We conducted multiple, art-informed interviews on the topic of friendship with 14 children with LD at the age of 6–8 years. Participating children were based in the United Kingdom and Republic of Ireland. They attended enhanced provision, specific speech and language classes and mainstream classrooms. We used framework analysis to map children's responses to Selman's (1979) developmental model of interpersonal understanding, which espouses a theory of children's social development within the context of peer relationships.

Results: The understanding of friendship formation in children with LD varied from physical presence to mutual support and sharing. Children's ideas about a good/bad friend represented the lowest developmental stage. Participants from the mainstream classroom demonstrated the highest stages of interpersonal understanding. Children with LD did not mention their language abilities as a barrier to making friends.

Conclusion: There are limited studies exploring friendship directly from children with LD, and this study provides insights into this gap, by utilising art-informed interviews. Children's immature understanding of a good/bad friend points towards a potential susceptibility to false friends, which we suggest needs further empirical validation. We also found that children with LD did not pay attention to their language difficulties when making friends, which raises questions about the ways diagnoses are shared with children.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.

KEYWORDS

friendships, interviews, language disorder, peer relationships

WHAT THIS PAPER ADDS*What is already known on the subject*

- Children with Language Disorder (LD) are at risk of peer relationship difficulties. Studies to date are based on sociometrics and adult reports. Only a few studies employ participatory approaches to research with children, directly engaging children with LD when exploring their friendships

What this paper adds

- This paper directly asks children with LD about their understanding of friendship and strategies for making friends.
- Physical proximity and play are important to children's understanding of friendship especially in recognising good and bad friends. This indicates potential reasons for children with LD being susceptible to false friends
- Additionally, children with LD do not perceive language and communication as a barrier to making friends.

What are the potential or actual clinical implications of this work?

- Concepts around friendship and good/bad friends should be routinely assessed and targeted (if appropriate) in interventions. The study highlights the need to continue discussing practices around sharing diagnoses with children with LD.

INTRODUCTION

Friendships and peer relationships foster social and emotional development in children by providing unique, power-balanced and interactive contexts, which children can freely join or leave (Bukowski et al., 1998; Rubin et al., 2011). Typically, children begin interacting with peers in their early years when their interactions focus around play (Dunn, 2004; Gottman, 1983). However, their understanding of friendship and distinguishing between good or bad friends substantially develops throughout childhood (Afshordi, 2019; Furman & Bierman, 1983; Liberman & Shaw, 2019). Friendship theories describe factors, including the characteristics of a friend, contexts and expectations, that contribute to the quality of the peer relationship (e.g., Bigelow et al., 1996; Hartup, 1996). To successfully navigate the complex nature of friendships, children need to develop robust social and emotional capacities.

Primary difficulties in language development can place children with Language Disorder (LD) at a disadvantage

in peer interactions (e.g., Redmond, 2011; van den Bedem et al., 2018). Affecting 9.92% of children, LD includes a broad group of children, including those with an unknown cause (Developmental Language Disorder) for their difficulties as well as those associated with another condition such as autism, cerebral palsy or intellectual disability (Frazier Norbury et al., 2016). Co-occurring emotional, social and behavioural difficulties make diagnosing LD difficult and may prevent affected children from receiving language targeted interventions (Cohen et al., 1998; Reilly et al., 2014). Missed LD diagnosis is a risk to literacy, education and social adjustment (Blanton & Dagenais, 2007; Bryan et al., 2015; Lindsay et al., 2007; Winstanley et al., 2020).

Peer relationship difficulties often begin in childhood. Compared to their typically developing (TD) peers, children with LD have fewer friends and lower quality friendships (Durkin & Ramsden, 2007; Fujiki et al., 1999), report increased bullying rates (Conti-Ramsden & Botting, 2004; Forrest et al., 2021; McCormack et al., 2011), and may

be vulnerable to abuse and exploitation (Brownlie et al., 2007). Task-based studies and self-reports investigating why children with LD are less likely to succeed in establishing friendships indicate empathy and social cognition as mediators between poor language and poor peer relationships (e.g., Andres-Roqueta et al., 2016; van den Bedem et al., 2019). Although increased language difficulties are associated with lower popularity (Laws et al., 2012), language is not the only predictor of poor peer relationships in children with LD (Andres-Roqueta et al., 2016). This suggests that social understanding may be linked to friendship concepts in children with LD.

The nuances in understanding others and the roles that friends play in children's lives manifest in behaviours children display in peer interactions. Although they join peer groups similarly to their TD peers, children with LD take extra time to approach peers and in an 'onlooker' play—watching and commenting on peer play without joining in (Liiva & Cleave, 2005). Even though children with LD have a risk of peer difficulties, they also display prosocial behaviours and motivation (Fujiki et al., 2001; van den Bedem et al., 2019). It is therefore important to explore their own perspectives on friendships; Who do children with LD consider as a friend? What motivates them to make friends? We have limited understanding of how children with LD conceptualise friendship, as many studies to date have not consulted children directly.

A recent systematised literature review of peer relationships studies of children with LD identified just four publications reporting findings from research directly engaging children via interviews and art-informed methods (Janik Blaskova & Gibson, 2021). Though peer relationships were not the key goal of their explorations, all reports confirmed peers as crucial agents in the daily experiences of children with LD (Lyons & Roulstone, 2018; Markham et al., 2009; Merrick & Roulstone, 2011; Roulstone & Lindsay, 2012). These studies did not explore how children with LD conceptualise friendship. Understanding their concepts of friendship will lead us closer to fully grasping the mechanisms underlying their difficulties in peer relationships and friendships.

Friendship formation framework

A number theoretical and empirical models of friendships outline benchmarks for determining social-cognitive maturity in the context of peer relationships. Bigelow et al. (1996) propose a behavioural-based model, highlighting the importance of social rules and applying them within different relationships, including friendships. Hartup's (1996) model involves mutual affection, and friendship develops with the ability to differentiate between surface interaction and deeper reciprocity in relationships. Although Hartup (1996) and Bigelow et al. (1996) include

important aspects of relationships (e.g., proximity, similarity), Selman's (1977, 1980) Social Understanding model has been selected as the key framework for the current study.

Selman (1980) defines friendship from a developmental perspective, describing five developmental stages in children's social-cognitive understanding of peers as friends. Initially viewing peers as momentary friends in play (Stage 0), children progress to seeing peers as 'helpers' (Stage 1) and eventually engage in reciprocal assistance (Stage 2). In the final two stages, children form closer bonds and share secrets (Stage 3), ultimately perceiving friendships as long-lasting relationships built on trust and support, even when physically apart (Stage 4, Selman, 1980). Selman aligned the developmental stages of friendship with the developmental milestones in perspective taking, making his model the most finely articulated framework for the social-cognitive understanding of friendships (Parker et al., 2015). Thus, we selected Selman's framework and friendship definitions in this study. Selman's (1979) social-cognitive (perspective-taking) map of friendship and friendship formation is summarised in Table 1.

Although Selman's model was developed decades ago, a more recent study with TD children confirmed the originally outlined stages 0 and 1 (Marcone et al., 2015). In this study 7–8-year-olds ($n = 49$) were significantly better in defining friendship as one-way assistance compared to children at the age of 6 and younger ($n = 50$), who mostly perceived friendship as a momentary physical interaction (Marcone et al., 2015). Only two of the older children revealed stage 2 answers (Marcone et al., 2015). Marcone et al. (2015) included only children below the age of 9, which corresponds with the age group in our study.

Given our emphasis on children with LD, we examined the applicability of Selman's model as observed in studies involving non-TD children. In a comparative study, Kravetz et al. (1999) revealed that children experiencing learning difficulties showed significantly lower performance to age-matched peers $t(40) = 3.32, p < 0.01$ and differences in their fluctuation across stages compared to peers. Similarly, earlier clinical studies suggest that social understanding does not develop globally across all areas, but the stages of children's conceptions vary, for example, children can reach higher developmental stage in understanding the concept of trust between friends while holding lower-stage concepts about jealousy in friendship (Selman & Demorest, 1984; Selman et al., 1977).

Study aims

This study aims to shed light on how children with LD understand friendships. We chose to focus on *friendship formation* to gain detailed insights into what children with LD value about friends, how they make friends and who they consider to be a good or bad friend. We added 'bad

TABLE 1 Stages in developing friendship and friendship formation concepts, based on Selman (1979).

Stages	Age	Friendship domain	Perspective-taking	Motives Why?	Mechanisms How?	Ideal friend
0	3–7 years	Momentary physical playmate	Undifferentiated/egocentric	Interact in play	Proximity and propinquity	Closeness of physical appearance and functional activity
1	4–9 years	One-way assistance	Subjective/differentiated	Friends do overt activities that the self wants done	Tuning into the likes/dislikes/preferred activities of a peer	Knows what self likes doing and will do it with the self
2	6–12 years	Fairweather cooperation	Reciprocal/self-reflective	Needs company and to be liked, social interaction	Coordinate context specific likes & dislikes	Reveals inner or true feelings, does not present a fake image
3	9–15 years	Intimate-mutual sharing	Mutual/third person	General mutual support upheld over a period of time	Develops through shared experiences over time	Complementary personality, 'good person' to rub off
4	12 to adulthood	Autonomous interdependence	In-depth/societal	Sense of personal identity through interpersonal relations	Builds up through series of stages, parallel with ontogenetic development of global stages	Relative concept, someone with a personality compatible with the self, empathic, sensitive

friend' to Selman's original *friendship formation* concepts of motivation, mechanisms, ideal friend to use contrast and support children's reflection on abstract notions.

The study addresses the following research questions:

1. What concepts of friendship formation do children with LD hold?
2. What do friendship formation concepts of children with LD reveal about their levels of understanding of friendship motivation, mechanisms for making friends and what constitutes a good and a bad friend?
3. What strategies for making friends do children with LD follow and propose?

Answers to these questions will enhance our understanding of how children with LD conceptualise friendship and identify potential gaps to target in therapeutic setting to prevent potential difficulties around peer relationships. This study further informs about the possible utility of Selman's (1979) interpersonal understanding manual in therapeutic settings and peer studies involving children with LD.

METHOD

The current study draws on data from a larger research project concerning peer relationships and well-being of children with LD. We mapped studies and methods involving children with LD about their friendships (Janik Blaskova & Gibson, 2021) and engaged peers of children with LD in interviews about their friendships (Janik Blaskova & Gibson, 2023). The larger project collected data through multiple, semi-structured and art-informed interviews about the well-being and friendships of children with LD. To ensure shorter and child-friendly interactions, we met with the children several times, enabling us to pause interviews if attention waned. This report presents findings from multiple friendship interviews conducted with children with LD.

We adopted a qualitative methodology to facilitate an in-depth exploration of friendship formation concepts in children with LD and address gaps in existing evidence, which has limited inclusion of children with LD (Janik Blaskova & Gibson, 2021). Exploratory approach further allowed us to adapt Selman's framework to the unique context of children with LD, uncovering the complexities around their friendships.

Ethics

The study followed the ethical guidelines of the British Education Research Association (BERA, 2018). The University of Cambridge and the Health Research Author-

ity in the United Kingdom approved the study. An informed parental consent was obtained prior to meeting participating children. Before one-to-one meetings, we sought children's informed assent and described the study goals in a child-friendly format and used the symbols of Communicate-in-Print (Widgit software, 2018) to support written text. We adjusted our interactions as described in the Data Collection and Interviews section. We anonymised the collected data and used pseudonyms to prevent identification of participants.

Recruitment procedures

We used a purposive sample strategy to recruit children between the ages of 6–8 years with LD and with English as the primary language of education. Study information was shared with parents, educators, speech and language therapists and third sector organisations in the United Kingdom and Republic of Ireland. We told parents and teachers that we were recruiting participants whose primary difficulty was in language development. Inclusion was conditional upon scoring below 55 on the Global communication composite score (Frazier Norbury et al., 2016); OR scoring 1 SD below the mean on the sentence recall subtest of the Clinical Evaluation of Language Fundamentals, 4th Edition (Semel et al., 2006) AND sentence comprehension subtest of the Assessment of Comprehension and Expression 6–11 (Adams et al., 2001). Boys, girls and children from different educational settings were included. Children with specific ethnic, socio-economic or any other backgrounds were not specifically targeted.

Out of the initial pool of 17 children, our final sample included 14 participants and the remaining three were excluded. One child could not join the study because their primary language of education was not English. Two other children had other primary developmental difficulties that prevented them from joining the study. Table 2 presents the background information of participating children, using pseudonyms.

Our participant sample includes children who have a negative score on the Social Interaction Deviance Composite, suggesting these children had disproportionate difficulties with pragmatic language, and we later learned that one child was diagnosed with autism during our data collection. We decided to retain these children in the study as pragmatic language difficulties fall under the broad umbrella of language disorder.

Our intention was to reflect the typical diversity seen in classes or groups of children with language disorders. We acknowledge our lack of information about possible co-occurring conditions, which is why we have avoided using terms like 'specific language impairment' or 'developmental language disorder' to describe our participants.

TABLE 2 Participants' characteristics.

Child ID	Gender	Age in years	Yrs since arrival to the UK/ROI	Languages in order most spoken at home	Ravens standardised	CCC-2 GCC ^a scaled score	CCC-2 SIDC ^b scaled score	CELF-4 ^c sentence recall standardised	School settings
Mark	M	8.42	8	Hungarian, English	125	35	17	1	EP ^d
Wade	M	7.86		English	125	46	9	11	EP ^d
Henry	M	7.23		English	95	27	15	1	EP ^d
Kevin	M	8.9		English, Polish	80	43	17	1	MC ^e
Mary	F	7.97	6	Polish, English	115	48	9	4	SSLD ^f
Alfie	M	7.77		English, Krio	105	42	13	1	SSLD ^f
Zara	F	6.99		English, Tagalog	125	52	17	4	SSLD ^f
Larry	M	7.47		English	80	45	-7	4	SSLD ^f
Andy	M	7.15		English, Bengali	90	54	13	2	SSLD ^f
Laura	F	8		English	70	29	0	1	MC ^e
Jade	F	8.78		English	<60	30	18	1	MC ^e
Mia	F	7.94		English	95	29	13	6	MC ^e
Alice	F	8.75		English	75	42	11	1	MC ^e
Lucy	F	7.17		English	60	36	-1	7	MC ^e

^aGeneral communication composite.

^bSocial interaction deviance composite.

^cClinical evaluation of language fundamentals—Fourth edition.

^dEnhanced provision.

^eMainstream class.

^fSpecific speech and language disorder class.

Abbreviations: CCC-2, Children's Communication Checklist-2; CELF, Clinical Evaluation of Language Fundamentals; EP, Enhanced Provision; GCC, General Communication Composite; MC, Mainstream Class; ROI, Republic of Ireland; SIDC, Social Interaction Deviance Composite; SSLD, Specific Speech and Language Disorder Class.

Participating children attended classrooms with different levels of language and communication support: Enhanced Provision, Specific Speech and Language Disorder Class and Mainstream settings. The Enhanced Provision offers a small-sized class, accommodating a maximum of eight children, with language support, therapy in the morning, and mainstream class activities in the afternoon. Mark, Wade and Henry were attending this kind of classroom. The Specific Speech and Language Disorder Class is also small-sized, allowing a maximum of 8 children, and provides full-time language support and therapy for a duration of 2 years. Additionally, children in this classroom participate in shared assemblies and playtime with children from an adjacent primary school. Mary, Alfie, Zara, Larry and Andy were enrolled in the Specific Speech and Language Disorder Class. In the Mainstream setting, children attend a standard class and receive individual pull-out speech-language therapy as needed. Children in this mainstream class include Kevin, Laura, Jade, Mia, Alice and Lucy.

In the United Kingdom, educational placements are determined by children's language proficiency. Children with LD in mainstream classrooms should have higher language skills than those in the Enhanced Provision or Specific Speech and Language Disorder Classes.

Interviews

Data collection took place in children's schools, except for one participant, who participated at home. At each meeting we reminded children they could take a break and/or withdraw from the study at any stage. Additionally, we asked teachers about children's immediate well-being before interviews and children's behaviours and reactions were observed. A couple of meetings were stopped because a child expressed feeling tired or appeared to be losing attention. Most of the time, children enjoyed the activities, stayed engaged and looked forward to our next meeting. Art-informed activities were flexibly combined with interviewing.

We conducted semi-structured and art-informed interviews to collect 'friendship concepts data' in 1–4 individual meetings with children, including final interviews to validate preliminary findings. Meetings lasted between 10–30 min, depending on children's attention span and individual needs. The initial plan for the wider study clearly separated interview schedules about friendship concepts, friendship experiences and school well-being into distinct sessions. In reality, however, schedules were used flexible and according to children's mindset, attention and interests during each interview. This accommodating

approach facilitated children's engagement and supported their communication needs.

Recognising multiple ways for meaning making, a series of interviews were conducted using a multimodal approach. We drew on Kress and van Leeuwen (2006), who emphasise visual representations alongside language in the communication and interpretation of meaning. Unlike in purely traditional interviews that heavily rely on language, we included art as one of the modalities to facilitate children's responses. However, we recognised that reluctance to draw, scribbling, writing and, inconsistencies between children's drawings and verbal responses could create risks to our data interpretation (Scherer, 2016). We addressed these potential threats by demonstrating and navigating children through art activities, exploring their work through questions, and providing different visual media options in case they preferred using play-dough, stickers, or art and craft items. McLaughlin and Coleman-Fountain (2018) used some of these strategies with young people with disabilities impacting their speech, and other physical and learning capacities, and successfully elicited participants' voice in interpreting their social lives.

Visualisation and art encouraged children to reflect upon their friendships and express their ideas. Children could use crayons, stickers, play dough, coloured papers and various art and craft items freely. We started with a warmup activity, inviting children to complete a very simple evaluation of 'How I feel about my friends' in school. We used smiley faces and an empty circle when adapting the 'How I feel about my talking activity' used with children with speech, language and communication needs (McLeod, 2018). Next, children drew the 'Circle of Friends' to map their peer relationships in the classroom. Finally, children drew or created their classroom friend(s). They were asked about their artwork, for example, *Who is in the drawing? Do you like playing with them?* (McLeod, 2018), and a series of friendship quality questions (Dunn et al., 2002). While the friendship quality questions and description of art focused mainly on children's friendship experiences, some of their answers and particularly their artwork revealed the perceptions they hold about friendship formation.

The *friendship formation* interview generated the majority of the friendship conceptions data. The *friendship formation* interview was followed without the original friend's dilemma that Selman (1979) proposed. The dilemma would place additional cognitive load for children to understand a hypothetical story without supporting their language needs. Therefore, questions were changed to personal contexts, directly enquiring about the participant's friends. Selman (1980) recommends such adjustments to gain good quality insights from children,

TABLE 3 Friendship formation interview (Selman, 1979) with added probes.

Question	Supplementary probes
Why are friends important?	Is there anything else?
Why does a person need a good friend?	
Is it easy or hard to make a good friend? Why?	Why is it sometimes ___ (the opposite)? ¹ How do you do it? How do you make friends? ² How else can children make friends?
What kind of person makes a good friend?	What else makes them a good friend? Could you tell me more?
What kind of person would you NOT want as a friend?	Why is that important? What else would you like this person to be like or do?

changing the hypothetical, general or personal contexts of questions as needed. Therefore, the interview started with personal context and used visual methods modality described earlier to ease children into talking about their own friends and experiences. Asking about their artwork supported children in expressing their abstract concepts of friendships and moving to more general context.

Children could continue using art during the traditional interview modality—questions and answers. *Friendship formation* was in focus, reducing interview questions to four main ones (Table 3). This allowed for extra time to ask supplementary probes and gave children time to express themselves according to their abilities.

Selman's original questions were complemented with probes¹⁻² about 'Making friends strategies' to collect data for answering research question 3. These interview questions were reverted to in subsequent meetings with children, who did not answer them at the first meeting.

Reflective notes

After each meeting with participating children, the researcher took notes capturing their reflections about children's answers and artwork. When analysing the friendship concepts data, these notes helped point at specific social understanding stages that individual children hold, for example abstract thinking, physical proximity.

Analytical procedures

A three-level analytical process involved examining 54 documents including transcribed interviews, artwork, and reflective notes. At first, framework analysis (FA) helped organise data into generated themes. FA is systematic

approach to qualitative data analysis performed in six steps: data familiarisation, identifying a thematic framework, indexing, charting, data mapping and interpretation (Iliffe et al., 2015; Parkinson et al., 2016). FA allows for a mix of top-down and bottom-up approaches, which allowed for identifying themes from existing literature (Selman's *friendship formation* concepts) as well as directly from data (strategies for making friends, artwork). After indexing the data with codes, the charting step resulted in a summary matrix that organised data categories in rows and children's data in columns.

Selman's interpersonal understanding manual

At this stage, the second level of analysis was conducted to reveal how children's *friendship formation* concepts corresponded to their levels of social understanding. More specifically, each response within each Selman's *friendship formation* category (motives, mechanisms, good friend, bad friend characteristics) was assigned a single developmental stage score 0–4. The researcher followed the detailed guidelines specified in the Interpersonal Understanding Assessment, friendship domain manual (Selman, 1979). The main principle lies in children differentiating between the stages of momentary physical interactions (Stage 0), one-way assistance (Stage 1), fairweather cooperation (Stage 2), intimate mutual sharing (Stage 3) and autonomous independence (Stage 4) (Selman, 1979).

Stages give qualitative information about the developmental level of a specific *friendship formation* concept—category. Mixed stages are possible and indicate that children may reach different developmental levels of their perspective-taking with a specific aspect of *friendship formation*—motives, mechanisms, ideal/bad friend.

Finally, interpreting data was the third level of analysis that considered developmental stages within and across the responses of individual children. The researcher

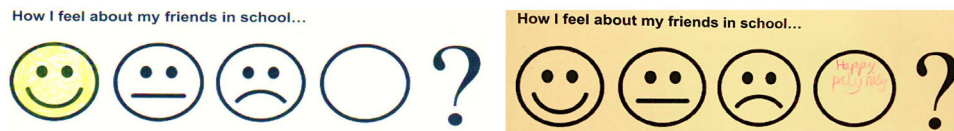


FIGURE 1 Responses of Zara and Mia to an interview warmup activity. [Colour figure can be viewed at wileyonlinelibrary.com]

examined the variability of Selman's (1979) *friendship formation* issues—motives, mechanisms, ideal and bad friends—to understand children's ideas about making friends in detail. The researcher reflected about the missing or unclear answers and interpreted them in relation to the stages assigned to other aspects of friendship perceptions in an individual child. Furthermore, missing or unclear answers were considered in relation to specific concepts within which answers were missing, and implications about the nature of the concept were made. Additionally, children's age and school settings were taken into account when interpreting the results.

Trustworthiness and credibility

This qualitative enquiry strived for rigor and trustworthiness. Therefore, method triangulation (e.g., artwork, friendship formation interview, friendship quality interviews), multiple data collection and member checking were used to enhance the credibility of data and findings (Patton, 1999). Children's artwork complemented interviews about the perceptions they have about friendships and served as a prompt to question and validate children's representations of their friendships and friends. Multiple meetings helped build rapport with children and give them opportunities to express their friendship perceptions on different occasions. If needed, children were encouraged to elaborate on previously presented examples that were unclear and thus confirmed the interpretations or clarified discrepancies.

RESULTS

We started the first friendship interview with a warmup activity, indicating how children feel about their friends in schools. All participating children indicated a happy face in different ways. Many would colour in the happy face (Figure 1 left) and Mia wrote their feelings "Happy, paly nicy ((play nicely))" in the empty circle (Figure 1 right).

Next, drawing the 'Circle of Friends' mapped children's peer relationships in classroom.

In Figure 2, Children were then invited to draw their own circle of friends, revealing the closeness to individual peers in their class. Their drawings and responses indi-



FIGURE 2 Circle of Friends by Wade. [Colour figure can be viewed at wileyonlinelibrary.com]

cated how they view their peers as friends. In the next art-informed activity, children drew or created their classroom friend(s) and were probed about friend drawings and artwork to elicit their perceptions around friendships. For example, they were asked about friends holding hands or the symbolic representations (crosses, hearts) to reveal more descriptive responses. Friendship formation interview followed, with the option for children to continue working on their art work.

We analysed children's responses at three levels. First, we present findings from the framework analysis of friendship formation concepts. The categories of *the purpose of friendship*, *good and bad friend descriptions* are complemented with interview extracts. Next, children's *friendship formation* perceptions are evaluated against Selman's stages of social understanding development. Finally, the strategies for and experiences of making friends reveal how (*mechanisms*) children with LD go about making friends.

The purpose of friendship

Participating children with LD differ in their understanding of the purpose of friendship. Two children (Mary and Zara) gave 'don't know' or unclear answers to *Why are friends important?* and *Why does a person need a good*

friend? On the other hand, some children gave multiple answers. Mark and Henry state that they need friends to have someone to play with.

Researcher: *Why do you need a friend?*

Mark: *Pla-aay*

Researcher: *To play*

Mark: *((uu)) ((intonates as if 'mm,' confirming))*

Four participating children (Alfie, Larry, Andy and Jade) perceive friendship as a way to team up and feel protected from others.

Andy: *Friendship is like you are, you have a friend and you go over to not your friends. Yeah.*

R: *Mhm. And why are friends important?*

Andy: *Because they be more friends, they safe.*

R: *They are safe, I see. And, so, is that why a person needs a good friend?*

Andy: *Yep.*

Alice sees friends as a gateway to make more friends.

R: *... why do you need a friend?*

Alice: *To make friends*

R: *Hmm, to make more friends? Or*

Alice: *((nodding))*

R: *Okay*

Alice: *To make more friends.*

Wade, Kevin, Laura, Mia and Lucy understand friendship as a means of having a playmate and being happy. Lucy's answers demonstrate friends as providing company and happiness.

R: *Can you tell me why friends are important? What do you think?*

Lucy: *Detause ((because)) if you didn't have a friend, that means you wouldn't, you would you would always be alone, and you wouldn't and you dust ((just)) and you would dust ((just)) be really miserable every day.*

R: *And is there anything else, why a person needs a friend?*

Lucy: *Detause ((because)) detause ((because)) then he would make and then he will be happy.*

Kevin's answers indicate recognising the perspectives and feelings of others.

Kevin: *Being nice to each other, be kind and play with other people, don't annoy other people, play with them*

R: *Mhmm*

Kevin: *respond-ing if they want to play.*

Kevin demonstrates thinking beyond the concept of self by showing awareness of mutual support in interactions. Mia describes friendship using hands.

Mia: *Friendship is like, when you meet a friend, like, and friendspit is like when you DON'T want a friend doing (your s) by himself, but if you me- if you friendship is like you, is like a hand to hand ((joins hands and intertwines fingers)) but like friends together*

R: *Like fingers intertwined together*

Mia: *like ff like ffriends holding hands*

R: *mhm*

Mia: *together and gether and never letting go hands*

R: *mhm*

Mia: *maybe, like a, inside your, inside my head I feel like me or or my BFFs will ha- holding hands*

R: *like that*

Mia: *and we never let go of each other 'cause er normally when I fight I normally let go of my friend's hands so I can have my own time [[lets go of hands]]*

R: *okay*

Mia: *then, when I come back I like [[putting hands together again]] put my hands back together*

R: *that's the friendship, okay. Thank you!*

Mia's understanding of friendship taps on the appreciation that friends do not need to be physically present to remain in the friendship. However, most participating children see friendship as a temporary play activity, companionship, and many cannot fully express their friendship perceptions, which they may or may not have formed.

Good and bad friends

Before asking about good and bad friends characteristics, children were prompted to draw their best friends or friendship. Their work varied from very physical representations of their actual friend, physical proximity and holding hands to abstract symbolism of friendships. Examples of the artwork are displayed in Figure 3.

When prompted, children described their work in a more or less elaborative way. Mia expressed their perceptions of friendship in an abstract way. They expressed friendship with cross and heart symbols, and intertwined their hands when describing their work. Mia demonstrated that friends can get distant or fall out by untying their hands. This representation tapped into the relativistic concepts of friendship.



FIGURE 3 Best friends and friendship by Kevin, Andy and Mia (respectively). [Colour figure can be viewed at wileyonlinelibrary.com]

Turning to the interview data, Mark, Mary, Zara, Jade and Alice had difficulties responding to interview questions about good friend characteristics. They answered either “I don’t know” or started listing their classmates’ names. It seemed easier to describe their actual friends.

Across children with LD, who answered the question what a good friend is, the descriptions included someone who is kind and supportive.

R: Who is a good friend?

Wade: Oh yeah, I, when he is kind

R: Mhmmm

Wade: and helps you.

Larry highlights a good friend’s physical qualities as a means to achieve their goals by teaming up and being better at skills (e.g., running).

R: Can you tell me what makes a good friend?

Larry: Helping.

R: And what, what else? Is there anything else?

Larry: Teaming up.

R: Teaming up? Why would you team up?

Larry: ‘Cause it will be a lot faster

R: Mhm

Larry: ‘Cause he is smart.

R: And can you tell me a story when you teamed up with somebody?

Larry: Mmm, we actually are very good, we are very fast.

R: Like when for example?

Larry: So we’re fast like even before.

R: Mhmm.

Larry: Not even before my ot- my other friends can’t catch up to me and Andy.

Unlike with good friends, almost all children with LD were able to describe a bad friend and referred to their own experiences with peers. A majority of their answers referred to physical behaviour.

R: Mhmm. And, what kind of person would you NOT want as a good friend? As a friend?

Jade: Mmm. Jack. Because, yesterday, at lunchtime, wat- I’ve got to show you

R: Okay

Jade: ((Unties shoes))

R: He took his shoes off?

Jade: I di- he did it to me. He took my shoe off put they’re in, a hot tub, hot everywhere

R: Why did he do that?

Jade: Because I was laughing at somebody else and then he thrown my shoe

R: oh my goodness

Jade: but, kindly, Alison year four, he, kindly got my shoe

R: Where did it end up?

Jade: It end up on the Trim trail

R: What kind of person you don’t want to have as a friend?

Henry: Ehm, Ryan and Tayler. Ehm, they fight

R: Oh, they fight, ok.

Henry: And I tell them I don’t want to play.

R: Mhmm. And what happened then

Henry: They are, they copy me, I talk

R: They copy you as you talk?

Henry: Yes

Other children with LD shared stories of peers saying rude words and bullying.

R: What kind of person you don’t want as a friend?

Wade: A person who is a bully.

R: Who is a bully, oh, how do you know a bully?

Wade: Cause he isn’t kind to you and he says nasty word.

R: Can you tell me a story? Have you seen a bully?

Wade: O-skar, he push me over. And in a school, they push me over.

R: Oh and who was this, who pushed you over?

Wade: A bully

R: *Can you tell me more? Is there anything else about a bully?*

Wade: ... *when he bully he do it more than once.*

Some of the bad friend behaviours are linked with not listening to the teacher or not behaving in school.

R: *And what kind of friends you would NOT want as a friend? Laura:* ...*if they be, if be horrible they might get told off by the teacher. If they be caught swearing.*

R: *Oh, I see.*

Laura: *'Cause we're not allowed to swear in this school.*

Andy makes an interesting distinction between a good and bad friend at a physical level.

Andy: *IF YOU want to be a bad boy, get a bad boy haircut*

R: *Is that so?*

Andy: *Yeah*

R: *Do you have a bad boy haircut? How does a bad boy haircut look like?*

Andy: *Is like you have like a colour, like blond and then have like goes up and is so strange.*

R: *I see and it's a bad boy haircut, okay.*

Andy: *I saw that in a picture, in google.*

Andy's response suggests that it is possible to decide whether you want to be a good or a bad friend and your looks communicate your intentions. Mia reveals their awareness of reciprocity and interpersonal orientation in their answer.

R: *What kind of person you would NOT want as a friend?*

Mia: *I wouldn't have like someone who, if I was new, and I saw loads of people being mean to each other, and being mean to different people, and being mean to the teacher*

R: *yeah*

Mia: *I wouldn't be best friends if I, if they show me their respect first*

R: *okay*

Mia: *and they, they said "I don't wanna be her best friend. I'm gonna show her my baddest respect" than she won't be my friend and then I'll make myself friend, make loads of new friends.*

Children demonstrated mixed levels of interpersonal understanding in the context of friendship. In the next step of our analysis, we evaluated their answers against Selman's developmental levels.

Developmental levels of friendship formation concepts

According to Selman's (1979) *Friendship formation* framework, the participating 6–8-year-old children were expected to fall within the 0–2 range of developmental stages. Table 4 reports all stages for each participating child. The numbers under the *Friendship formation* concepts headings represent coded evidence that a child is forming a concept at that particular developmental stage. Based on the responses provided by each child, there are varying stage numbers under each concept (e.g., Mark gave 2 responses coded as stage "0" for Motives, while Wade gave 2 responses at stage 2). Blank values represent no answer. Table includes columns of the highest achieved stage and stage range.

Overall, responses show individual differences among children and across *friendship formation* concepts.

Only Mark and Zara give Stage 0 answers across all their responses. They both do not give evidence to some concepts. Mark could not describe a friend and Zara could not reveal their motives behind making friends. Their stage 0 answers correspond with the age group of 3–7 years and children's alignment with stage 0 across answers indicates that they seem to dwell too long on the 'momentarily physical activity' as a friendship concept.

Mark was 8.5 years old, and in their case, the almost nonverbal communication can be speculatively considered as the reason for perceiving friendships as a means to play. Being unable to connect with peers verbally, Mark might struggle with getting peers to perform specific activities that he wants to get done (stage 1 Friendship as a one-way assistance) or equally, they may not be able to communicate their perceptions.

As the next stage is estimated to develop between 4–9 years of age, some of Mark and Zara responses would be expected to move towards recognising the psychological awareness of motives, feelings and thoughts in the context of friendship. All other children responded at least once within Stage 1.

Ideal/good friend and bad friend concepts reveal the biggest differences among children. Two participants did not give any description while two others revealed higher stages of social understanding than the rest of the children.

Only Mia reveals the highest level of *Friendship formation* concepts among participants. Mia reaches stage 3 for ideal/good friend and, interestingly, shows a sophisticated response to bad friend: *"...being mean to each other, and being mean to different people, and being mean to the teacher [...] I wouldn't be best friends if I, if they show me their respect first."* Mia has two very close friends with whom they form a small peer group. Being exposed to



TABLE 4 Friendship formation stages.

Child ID	Gender	Age in years	# of data source ^a	Highest achieved stage ^b	Range of stages	Friendship formation concepts			
						Motives	Mechanisms	Ideal/good friend	Bad friend
Mark	M	8.42	2	0	0	0,0	0,0	-	-
Wade	M	7.86	2	2	0-2	2,2	2,1,1,1	1,1,1,1,0	1,0
Henry	M	7.23	2	1	0-1	0,0	0	0	1,0
Kevin	M	8.9	3	2	0-2	2,2,1,0,0	2,0,0,0,0	1,0	1,1,0,0
Mary	F	7.97	2	2	0-2	-	2,2	1	1,0
Alfie	M	7.77	2	1	0-1	1	1,1	1	0,0,0
Zara	F	6.99	1	0	0	-	0	0,0	0,0,0
Larry	M	7.47	2	1	0-1	1,1,1,0,0	-	1,1,1	0
Andy	M	7.15	4	2	0-2	1,1,0	2,2,1,0,0,0	2,0,0	0
Laura	F	8	2	2	0-2	2,2	1,1	1,1,0	1
Jade	F	8.78	2	1	0-1	0	1	1,0,0	0,0
Mia	F	7.94	3	3	1-3	2,2	2,2	3,3,3,1	2
Alice	F	8.75	2	1	0-1	1,0	1	-	-
Lucy	F	7.17	3	2	0-2	2,2	1,1,1,0,0	1,1,1	1,1

^aData sources include researcher's notes, and interviews focused on well-being, friendship, retrospective video recording and Validation. More data sources indicate higher engagement of the child with the topic and not the need to validate or confirm their answers on multiple occasions.

^bAge ranges of developing friendship formation concepts, as outlined by Selman (1979). Stage 0 3–7 years, Stage 1 4–9 years, Stage 2 6–12 years, Stage 3 9–15 years, Stage 4 12 years to adulthood.

TABLE 5 Summary of highest reached developmental stages per school settings.

Purpose of friendship	Enhanced Provision (n = 3)	Specific Speech and Language Disorder Class (n = 5)		Total
			Mainstream (n = 6)	
Don't know	0	2	0	2
Stage 0	2	0	1	3
Stage 1	0	3	1	4
Stage 2	1	0	4	5

a higher dynamics of friendship relations within a small group could be one of the catalysts for developing higher levels of social understanding.

In Table 5, children's school settings are compared to identify potential differences in children's understanding of making friends.

The comparison shows that children in mainstream classrooms gave most Stage 2 and Stage 1 answers. Only one child with LD from a mainstream classroom, Jade, holds that friends are important to have someone to play with (Stage 0). All 'don't know' responses came from children from the Specific Speech and Language Disorder Class. Two children from this class responded in line with Stage 1 purpose of friendship. Two children with LD in the Enhanced Provision gave Stage 0 answers and one child with LD in the same settings held the Stage 2 understanding of the purpose of friendship.

Strategies for and experiences of making friends

The final research question explores strategies for making friends that children with LD follow and propose. Participating children reveal a number of ways to make friends. To play with someone is a strategy followed by six children participants—Mark, Henry, Kevin, Larry, Andy, Jade.

R: What if I come to school, to a new school, how do I make friends?

Henry: Ehm, play with some each other.

R: Play with whom?

Henry: Someone.

Alfie, Zara, Mia, Alice approach peers, introduce themselves or ask if they can be friends.

R: How do you make new friends?

Alfie: You just asks them.

R: Okay. What do you ask them?

Alfie: Then you get, then you get, then you get a FRIEND.

R: Mhm, And what do you ask them?

Alfie: Can you be my friend? But sometimes they say noo-oo.

R: What do you do then?

Alfie: Sometimes they be mean to you.

R: Mhm

Alfie: And hurt you feelings.

R: Can you tell me a story when you made a new friend?

Zara: Well, when I was, when I want to go up, at the first time I went to Glan and I didn't know anyone, so I saw a friend's name is Mary [participant]. And her name was 'Hi' and I was saying 'Hi, my name is Zara. What's your name?' And then Mary says 'Hi, my name is Mary'.

When asked whether it is easy or hard to make friends, children with LD stated a variety of experiences. Six children with LD—Kevin, Zara, Andy, Laura, Alice, Lucy—find it easy.

R: Is it easy or hard to make friends?

Andy: Easy

R: Easy? How do you do it?

Andy: So you play together and like say nicely.

Five participating children—Wade, Mary, Larry, Jade, Mia—find making friends hard because they do not know the other child or the environment.

Mia: It's really hard to make friends when you're new to a school

R: mhm

Mia: because you don't know what to say, you don't know what to do, and you're new and you're new to everything.

Three remaining participants (Mark, Henry, Alfie) did not respond clearly whether they find it easy or hard to make friends.

Wade, Henry, Kevin, Alfie, Andy, Laura, Jade, Mia and Lucy offered their advice for making friends. Some children with LD revealed strategies specific to children who may find it difficult to make friends because they experience difficulties with language and communication.

R: How can children make friends?

Lucy: Ehm, doing ((going)) to next to body and dust ((just)) play with somebody, then, then ask tan ((can)) you want, tan ((can)) you be their friend, and they got listen, if they say 'No' tell a teacher

R: Mhmm, okay. And what would you say to somebody if they may have difficulties talking maybe if they don't know how to talk

Lucy: Ehm let another person do it who is been your friend, let a teacher do it for you.

Kevin: So you listen to teacher what she's speaking or other children. After you kind of learn a language and after you go, will be understand how you say that.

R: What would you advise those children that have difficulties to talk?

CHI2: I would say, if someone was nervous, I would just like stand there and say the first word "Can" and then they say "Can be f-" and then you say "friends" and then that's it. You normally just start to say one word and then you say the next word and then it carries on then. You make friends sometimes.

R: Okay. That's very good, okay. I like that.

Mia: Er, normally, when you don't, you're too shy to make friends, you normally just sit alone and then, people come and say "Can you please, do you want, do you need a friend?" and then I say "yes" and then er, then you be BFFs.

R: Mhm.

Mia: If you've been together for a whole year.

R: Mhm.

Mia: Every year.

Children with LD follow a variety of strategies to make friends—from physical play, onlooking behaviour to asking or inviting peers to join a game. Their advice to children with difficulties speaking and understanding language includes asking another friend or a teacher to help with the communication, pick up the language from peers and teacher, try speaking up one word at a time or hang around peers and wait until they approach you.

DISCUSSION

In this discussion section we review our findings and contextualise them within broader literature on social relationships in children with language disorders. The present study has generated new insights into both the developmental maturity and the understanding of friendships in children with LD. Like most children, our participants assign meaning to their friendships through play and joined activities with peers but seem to overly dwell on physical interactions when describing good and bad

friends. Differences across individuals are noteworthy, and so are the within-child disparities. Many children could reach up to two stages of difference between understanding the motives for having friends, strategies to make friends and good/bad friend description while the understanding of a couple of participants stayed at the lowest developmental stage throughout. Unexpectedly, none of the participants reported language difficulties as a barrier when trying to make friends.

The prevalence of play and physical activities

One particularly interesting finding was that the children with LD revealed that their perceptions of *friendship formation* are rooted in play and physical interactions. They want to make friends to engage in play, and indeed, they reported making friends through joining in play activities. This learning aligns with findings in essays (Bigelow & LaGaipa, 1975), interviews and experiments with typically developing children (Afshordi, 2019; Furman & Bierman, 1983; Liberman & Shaw, 2019).

Furthermore, the importance of the contexts of play and physical activity emerged for participating children describing good friends with a mutual sense of 'we' and 'us' that developed over time. Play facilitates deeper connection with others through verbal and nonverbal communication, conflict management or even shared pretending (e.g. Dunn, 2004; Gottman, 1983). Our study complements this knowledge, indicating that even for children with LD, play may represent a safe environment to make friends and to test out if peers are good or bad friends. Our findings suggest that some children with LD perceive play beyond an apparent context for interacting with peers, as captured by Selman (1980). Although answers indicating a sense of mutuality correspond to stages 2 and 3, the highest ones reached in the study, the same children occasionally reverted to lower stages when describing their motives and strategies for making friends. Play and physical proximity, therefore, remain important even for children with an advanced understanding of some *friendship formation* concepts.

Recognising what makes a good friend

In this study, children's perceptions of good and bad friends reflect the developmental shift from the 'momentary physical play' concepts of friendship to appreciating the psychosocial characteristics of friends and relationships themselves (Selman, 1980). Although participating children still consider physical activities and proximity

(sitting together in class, joining gardening club, school activities) as a distinction, an ideal friend is also someone displaying kind, caring and helpful behaviours towards children with LD (stage 1).

Most participating children with LD described an ideal friend and a bad friend along the lines of playing with them and providing (or refusing) them one-way assistance. This self-focused and subjective perspective does not yet involve reflecting upon the thoughts and intentions of prospective friends (Selman, 1980). Exploring this area may therefore be important in relation to children's vulnerability towards not recognising friends with negative influences. At these stages, children may not simply be aware of the psychological reciprocity in interactions and could be easily influenced by peers who are physically present, who play with them and do them favours (Afshordi, 2019; Liberman & Shaw, 2019).

Our findings could shed light on the potential social understanding reasons for girls with a history of LD being more likely to fall victim to sexual assaults than TD girls (Brownlie et al., 2007). Difficulties with social inferencing (understanding true intentions) and a lack of strong friendships have been identified as elevating risk of such abuse in other populations (e.g., Finkelhor et al., 2007; Sedgewick et al., 2019), and the finding that those with LD may have challenges with friendship intentionality requires urgent further investigation.

Our participants were at the age when their friendship concepts were being formed. However, it is concerning to learn that their good and bad friend descriptions are at the lowest stages of their social understanding as outlined by Selman (1980). While acknowledging companionship and positive behaviours towards a child as friend-like behaviours, children with LD did not recognise similar interests or likes with friends that would distinguish them from non-friends. Studies with typically developing children suggest appreciating shared characteristics of friends, for example, gender, interests, activities, is present as early as 3–4 years of age (Afshordi, 2019; Liberman & Shaw, 2019). The finding that 8-year-olds with LD struggle with this aspect of understanding friendships aligns with findings from a study with primary school aged (9–11 years) autistic children (Calder et al., 2013). It is also consistent with the evidence from a quantitative study suggesting that perceiving friendships may be a particular area of vulnerability for children with LD (Forrest et al., 2021). The present study elucidates these findings by highlighting that immature views of friendships are a contributing factor.

Furthermore, our findings may also be relevant for older children with LD and could indicate one of the potential reasons behind the increased number of juvenile offenders with language difficulties (e.g. Blanton & Dagenais,

2007; Bryan et al., 2015). Children with LD may fall victims to false friends, who may misuse their trust, and since offenders with LD possess a higher risk of reoffending (Winstanley et al., 2020), there is a possibility that rehabilitation services may not be addressing underlying issues.

An important implication is that perceptions of friendship and thoughts, feelings and motivations in good and bad friends should be an area routinely assessed and (if appropriate) targeted in educational and therapeutic interventions for children with LD.

The misalignment of social understanding across Selman's friendship domain

Overall, children with LD participating in this study responded broadly within age-related expectations for the development of friendship according to Selman's stages. Since stages 0, 1, and 2 overlap and together, describe children between the age of 3–12 years, it is not surprising that these levels were mostly represented in the data from 8-year-old children. Responses that varied across all three stages within a single child were noted in half of the participants, rather than these children having a consistent level of friendship understanding. Selman and Demorest (1984) observed the same pattern in two children with socioemotional and interpersonal difficulties. For all children, the fluctuation across stages is part of natural development influenced by internal and external factors such as context (Selman et al., 1977). Children's development of social understanding entails shifting upwards but also transforming orientation towards self and others (Selman & Demorest, 1984). These changes in understanding are qualitative, involving qualitative restructuring of issue understanding, not a quantitative or linear increase of knowledge (Selman et al., 1977). Naturally, this complexity manifests in a multidimensional development.

Surprisingly though, there were different trends across the participants' development. Given that advancing in social understanding is a complex process, it is unusual to identify Zara and Mark, who kept their responses at the same level of the lowest understanding of friendship concepts. Severe expressive language difficulties in Mark, and potential autism (as indicated by parents and teachers) may account for the consistent manifestation of less complex social understanding that is in the responses of both children. It is important to note that recent research emphasises that autistic social understandings should be considered 'different' not necessarily 'less than' other types of social understanding. We, therefore, note that further research on the development of friendship and autistic social understanding is needed.



For most children from mainstream classroom settings, the presence of more children and variety of relationships may constitute reasons for reaching higher levels of social understanding. The exposure to experiences with different peers could encourage the development of social understanding. In comparison, only one child in the Enhanced Provision and no participants from the Specific Speech and Language Disorder Class responded in line with this stage. It needs to be noted however that in the current UK schooling system, education placement reflects children's language skills and children with LD in the mainstream classrooms should have better language than those in the Enhanced Provision or Specific Class. Therefore, we cannot infer causation but rather association between the placement and social understanding.

This finding contributes to the debate on inclusive classroom settings. Inclusion as a human right has been promoted via mainstream education; however, its effectiveness in practice has been doubted due to inconclusive findings about its benefits towards children's social and educational outcomes (Lindsay et al., 2007). Our study implies that children with LD in mainstream settings show higher development of *friendship formation* concepts than their peers in language units or specific language and communication disorder classes. Similarly, a study on social cognition and social competence revealed better performance of children with LD in integrated, mainstream settings compared to their counterparts in special classrooms (Farmer, 2000). If the aim of education was to encourage holistic development of an independent individual, mainstream settings may be the better option to achieve this goal.

Making friends strategies and advice

Our final research question concerned children's perceptions of making friends and what could make that easier or more difficult. In our study, many children found it easy to make friends. Those who admitted that making friends can be hard attributed any difficulty to unfamiliarity with peers or the environment. Surprisingly, none mentioned language or communication difficulties as potential obstacles. Only when asked for advice to children who could experience problems with language, a number of children recommended seeking help from teachers or trying to pick up language cues from teachers. Some advised giving it a try and hoping that other children will come and invite you to play in case you are shy. The importance of play remains very relevant and does not always place high linguistic demands. Participating children said that they would play with peers or ask them directly if they could join in with their game or even become friends.

This finding may be specific to our study design as it does not align with observational studies and teacher reports, in which children with LD struggle to approach their peers (Brinton et al., 1997). Nonetheless, other qualitative studies with children and young people with LD mirror our results. In the perceived quality of life study with participants aged 6–18 years, language difficulties did not come up as a specific barrier to peer interactions but rather to classroom and academic engagement (Markham et al., 2009). In a qualitative evaluation of a speech and language programme, school-aged children with LD identified language and communication as areas, in which they could improve (Roulstone et al., 2012). However, they did not perceive them as crucial for their peer relationships (Roulstone et al., 2012). Their older peers did not see their language as problematic and instead gave importance to managing their own behaviours or academic performance (Roulstone et al., 2012). Not perceiving one's own difficulties in language and communication, or considering them as problematic when interacting with others could be linked with receiving speech, language and communication needs support, believing in having reached sufficient communication levels, or simply not perceiving language as central to social functioning.

Another explanation could be that children with LD appreciate that the attitudes and behaviours of others also influence their mutual interactions. At the age of 7–10 years, they report that language impacts their interactions with non-friends but not with friends and relatives (Merrick & Roulstone, 2011). This suggests that children with LD could perceive friends as those with whom they may be able to connect verbally and thus do not consider language as a barrier to friendships. Such perceptions would be tacit to children with LD though as it did not come up in their answers to direct questions about good and bad friends. Could this inferred perception of language not being a barrier to making friends link with the lower understanding of good/bad friends found in our study? Maybe learning that children with LD would like other people, including peers, teachers and parents, to listen and avoid interrupting or even shouting at them when they interact (Roulstone & Lindsay, 2012; Roulstone et al., 2012), could reflect some of the behaviours that they encounter as they grow up and could be off-putting in their making friends efforts.

Strengths and limitations

The research approaches adopted in the current study pose strengths as well as limitations. An important strength lies in adapting Selman's interview schedule to multimodal methods. Combining children's own experiences and artwork facilitated their reflection and self-expression.

As opposed to tools such as theory of mind stories and vignettes that are language heavy, require abstract thinking and can be detached from children's experiences, the study engaged with direct experiences of children.

On the other hand, the child-centred approach might have limited study findings to some extent as interviews may not have always elicited full answers from participating children, especially from those with emotional and behavioural difficulties. Respecting children's boundaries was a priority, and whenever possible, follow up meetings reverted to unanswered or ambiguous responses. Consulting parents or teachers on specific topics might have been a route to obtaining more thorough data; still, a priority was given to learning directly from children.

Another caveat to note is that the varied profiles of children in our study means we cannot fully confirm that our findings are unique to those with LD. We chose not to exclude the participant who was referred to autism assessment services because we wanted our study to represent the heterogeneity typical of classes or caseloads of children identified as having LD. We do not have any further information about possible co-occurring conditions. For this reason, we have avoided using 'specific language impairment' or 'developmental language disorder' when describing the group in our study.

The use of art modalities and their representations may not have produced relevant data for all children. Art representations of concepts were validated with every participant to see whether they described or connected their work with any of their friendship perceptions. In some cases, art served as a means to make children more comfortable and have a playful experience when participating in an interview. Resource constraints meant that we were unable to conduct further analyses with the drawings but we recognise that methods such as the Pictorial Assessment of Interpersonal Relationships—PAIR (Bombi, Pinto, and Cannoni 2007), could be an interesting strategy for the analysis of children's ideas about interpersonal relationships in future research.

The coding could have been strengthened if inter-rater reliability was established. Initially, involving another researcher in the project was not considered due to the case study design of the wider study. Limited time resources and the pandemic situation prevented the inclusion of another researcher. The very focused interview schedule generated data, which do not require deeper interpretation. Selman's (1979) scoring manual has detailed and user-friendly procedures to follow. It extensively describes the assignment of developmental stages to answers and includes specific examples. Therefore, the quality of the findings is not affected.

CONCLUSION

Few studies explore friendships directly with children with LD. This study fills the gap and uses art-informed interviews to provide insights. Previous research into the friendships of children with LD collected data from observations or parent and teacher proxies. By targeting and pioneering a direct investigation of *friendship formation* concepts with children with LD, this study contributes to the wider knowledge of peer relationships of children with LD by proposing hypotheses to be tested in further studies.

The findings show that at the age of 6–8 years, children with LD may still lack awareness of motives, thoughts and feelings of peers, especially when distinguishing between good and bad friends. As this lack of perspective-taking could be misused by more mature peers, it would be useful to compare the perceptions of TD children to see whether there are discrepancies between groups or whether this is part of natural development.

This study further contributes to the debate on the effectiveness of inclusion. From the developmental psychology perspective, it implies that friendship formation understanding differs among children with LD in Enhanced Provision or Specific Speech and Language compared to those in mainstream classrooms. However, this observation does not imply causation because language skills determine children's placement. In mainstream classrooms, better language skills may be equally linked with friendship conceptions.

We know that children with LD have difficulties in peer relationships, yet our participants do not perceive language as a barrier when making friends. Therefore, researching self-perception and how it is shaped by peer relationships could reveal its importance for the developmental outcomes of children with LD. Future research would benefit from engaging not only children with LD but also their peers in learning how their relationships function and could be improved.

ACKNOWLEDGEMENT

This study is part of a PhD research project funded by the Lego Foundation and Cambridge Trust.

CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to disclose.

DATA AVAILABILITY STATEMENT

Anonymised data that support the findings of this study are available from the corresponding author [L.J.B.], upon reasonable request.

ORCID

Lenka Janik Blaskova  <https://orcid.org/0000-0003-3019-0880>

Jenny L. Gibson  <https://orcid.org/0000-0002-6172-6265>

REFERENCES

- Adams, C., Coke, R., Crutchley, A., Hesketh, A. & Reeves, D. (2001) *Assessment of Comprehension and Expression 6 - II*. NFER-Nelson.
- Afshordi, N. (2019) Children's inferences about friendship and shared preferences based on reported information. *Child Development*, 90(3), 719–727. <https://doi.org/10.1111/cdev.13237>
- Andres-Roqueta, C., Adrian, J.E., Clemente, R.A. & Villanueva, L. (2016) Social cognition makes an independent contribution to peer relations in children with Specific Language Impairment. *Research in Developmental Disabilities*, 49–50, 277–290. <https://doi.org/10.1016/j.ridd.2015.12.015>
- Bigelow, B.J. & La Gaipa, J.J. (1975) Children's written descriptions of friendship: a multidimensional analysis. *Developmental Psychology*, 11(6), 857–858. <https://doi.org/10.1037/0012-1649.11.6.857>
- Bigelow, B.J., Tesson, G. & Lewko, J.H. (1996) *Learning the rules: the anatomy of children's relationships*. Guilford Press.
- Blanton, D.J. & Dagenais, P.A. (2007) Comparison of language skills of adjudicated and nonadjudicated adolescent males and females. *Language, Speech, and Hearing Services in Schools*, 38(4), 309–314. [https://doi.org/10.1044/0161-1461\(2007\)033](https://doi.org/10.1044/0161-1461(2007)033)
- Bombi, A.S., Pinto, G., & Cannoni, E. (2007). *Pictorial Assessment of Interpersonal Relationships (PAIR)*. A quantitative coding system of children's drawings. Florence: Florence University Press.
- Brinton, B., Fujiki, M., Spencer, J.C. & Robinson, L.A. (1997) The ability of children with specific language impairment to access and participate in an ongoing interaction. *Journal of Speech, Language, and Hearing Research*, 40(5), 1011–1025. <https://doi.org/10.1044/jslhr.4005.1011>
- British Educational Research Association. (2018) *Ethical guidelines for educational research*. 4th edn. Available at: <https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2018>
- Brownlie, E.B., Jabbar, A., Beitchman, J., Vida, R. & Atkinson, L. (2007) Language impairment and sexual assault of girls and women: findings from a community sample. *Journal of Abnormal Child Psychology*, 35(4), 618–626. <https://doi.org/10.1007/s10802-007-9117-4>
- Bryan, K., Garvani, G., Gregory, J. & Kilner, K. (2015) Language difficulties and criminal justice: the need for earlier identification. *International Journal of Language & Communication Disorders*, 50(6), 763–775. <https://doi.org/10.1111/1460-6984.12183>
- Bukowski, W.M., Newcomb, A.F. & Hartup, W.W. (1998) *The company they keep: friendships in childhood and adolescence*. Cambridge University Press.
- Calder, L., Hill, V. & Pellicano, E. (2013) 'Sometimes I want to play by myself': understanding what friendship means to children with autism in mainstream primary schools. *Autism*, 17(3), 296–316. <https://doi.org/10.1177/1362361312467866>
- Cohen, N.J., Menna, R., Vallance, D.D., Barwick, M.A., Im, N. & Horodezky, N.B. (1998) Language, social cognitive processing, and behavioral characteristics of psychiatrically disturbed children with previously identified and unsuspected language impairments. *Journal of Child Psychology and Psychiatry*, 39(6), 853–864.
- Conti-Ramsden, G. & Botting, N. (2004) Social difficulties and victimization in children with SLI at 11 years of age. *Journal of Speech, Language, and Hearing Research*, 47(1), 145–161.
- Dunn, J. (2004) *Children's friendships: the beginnings of intimacy*. Blackwell Publishing.
- Dunn, J., Cutting, A.L. & Fisher, N. (2002) Old friends, new friends: predictors of children's perspective on their friends at school. *Child Development*, 73(2), 621–635. <https://doi.org/10.1111/1467-8624.00427>
- Durkin, K. & Conti-Ramsden, G. (2007) Language, social behavior, and the quality of friendships in adolescents with and without a history of specific language impairment. *Child Development*, 78(5), 1441–1457. <https://doi.org/10.1111/j.1467-8624.2007.01076.x>
- Farmer, M. (2000) Language and social cognition in children with specific language impairment. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 41(5), 627–636. <https://doi.org/10.1017/S0021963099005788>
- Finkelhor, D., Ormrod, R.K. & Turner, H.A. (2007) Re-victimization patterns in a national longitudinal sample of children and youth. *Child Abuse & Neglect*, 31(5), 479–502. <https://doi.org/10.1016/j.chiabu.2006.03.012>
- Forrest, C.L., Gibson, J.L. & St Clair, M.C. (2021) Social functioning as a mediator between Developmental Language Disorder (DLD) and emotional problems in adolescents. *International Journal of Environmental Research and Public Health*, 18(3), 1221. <https://doi.org/10.3390/ijerph18031221>
- Fujiki, M., Brinton, B., Hart, C.H. & Fitzgerald, A.H. (1999) Peer acceptance and friendship in children with specific language impairment. *Topics in Language Disorders*, 19(2), 34–48. <https://doi.org/10.1097/00011363-199902000-00005>
- Fujiki, M., Brinton, B., Isaacson, T. & Summers, C. (2001) Social behaviors of children with language impairment on the playground: a pilot study. *Language, Speech, and Hearing Services in Schools*, 32(2), 101–113. [https://doi.org/10.1044/0161-1461\(2001/008\)](https://doi.org/10.1044/0161-1461(2001/008))
- Furman, W. & Bierman, K.L. (1983) Developmental changes in young children's conceptions of friendship. *Child Development*, 54(3), 549–556. <https://doi.org/10.2307/1130041>
- Gottman, J.M. (1983) *How children become friends*. University of Chicago Press.
- Hartup, W.W. (1996) The company they keep: friendships and their developmental significance. *Child Development*, 67(1), 1–13. <https://doi.org/10.2307/1131681>
- Ilfie, S., Kendrick, D., Morris, R., Griffin, M., Haworth, D., Carpenter, H., Masud, T., Skelton, D.A., Dinan-Young, S., Bowling, A. & Gage, H. & ProAct65+ research, t. (2015) Promoting physical activity in older people in general practice: proAct65+ cluster randomised controlled trial. *The British Journal of General Practice: The Journal of the Royal College of General Practitioners*, 65(640), e731–e738. <https://doi.org/10.3399/bjgp15x687361>
- Janik Blaskova, L. & Gibson, J.L. (2021) Reviewing the link between language abilities and the social and emotional development of children with Developmental Language Disorder: the importance of children's own perspectives. *Autism & Developmental Language Impairments*, 6, 23969415211021515.
- Janik Blaskova, L. & Gibson, J.L. (2023) Children with language disorder as friends: interviews with classroom peers to gather their

- perspectives. *Child Language Teaching and Therapy*, 39(1), 39–57. <https://doi.org/10.1177/02656590221139231>
- Kravetz, S., Faust, M., Lipshitz, S. & Shalhav, S. (1999) LD, interpersonal understanding, and social behavior in the classroom. *Journal of Learning Disabilities*, 32(3), 248–255. <https://doi.org/10.1177/002221949903200306>
- Laws, G., Bates, G., Feuerstein, M., Mason-Apps, E. & White, C. (2012) Peer acceptance of children with language and communication impairments in a mainstream primary school: associations with type of language difficulty, problem behaviours and a change in placement organization. *Child Language Teaching and Therapy*, 28(1), 73–86. <https://doi.org/10.1177/0265659011419234>
- Liberman, Z. & Shaw, A. (2019) Children use similarity, propinquity, and loyalty to predict which people are friends. *Journal of Experimental Child Psychology*, 184, 1–17. <https://doi.org/10.1016/j.jecp.2019.03.002>
- Liiva, C.A. & Cleave, P.L. (2005) Roles of initiation and responsiveness in access and participation for children with specific language impairment. *Journal of Speech, Language, and Hearing Research*, 48(4), 868–883. [https://doi.org/10.1044/1092-4388\(2005/060\)](https://doi.org/10.1044/1092-4388(2005/060))
- Lindsay, G., Dockrell, J.E. & Strand, S. (2007) Longitudinal patterns of behaviour problems in children with specific speech and language difficulties: child and contextual factors. *British Journal of Educational Psychology*, 77(4), 811–828. <https://doi.org/10.1348/000709906x171127>
- Lyons, R. & Roulstone, S. (2018) Well-being and resilience in children with speech and language disorders. *Journal of Speech Language and Hearing Research*, 61(2), 324–344. https://doi.org/10.1044/2017_JSLHR-L-16-0391
- Marcone, R., Caputo, A. & della Monica, C. (2015) Friendship competence in kindergarten and primary school children. *European Journal of Developmental Psychology*, 12(4), 412–428. <https://doi.org/10.1080/17405629.2015.1031215>
- Markham, C., Van Laar, D., Gibbard, D. & Dean, T. (2009) Children with speech, language and communication needs: their perceptions of their quality of life. *International Journal of Language & Communication Disorders*, 44(5), 748–768. <https://doi.org/10.1080/13682820802359892>
- McLaughlin, J. & Coleman-Fountain, E. (2018) Visual methods and voice in disabled childhoods research: troubling narrative authenticity. *Qualitative Research*, 19(4), 363–381. <https://doi.org/10.1177/1468794118760705>
- McCormack, J., Harrison, L.J., McLeod, S. & McAllister, L. (2011) A nationally representative study of the association between communication impairment at 4–5 years and children's life activities at 7–9 years. *Journal of Speech, Language, and Hearing Research*, 54(5), 1328–1348. [https://doi.org/10.1044/1092-4388\(2011/10-0155\)](https://doi.org/10.1044/1092-4388(2011/10-0155))
- McLeod, S. (2018) Listening to children and young people with speech, language and communication needs: who, why and how? In S. Roulstone & S. McLeod (Eds.), *Listening to Children and Young People with Speech, Language and Communication Needs* (pp. 23–40). J&R Press Ltd.
- Merrick, R. & Roulstone, S. (2011) Children's views of communication and speech-language pathology. *International Journal of Speech Language Pathology*, 13(4), 281–290. <https://doi.org/10.3109/17549507.2011.577809>
- Norbury, C., Gooch, D., Wray, C., Baird, G., Charman, T., Simonoff, E., Vamvakas, G. & Pickles, A. (2016) The impact of nonverbal ability on prevalence and clinical presentation of language disorder: evidence from a population study. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 57(11), 1247–1257. <https://doi.org/10.1111/jcpp.12573>
- Parker, J.G., Rubin, K.H., Erath, S.A., Wojslawowicz, J.C. & Buskirk, A.A. (2015) Peer relationships, child development, and adjustment: a developmental psychopathology perspective. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology* (pp. 419–493). John Wiley & Sons, Inc.
- Parkinson, S., Eatough, V., Holmes, J., Stapley, E. & Midgley, N. (2016) Framework analysis: a worked example of a study exploring young people's experiences of depression. *Qualitative Research in Psychology*, 13(2), 109–129. <https://doi.org/10.1080/14780887.2015.1119228>
- Patton, M.Q. (1999) Enhancing the quality and credibility of qualitative analysis. *Health services research*, 34(5), Pt 2, 1189–1208.
- Redmond, S.M. (2011) Peer victimization among students with specific language impairment, attention-deficit/hyperactivity disorder, and typical development. *Language Speech and Hearing Services in Schools*, 42(4), 520–535. [https://doi.org/10.1044/0161-1461\(2011/10-0078\)](https://doi.org/10.1044/0161-1461(2011/10-0078))
- Reilly, S., Tomblin, B., Law, J., McKean, C., Mensah, F.K., Morgan, A., Goldfeld, S., Nicholson, J.M. & Wake, M. (2014) Specific language impairment: a convenient label for whom? *International Journal of Language & Communication Disorders*, 49(4), 416–451. <https://doi.org/10.1111/1460-6984.12102>
- Roulstone, S. & Lindsay, G. (2012) *The perspectives of children and young people who have speech, language and communication needs, and their parents Bristol Speech & Language Therapy (DFE-RR247-BCRP7)*. Department for Education.
- Roulstone, S., Wren, Y., Bakopoulou, I. & Lindsay, G. (2012) Interventions for children with speech, language and communication needs: an exploration of current practice. *Child Language Teaching and Therapy*, 28(3), 325–341. <https://doi.org/10.1177/0265659012456385>
- Rubin, K., Coplan, R., Chen, X., Bowker, J. & McDonald, K. (2011) Peer relationships in childhood. In M. H. Bornstein & M. E. Lamb (Eds.), *Developmental Science* (pp. 519–578). Psychology Press. <https://doi.org/10.4324/9780203112373>
- Scherer, L. (2016) Children's engagements with visual methods through qualitative research in the primary school as 'Art that didn't work'. *Sociological Research Online*, 21(1), 1–16. <https://doi.org/10.5153/sro.3805>
- Sedgewick, F., Crane, L., Hill, V. & Pellicano, E. (2019) Friends and Lovers: the Relationships of Autistic and Neurotypical Women. *Autism in Adulthood: Challenges and Management*, 1(2), 112–123. <https://doi.org/10.1089/aut.2018.0028>
- Selman, R.L. (1979) *Assessing interpersonal understanding: An interview and scoring manual in five parts constructed by the Harvard-Judge Baker Social Reasoning Project*. Harvard-Judge Baker Social Reasoning Project.
- Selman, R.L. (1980) *The growth of interpersonal understanding*. Academic Press.
- Selman, R.L. & Demorest, A.P. (1984) *Observing troubled children's interpersonal negotiation strategies: Implications of and for a developmental model*. [<https://doi.org/10.2307/1129853>]. Blackwell Publishing.
- Selman, R.L., Jaquette, D. & Lavin, D.R. (1977) *Interpersonal awareness in children: Toward an integration of developmental and*



- clinical child psychology*. American Orthopsychiatric Association, Inc. <https://doi.org/10.1111/j.1939-0025.1977.tb00981.x>
- Semel, E., Wiig, E.H. & Secord, W. (2006) *Clinical evaluation of language fundamentals—fourth edition UK (CELF-4UK)*. Harcourt Assessment.
- van den Bedem, N.P., Dockrell, J.E., van Alphen, P.M., Kalicharan, S.V. & Rieffe, C. (2018) Victimization, bullying, and emotional competence: longitudinal associations in (Pre)adolescents with and without developmental language disorder. *Journal of Speech, Language, and Hearing Research*, 61(8), 2028–2044. https://doi.org/10.1044/2018_JSLHR-L-17-0429
- van den Bedem, P., Willems, D., Dockrell, J.E., van Alphen, P.M. & Rieffe, C. (2019) Interrelation between empathy and friendship development during (pre)adolescence and the moderating effect of developmental language disorder: a longitudinal study. *Social Development*, 28(3), 599–619. <https://doi.org/10.1111/sode.12353>
- Widgit software. (2018). Symbols, icons and pictures. Available at: https://www.widgit.com/symbols/icons_pictures.htm
- Winstanley, M., Webb, R.T. & Conti-Ramsden, G. (2020) Developmental language disorders and risk of recidivism among young offenders. *Journal of Child Psychology and Psychiatry*, n/a(n/a). <https://doi.org/10.1111/jcpp.13299>

How to cite this article: Janik Blaskova, L. & Gibson, J.L. (2024) Exploring concepts of friendship formation in children with language disorder using a qualitative framework analysis. *International Journal of Language & Communication Disorders*, 1–21. <https://doi.org/10.1111/1460-6984.13021>