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## **“He Cares About Me and I Care About Him.” Children’s Experiences of Friendship with Peers who use AAC**

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Typically developing children face multiple challenges in developing friendships with peers who have severe physical disabilities and use augmentative and alternative communication (AAC), especially when these peers experience restrictions in mobility, educational participation, physical access, and communication. In this small qualitative study, six typically developing children were interviewed about their friendships with classmates who have cerebral palsy and use AAC. Data were analyzed according to Riessman’s narrative methodology (2008). Overall, participants viewed these friendships positively. In this article, we discuss the main themes that characterized these friendships: communication, learning, helping, and shared time. This knowledge may help to facilitate friendships between children without disabilities and their peers who use AAC within mainstream educational settings.

**Keywords:** Aided communication; Cerebral palsy; Children; Friendship; Participation

### **INTRODUCTION**

For typically developing children, the school context provides a wealth of opportunities to establish friendships through social activities, interactions, and routines. School-aged friendships bring with them important learning opportunities, which, in turn, can shape many aspects of a child’s development. Research reviewed by Hollingsworth (2006) demonstrated strong links between children’s friendship experiences and their psychosocial, emotional, and communication development; and academic performance. However, the friendships that form between children with and without disabilities are often different from those between typically developing children.

Friendships between children with and without disabilities may be initiated within a buddy system or similar social interaction program (Kishi & Meyer, 1994; Matheson, Olsen, & Weisner, 2007), or evolve out of a helping relationship (Staub, 1998). The roles that each

child adopts within the relationship may also be different. For instance, as described by Staub (1998) in her observational study of children’s friendships within an inclusive school setting, friends without disabilities may adopt the role of academic support person, by taking notes for their peer or acting as a tutor; or the role of caretaker, by managing the behaviour and monitoring the safety of the friend with a disability. These roles can be self-initiated by the children; however, teachers and parents may be responsible for maintaining them beyond the level that is considered acceptable by the child without a disability in the friendship (Staub, 1998). For example, one sixth-grader from Staub’s study commented on her role as caretaker: “They would always ask me to do something with her and it’s sort of like I am her babysitter now. But I just wanted to be her friend” (p. 147). Nonetheless, when the roles are balanced carefully, peers can be an important source of social support and security, physical assistance, and companionship

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for children with disabilities (Matheson, Olsen, & Weisner, 2007; Staub, 1998).

Friendships with children with disabilities can have advantages for typically developing children, including an increase in status among peers and an appreciation of human diversity (Helmstetter, Peck, & Giangreco, 1994; Staub, 1998). Children who have a friend with a severe disability have described these relationships as being less competitive and more enjoyable than friendships with typical peers (Kishi & Meyer, 1994), as well as supportive. For example, Staub (1998) reported an instance where the friend with a disability acted as the social and emotional support for her typically developing peer at a time of need. Clearly then, these friendship dyads can yield reciprocal benefits.

Within the field of augmentative and alternative communication (AAC), outcome studies of inclusive education (when children with disabilities spend most or all of their time in mainstream education settings) indicate that sharing a class with a peer using AAC can develop increased awareness, acceptance, and compassion for individuals with disabilities (Kent-Walsh & Light, 2003). However, typically developing children and children who use AAC may face challenges in establishing and maintaining friendships.

Peers with disabilities such as severe cerebral palsy (CP) and in particular those who have CP and use AAC, are likely to experience restrictions in communication, movement, and mobility. Such restrictions create problems for their socialization in inclusive settings (Kent-Walsh & Light, 2003; Lightfoot, Wright, & Sloper, 1999; Mulderij, 1996; Salmon, 2009; Skar, 2003; Soto, Müller, Hunt, & Goetz, 2001). Additional issues, such as the initial negative attitudes of peers (McCarthy & Light, 2005; Skar, 2003), and the configuration of a child's educational program (Beukelman & Mirenda, 2005; Kent-Walsh & Light, 2003; Salmon, 2009; Soto et al., 2001), may influence the early friendship experiences between children with and without disabilities. A range of attitudinal, policy, and access barriers may also impede social relationships (Beukelman & Mirenda, 2005). For example, despite practice shifts to include children with disabilities in mainstream (general) education (Foreman, 2008), results of focus-group research conducted with teachers and parents of children who use AAC have identified funding, time and access limitations, attitude barriers, limitations of the student's AAC system, and students' over-reliance on their teaching assistants/aides, as challenge to inclusion and the development of friendships across the school community (Soto et al., 2001).

## **Social Participation at School**

Given that many skills for friendship development are learned in school (Conway, 2008), the benefits of educational inclusion for the social participation and friendship development of children with disabilities remain an important consideration when planning inclusive education programs (Soto et al., 2001). Social participation is influenced by the levels of physical integration and academic inclusion experienced by a child, as well as the support they receive (Beukelman & Mirenda, 2005), including that provided by adults, for friendship development (Conway, 2008; Salmon, 2009). Furthermore, opportunities for socialization and friendship development between students with and without a disability are affected by access to social recreation opportunities (Mulderij, 1996; Salmon, 2009; Skar, 2003); and the timing of integration, for example, integration periods for special education students who attend some mainstream lessons can be scheduled during classes that promote social interaction rather than solitary study (Meyer, 2001).

## **Physical Access and Physical Abilities**

In examining the determinants of social status in primary school children, Chase and Dummer (1992) found that physical attractiveness and sporting abilities were the two most powerful determinants of popularity for both girls and boys. Children with physical disabilities may be self-conscious about their disability and appearance, and often have limited access to physical recreation (Matheson, et al., 2007; Salmon, 2009; Skar, 2003). Nevertheless, participation in recreational activities allows for the development of new skills, the nurturing of a positive self-concept, and the building of social relationships (Schleien, Ray, & Green 1997). In Lightfoot and colleagues' 1999 study exploring the mainstream education experiences of students with a physical illnesses or disabilities, 32 of 33 students interviewed stated that self-consciousness, personal care needs, and/or an inability to participate in physical activities limited their contact with friends. These findings supported previous research by Mulderij (1996), who conducted a phenomenological study of 65 children with cerebral palsy and similar conditions to explore their perspectives of friends, family, and disability. Mulderij suggested that an inability to participate in social recreation was a primary cause of social rejection and limited friendship development for children with physical disabilities. In summary, children with physical disabilities such as cerebral palsy may experience limited opportunities to interact with peers during

social recreation. Furthermore, for some children, communication barriers may also limit social interaction.

### **Communicative Competence and Interaction Behaviours**

Researchers (e.g., Burleson, 1994; Guralnick, Gottman, & Hammond, 1996) have demonstrated the influence that communication ability exerts upon the success or failure of friendship formation. Typically developing children tend to make friends with peers whose communication skills, particularly emotional responsiveness, match their own (Burleson, 1994; Guralnick et al., 1996). Consequently, any reduction in communicative effectiveness or emotional responsiveness may negatively influence the patterns of friendship acquisition and maintenance between typically developing children and their peers who use AAC, who may have limited linguistic socio-relational skills (e.g., asking partner focused questions; initiating and maintaining conversational topics appropriately) and be constrained by their AAC system (Light, Arnold, & Clark, 2003). Furthermore, facial expressions and other non-verbal socio-relational skills may be limited by motoric impairments. As a result, typically developing peers may perceive individuals who use AAC as less communicatively competent and emotionally responsive than peers without disabilities, presenting a barrier to the development of meaningful social relationships (Light et al., 2003).

To date, little is known about the nature of friendships between children without disabilities and peers who use AAC, despite the fact that the development of these relationships is a goal of inclusive education programs (Balandin, Hand, & Sweep, 2008). Researchers have investigated children's initial attitudes towards unfamiliar peers who use AAC (McCarthy & Light, 2005); however, attitude ratings in these studies were based on recordings of partially or completely scripted interactions between a child using AAC and an adult who uses natural speech. The extent to which these results can be applied to the perspectives of typically developing peers interacting face-to-face at school with children who use AAC is not known. Furthermore, peer perspectives have primarily been examined in quantitative studies using attitude-rating scales, which may paint a limited picture of an individual's experience (Balandin, Berg, & Waller, 2006). Qualitative data may better capture the perspectives of typically developing children who are friends with a peer who uses AAC, and yield suggestions as to how best to promote these friendships. Hence, the aim of this study was to

investigate and report on existing friendships between these two groups, from the perspectives of children without disabilities, using the qualitative research method of narrative inquiry. The study was approved by the University of Sydney Human Research Ethics Committee. Pseudonyms have been used to protect the identities of the participants. Quotes are anonymous where confidentiality could be compromised, even with the attribution of a pseudonym.

## **METHOD**

### **Participants**

Friends of three children who used AAC were nominated to participate in this study by their classroom teachers, who identified two friends without disabilities for each child. Friends were identified as children who showed a sustained interest in the child who used AAC, and who engaged in social interactions with them on a regular basis. The six participants (friends without disabilities) and the education team (teacher and aide) confirmed the friendship status when asked. Participants and their parents provided informed consent.

In total, three boys and three girls aged 7–14 years participated. They were drawn from three schools (two students from each school). The participants all used natural speech and had no known physical, intellectual, sensory, or developmental disabilities. Their friends with disabilities all had a primary diagnosis of cerebral palsy and used electronic speech-generating devices (SGDs) to communicate. The friends with disabilities did not participate in this study. All of the children – those with and without disabilities – had attended a mainstream, general education setting since kindergarten. Two of the three friends with disabilities, Thomas and Lucy, participated in the mainstream curriculum full-time, and Philip, the third friend, experienced partial mainstream integration, spending the rest of his time in the school's learning support unit. Details about the participants without disabilities and their friends are summarized in Table 1. In light of the small population of school-aged children in mainstream classes who use SGDs in Australia, specific details about each child (e.g., exact age and educational background) have been withheld to ensure confidentiality.

### **Data Collection**

Each participant participated in two 30–60 min in-depth interviews that were conducted at the

TABLE 1 Summary of Information on Participants.

Participant (pseudonym)	School	Age band	Friend (pseudonym)	Length of friendship	Friend's communication mode
Megan (F)	Primary School	7–10 years	Lucy (F)	2 years	SGD, idiosyncratic sign language, a few spoken words
Jessica (F)	Primary School	7–10 years	Lucy (F)	3 years	As above
Angela (F)	Primary School	7–10 years	Thomas (M)	< 1 year	High tech SGD, a few spoken words
Toby (M)	Primary School	7–10 years	Thomas (M)	3 years	As above
Joe (M)	High School	11–14 years	Phillip (M)	3 years	High-tech SGD, yes/no gestures.
James (M)	High School	11–14 years	Phillip (M)	3 years	As above

Note: M = male, F = female

schools in a quiet setting. All interviews were conducted over a 6-month period by the primary author. Interviews were digitally audio-recorded and transcribed verbatim. Open-ended topic starters were used to guide the interview (Patton, 2002), based on the results of existing research addressing the friendships of children with disabilities (Helmstetter et al., 1994; Kishi & Meyer, 1994; Mulderij, 1996; Staub, 1998). A list of the most frequently used questions is included in Appendix A. Specific questions were not predetermined, but generated during the interview in response to the data. Follow-up questions such as “Can you tell me more about that?” and “How did you feel?” were used to further probe participants’ responses (Patton, 2002). Non-verbal features that imposed additional meaning on the data (e.g., gestures, laughter, word emphasis, dysfluencies, and silences) were noted. Additional field notes were used to detail the interviewer’s reactions, interpretations, or judgements that occurred during each interview.

### Data Analysis

Interviews were designed to generate stories of the participants’ experiences with their friends who used AAC. In light of this, a thematic narrative methodology approach was chosen to analyze the participants’ friendship stories (Riessman, 2008). A narrative analysis aims to identify recurring themes within and between stories; in this case, themes that characterized friendships between children who used natural speech and those who used AAC. Initially, individual data were re-organized into a loose “story” structure that traced the timeline of each friendship. The stories opened with the participant’s first encounter and initial impressions of the friend who used AAC. This was followed by shared events, complications, and interactions in the friendship; and concluded with the participant’s thoughts about the future of the relationship.

Secondary narratives (discrete stories about memorable events during the friendship) were

then identified within each text. The boundaries and macrostructures of these secondary narratives were identified using Labov’s narrative framework (orientation, complication, evaluation, resolution; and, when they occurred, coda) (Labov & Waletzky, 1967). Where appropriate, some data were further reworked as poems or pastiches (Ely, 2007; Riessman, 2008). Data was presented as a free-verse poem when the prosody used by the participant delineated clear stanzas (through pauses or emphasis), to preserve the voice of the participants (Ely, 2007). Pastiches also involve the restructuring of data to form a visual representation of meaning (Ely, 2007). They were used in this study to emphasize dramatic conflicts and contrasts in the data from a single child that were otherwise lost in prose (Ely, 2007).

Once re-structured, content and experiences within these stories were compared across data sets, with discrete examples taken from the texts to highlight similarities and differences in children’s experiences. Analysis also took into account salient language features such as story structure, cohesiveness, word choice, and word reoccurrence. Finally, the researcher consulted the second and third authors to discuss the interpretation of the different stories when analyzing the data set.

### Validation of Initial Data

Picture books were used with the younger children (under 12 years) as a unique tool to assist with the clarification of data and validation of initial interpretations or member checking (Patton, 2002). In this new validation method, which we have termed the *storybook method* (Anderson & Balandin, 2010), data were re-storied as an illustrated picture book, according to the narrative structure outlined above. This process involved some direct quotes from the child, some paraphrased data, and some summarizing statements that reflected our initial interpretation of the data. Some data were also re-

storied as cartoons and water-colour pictures in the books. Illustrations were created by the lead author, a practiced artist, and were drawn to appeal to young children. The illustrations were individualized and were adequately detailed to represent the complex social interactions and emotional experiences described by the participants in their initial interviews.

The younger children read their storybooks with the researcher during the second interview. Pop-up cartoon characters were used as indirect probes throughout the books to ask clarifying questions, request further detail, and present other participants' perspectives and experiences in an indirect and non-intimidating manner. Although specific outcomes around the use of this method were not evaluated, it was observed that the illustrations and pop-up characters helped the younger participants to engage in the interview process, expand upon existing data, and challenge misinterpretations (Anderson & Balandin, 2010). Participants over 12 years of age read through a modified transcript of their initial interview, which had been re-arranged to reflect the timeline of their friendship story (Polkinhorne, 1995), and also contained clarifying and summarizing statements. Participants were invited to modify the feedback data (transcripts and stories) if they wished.

### Data Synthesis

Additional data obtained from the second interview was added to the existing friendship story for each participant, and any necessary amendments to the researcher's interpretations were made accordingly. Participants' stories were then combined to form an overarching friendship narrative, reflecting the similarities and differences in the children's experiences. Recurring issues and themes, such as learning, roles, responsibilities, participation, and commonality, were identified from the combined stories. Discrete narratives and quotes from each child's data set were selected to illustrate specific experiences and perspectives within these broad themes.

## RESULTS

Analysis of the data revealed an overarching friendship narrative for all participants, beginning with the initiation of the friendship, and containing the participants' expectations and concerns for the future. Within this story structure, participants recounted a variety of personal experiences and perspectives. A brief overview of participants' experiences at the start of these

friendships is presented initially. We examine the issues that the participants perceived influenced the formation of their friendships. These included their social values and attitudes to disability, their motivations for friendship, and the personality characteristics of children with and without disabilities in the dyads. We then focus on themes arising from the "middle" of the overarching narrative: the participants' stories of interactions, roles, and shared time once their friendships with peers who used AAC had been firmly established. We also explore issues that motivate and maintain these relationships. Finally, we present the participants' thoughts on friendship transitions and their predictions for the future of their relationships with their peers.

### In the Beginning

Everyday for a year Megan and Lucy went to the same school in the same town and never exchanged a word. Then, one day the following exchange occurred:

And I said "hello" and she said "*hello*" back

And I said something like "what's your favourite animal?"

And she said "*horses*"

And I said, "that's my favourite too" (Megan).

This interaction could be the setting event for any school-aged friendship story. It marks, however, the beginning of the friendship between Megan, who did not have a disability, and Lucy, a classmate with cerebral palsy who used AAC.

All but one of the friendships in this study began spontaneously, through shared circumstances such as being in the same class. Adult intervention, in the form of a casual buddy program, was responsible for facilitating only one friendship, between Phillip and Joe. All participants described friendships built on a foundation of natural interactions that served to establish and support the relationship. Several features ensured the continuing success of the friendship, including participants' social values, their knowledge of and attitudes towards disability, the perceived rewards and benefits of engaging in these friendships, and the personal characteristics of each friend.

### *Social values and attitudes*

Our data indicates that children's social values and attitudes towards disability can influence

friendship formation. For four of the participants, this friendship was their first encounter with someone who had a disability, and for two, their peer's disability and "difference" was the catalyst for their initial expression of interest: "I asked [my teachers], 'what is this person doing in this wheelchair' and they told me 'it's Thomas, he's disabled'. So I actually became friends like that" (Angela). As well as curiosity, the four younger participants reported initial fear or uncertainty towards their peers who used AAC, and often used the adjectives "weird" and "unusual" to describe these first impressions. These adverse reactions typically decreased as participants became more familiar with their peer's disabilities. The following quote illustrates Megan's journey through these feelings: "[When I first met my friend], I was really freaked out and I don't know what to do... I didn't get her. And then [over time] I've got used to her."

Angela detailed how, after encountering other people with a disability at her father's work, she was better able to understand her friend's disability and needs: "When I met Tom I thought he was only pretending to be in a wheelchair... But then... I met some disabled people there [at my Dad's work], so then I understood why he's in a disabled wheelchair." Despite their familiarity, however, some participants continued to have difficulty with their friend's disability. One participant spoke of how she was still "getting used to" her friend's needs. She recognized how becoming friends with a peer with a disability had a significant impact on her own life, and her feelings about this were mixed. Her confusion can be seen through the following pastiche of quotes:<sup>1</sup>

I was in a different class from her  
 I stayed in my class, all happy in my class  
 And I had lots of friends and everything.  
 Next year... I... she...  
 She is ok, but soon as I said 'hello'  
 Like I know her name but I just got  
 Just like  
 ...Just got to get used to it

The other five participants were more comfortable with their peers' disabilities, even when confronted with particularly challenging aspects of CP such as when a friend dribbled or made loud vocalizations: "I haven't really thought

about it, I'm just so used to it and it's really just, what he does, so. It's part of him" (James). Along with discussing their attitudes about disability, participants also noted a variety of incentives, including the personal qualities of the peer with disability, which motivated their friendships.

### *Motivation for friendship*

All of the participants identified altruism, recognition, and positive feedback from the friend with a disability as motivators. Altruism was a strong feature in the maintenance of Angela's friendship with Thomas: "Because I care about poor people who aren't really walking." Joe's altruism extended to his friend's carers: "I just try to look after him a bit. Well, I try to give his carers a bit of a break." Public recognition and appreciation of students who help their peers provided another incentive. Some participants spoke openly about this. For example, Angela observed that when others see her being "kind" to a child with a disability, they would think "[that] I'm a good girl." Other participants reported that helping their friend made them feel good, or that they received positive feedback from their friend about their helping role. For example, Toby enjoyed it when his friend told him "that I'm a nice boy." Yet not all participants expressed a need to receive recognition: "People... obviously think that you are helping someone out who probably needs it, and that is a good thing... but other than that, I try and do it just without drawing too much attention" (Joe).

### *Personal characteristics*

The personalities and personal situations of the children in this study also provide an insight into their friendship motivations. For the four youngest participants, being friends with a child who used AAC appeared to fill a socio-emotional need such as to care and be cared for. Angela clearly valued the reciprocity in her relationship with Thomas: "He cares about me and I care about him." Similarly, Jessica reflected on her reciprocal attachment with her friend, Lucy, and their dismay at being separated: "Sometimes when we get split up... that probably makes her a bit upset... it doesn't make me feel very good either."

Two of the participants reported that at times they sought the company of their friend who used AAC to alleviate their own loneliness. Megan recounted:

She [friend who uses AAC] didn't really want me to go. And I didn't really want to

go myself. And it's pretty sad 'cause if I didn't want to go myself I would always cry because I don't have any friends at home...

The personal qualities of the students who used AAC also influenced their ability to attract and make friends with non-disabled peers. When asked, participants defined a friendship as having similarities and commonalities with someone, such as liking the same animals and sharing experiences with them (e.g., being in the same class). They also identified friends as people who have preferred personality traits such as being "nice," "funny," or "kind." Later on in their friendship stories, the children attributed many of these same qualities to their peers who used AAC, for example, pro-social behaviour (e.g., "He's just a nice guy.") and engaging personalities (e.g. "funny" and "silly"). Some qualities related specifically to the friend's disability, for example, being skilled at sign language or being able to "overcome" the disability. Said one participant: "...And even behind his disabilities, he's this fun-loving person."

Throughout their friendship stories, the participants also reflected on the characteristics that made them a good friend to someone with a disability. The need for trust, patience, and understanding were strong themes for the older participants. James explained that such understanding includes knowledge of your friend's special needs (e.g., communication needs), as well as his or her abilities and limitations: "Understanding... what you can do and can't do [with them]." They also noted that being a good friend includes interpersonal understanding, such as knowing what is going on in the friend's life. Younger participants emphasized the importance of their roles as helper, carer, and companion for their friend, for example, Toby said: "I play with him and help him with his work." These important roles, combined to make these exceptional friendships stand out from those between children without disability. Yet, participants noted that these friendships differed from others in a number of ways.

### **A "Different" Kind of Friendship?**

As in any friendship, shared experiences and common interests were important for these friends. Even so, the participants identified that having a friend with a disability is a different experience from a friendship with a non-disabled child: "Of course, he's a little different to every other friend. Yeah, it's a different relationship" (Joe). Most of the differences explored in this

study fell into one of four categories: learning, helping, interactions, and shared time.

### ***Learning***

One benefit of being friends with a peer who has a disability is the learning of new skills. In their friendship, Lucy and Jessica used sign language as a primary means of communication. Even though Jessica knew a lot about Lucy's sign language, there was always something new to learn, and Lucy found interesting ways of teaching her friend. Said Jessica: "We have a video camera at home that we use and Lucy was signing weather. Like RAIN and SUN and COLD and WET... She's been teaching me for a while how to sign stuff." Several participants in this study attributed improvements in their own communication skills (e.g., interpretation of body language) to their experience interacting with their friends who use AAC. When asked what he liked about his friendship with Phil, Joe spoke about the valuable life-experience he gains:

I guess if you ever were in a situation in future life, it would be useful... if you wanted to go into a profession of, like, where you help people in disability and stuff, it would be helpful there. Or if you had a colleague [with a disability] in the workforce, it would be useful there.

### ***Interactions***

The roles and nature of interactive pastimes (e.g., chatting, joking, and counselling) were also different within these friendships. Participants reported that talking with their friend who used AAC could often be difficult: "It can get pretty hard to understand her sometimes. Because sometimes it [the device] doesn't say the right words" (Jessica). Other problems that participants identified commonly included the volume or quality of the voice output for high-tech communication devices, the delayed nature of their friend's aided communication, and their own lack of proficiency in AAC (e.g., not understanding their friend's sign language). Adults who are experienced in using AAC have noted these same issues as barriers to satisfactory social interactions with family and friends, and more formal interactions such as job interviews (Allan, 1999). Even so, participants had adapted to their friends' interaction styles and employed a range of strategies to support communication within the friendships. "I don't really get her sign language sometimes so I have to ask Mrs X what she's saying" (Megan).



All of the participants engaged in conversations with their friends about upcoming events and shared interests. Younger students such as Jessica and Lucy also shared secrets such as who they had a crush on or what they wanted to do in the future. Both of the older students expressed concerns that their friends with disabilities would not have life experiences such as employment or intimate relationships, and consequently avoided discussing these topics.

There's some stuff you can't really talk about. Or you just... try and steer clear of the subjects that maybe he is unable to do... just so, I guess, he doesn't feel left out. (Joe)

Another contentious topic was the disability itself. Some participants, such as James, felt that the subject of their friend's disability could be openly discussed: "I certainly don't avoid anything with his disabilities or anything." Angela, on the other hand, perceived her friend's disability as a potentially distressing topic that she avoided mentioning around him, "cause I don't want to make him a bit more sad."

Counselling played a role in four of the friendships; however, James and Joe were the only participants to reflect at length on this aspect of their relationships. Joe shared a reciprocal advice-giving relationship with his friend, Phil; a "debriefing" process that occupied much of their time together: "We usually talk about just what's going on in life..." Other students, such as James, felt uncomfortable discussing their own problems with their friends who used AAC, because they did not share the same life experiences or because, as James reflected, their friends had enough to worry about: "You just feel a bit... 'I'm talking to him about something that is so... irrelevant in the whole scheme of things'."

### ***Shared time***

Participants reported engaging in quieter pastimes such as craft, board games, or TV with their friends who used AAC, rather than active pastimes like sports. Participants frequently celebrated their friends' skills at these activities. For example, James, Joe, and Megan described their friends' prowess at chess: "At school we usually just talk or play chess – he beats me" (James). James reflected on the low-interactive nature of activities like going to the movies, which can provide respite from the communicative challenges and demands of the friendship:

Sort of good. Because you can both just sit there and not have to talk or anything through the movie, but then afterwards you can talk about it and you can sort of tell during the movie sort of what he's thinking.

Participants noted that activities such as sports, chasing, and skipping were harder for their friends to participate in because of their physical disabilities. They also commented on how access barriers limited their friends' social participation. For example, Toby described his friend's difficulty in accessing the sports oval, so that despite being a keen soccer player, "He just watches us." At the time of Toby's second interview, this access barrier had been redressed: "It was hard for Mrs X to wheel him around but she knows how to do it now," said Toby, who was pleased that Thomas could be included in play.

Indeed, all of the participants discussed ways in which they attempted to include their friends in everyday school life, for example, by helping them to play sports and games or participate in social interactions: "We just make sure that everyone is including him and talking to him about what's happening, and if he's not physically actually doing it he's still a part of what's happening..." (James). When a child with a disability could not be included in an activity, participants often spoke of assigning them an alternative role, such as "skipping-rope turner", "cheerleader", or "mascot." Three of the participants felt that their friends were happy in these roles: "I think he just enjoys watching sometimes" (James). Angela, however, disagreed: "I think it's pretty upsetting for him, like he wants to be running like us."

To varying degrees, all of the participants saw their friends outside of school, at parties and sleepovers, or on trips to the movies or shops. This usually necessitated help from parents to negotiate access around stairs and seating and to travel longer distances.

When we went to the theatre there's steps, and Lucy couldn't get up the steps. So my friend's mum took the wheelchair and her mum... took Lucy up the stairs and got her back in the wheelchair... (Jessica).

For four of the participants, catching up with their friends outside of school was "complicated" and "difficult" because their friends needed help with mobility, eating, and toileting. Joe predicted the following difficulties that might prevent Phil from going to parties with school friends:

You'd have to get him transported there. Then you'd have to have ramps or stuff. Or

you'd have to push him around... Then you'd probably have to have to provide food that he could eat, and have to attend to his needs.

Although all of the participants recognized the difficulties that their friend's physical disabilities presented with respect to shared time, they all agreed that it was important to persevere: "It's more difficult to do everyday things, but you can do them still," said Joe. Participants frequently adopted phrases such as "work through it" and "get used to it" in their stories, and focused on the activities that they could, rather than could not, share.

### *Helping*

Caring and helping played a part in all of the friendships explored in this study. Five of the participants reported helping their friends with schoolwork (e.g., colouring in, completing work, and following classroom routines), and four spoke of providing physical assistance (e.g., with mobility, personal care, or mealtimes). The older participants were also conscious of their role as listeners when their friends just wanted to talk.

Another important role for some participants was that of "normalizer":

I just try to help him I think to become, to seem like he's more "normal" (Joe added the quotation marks in the air with his fingers). Well, of course he's normal, he's just you know, try to make it more like a more normal life, like a normal person... without a disability. (Joe)

Joe carried out this normalizing role during shared activities with Phil, for example, ensuring that Phil (who has a gastrostomy tube) could still experience the joys of Teppanyaki with his friends: "I like, put my rice-bowl in front of his face... so the guy threw like, five bowls of rice right in his face! ...That was fun."

A common helping role was mediation between the child with a disability and his or her peers. This often included sub-duties such as translator (facilitating interactions between the child and others) and informant (explaining issues relating to their friend's disability): "People will see me with him and talking to me with him and then afterwards they'd ask sort of different questions..." (James). This is an important role in the face of bullying, for example, which participants noted their friends with disabilities sometimes experienced:

Most of the time it's just usually because they don't know or understand [his disability]... It's good if they're trying to be constructive, like trying to find out something, but then... when they just don't know what they're talking about and just try and laugh at him or whatever it's just annoying... (James).

A related role for James was that of protector, in that he tried to shield his friend from awareness of this social discrimination. "I don't talk to him about sort of, if someone else says stuff about him, I don't want to talk about anything like that."

Each participant experienced the roles of helping and caring differently. Some like Jessica adopted the role of helper or carer readily and enjoyed the experience: "Pretty cool to help." (Jessica). These willing carers tended to be the participants who displayed more altruistic attitudes towards disability overall.

Despite the benefits of peer and public recognition and personal learning experience, being assigned helping responsibilities could sometimes be a daunting experience: "It's just really weird when you have to do things," said Megan, who reflected on these feelings in the following scenario:

If mum's like, 'feed her' or something like that, and I couldn't really do it. ...I just say, 'no, mummy, can you feed her?' 'Cause sometimes she bites me on the finger. So that's why I don't want to do it, in case she bites a finger or something.

Pressure from parents, teachers, and peers to adopt the role of helper were recurring themes throughout some narratives. For example, the following story segment from one of our participants hints at a theme of sacrifice, as though this participant is prioritizing the needs of her friend above her own.

Sometimes like she wants to sit outside with me.

She always wants to sit with me.

And she really wants me to be in with her all the time.

Sometimes I don't want to sit next to her, but she wants me to, so I have to.

However, not all participants found the task of being a designated helper onerous:

It never really bothers me. There are times when I'd prefer to be doing something else, but I do realise that it's for a better cause and I'd probably enjoyed playing with Phil over what I was going to do. (Joe)

Joe described a peer-roster system in place at his school for helping Phillip at lunchtimes: "We have dictated lunchtimes and recesses for most of the people in the house<sup>2</sup> where they have to look after him." While he agreed that some peers might find this compulsory task challenging at first, he identified it as an invaluable learning experience that would help students to become more familiar with and responsible for people with disabilities. "I think everyone realizes that it's their duty as a house member, to help out. And it is a positive experience for a lot of people... It gives them another perspective on life." Joe is highly supportive of this system and instrumental in managing the roster within his house.

Two participants recognized that their helping relationship was not reciprocal, but nonetheless spoke of their peer's contribution to the friendship:

She doesn't really [help me out]. But she draws me pictures... One time she drew me a dolphin in the water, and then she drew some trees in the background. It was really good! (Megan)

James reflected on his friendship in a similar way: "Don't really expect much, just like being with him and talking with him and that." For the remaining participants, the helping relationship with their friend was at least partially reciprocal. For example, Angela helped Thomas with his math on the first day they met. Now, Thomas and his teacher's aide help Angela with division, a math skill that is her weakness but Thomas' strength: "Tom is good at division and I'm not." Similarly, Jessica and Lucy helped each other to manage classroom routines when instructions had been missed: "...And if I don't know what to do, she'll usually tell me what I have to do... She'll type it in her [communication device], like she'll say: "Do this, and if that's too hard, you don't have to do that because we haven't learned it yet." Jessica feels this arrangement is very handy. "She's like my tool box!"

All of the participants in this study described their friendships with peers who used AAC to be fun and rewarding experiences. Most, while aware of the limiting effects of their friend's disability, did not perceive this as a significant barrier to the

friendship. Perhaps, as James suggests, these friendships are not so different after all:

It's just good being friends with him. Sort of [don't] really gain anything from his problems or anything, it's just like being friends with someone else.

### Looking to the Future

All of the participants in this study predicted that their friendships would continue to change and evolve over time. A strong theme for Megan and Jessica was change in the helping relationship as the physical parameters of their relationship changed. For example both predicted that imminent changes in Lucy's independence, such as her transition to a power wheelchair, or the provision of new technology in class, would alter their roles in the friendship. Despite having some concerns, the participants did not feel that they would have a serious impact on the quality of their relationship over the long term: "I think we'll usually stay best friends. 'Cause I know she likes me and I like her" (Jessica).

The older participants predicted change in their friendship as they approached the end of high school:

In three years we won't have the school environment to catch up in. And so we'll have to make further journeys, actually have to put in more effort to see each other... But I think it would all turn out ok in the end. (Joe)

Regardless of predicted challenges and changes, all six participants planned to stay friends with their peer who uses AAC, and looked forward to their friendship continuing to develop in the future.

## DISCUSSION

### Features Influencing Friendship Initiation and Maintenance

Several features that motivated and maintained the friendships were identified in this study, including children's social values and their attitudes towards disability. Such influences have been observed in previous friendship studies (Hall & McGregor, 2000; Staub, 1998). For example, when asked why they chose to spend time with a peer who had a disability, children in Hall and McGregor's study (2000) responded with answers such as "I want to make him happy," and

“...with his disabilities you want to help him.” (p. 121). These personal motives are similar to the altruism we observed in children such as Angela and Joe. Participants in our study recognized the importance of qualities such as understanding and patience within their friendships. Although children who befriend peers with disabilities may already display such character traits, it is possible that their friendship experiences foster these personal qualities. Indeed, parents and teachers interviewed by Staub observed that friendships with peers who had intellectual disabilities had resulted in personal growth (e.g., increased self-esteem and responsibility) for the non-disabled children (Staub, 1998).

The socio-emotional needs of typically developing children can also motivate their friendships with peers who have disabilities. Staub (1998) acknowledged the way in which friendships with children who have moderate or severe intellectual disabilities can fulfil the social and emotional needs of peers without disabilities. In our study, children reported similar benefits to being friends with peers who used AAC, including the alleviation of feelings of loneliness. Although results from small studies such as this cannot be generalized, such observations highlight the benefits that these friendships can yield for children without disabilities in inclusive education settings.

Our participants noted that the personal qualities of their peers who used AAC (e.g., an engaging personality or unique abilities such as sign-language proficiency) were also strong motivators for their friendships. Friends of children with intellectual disabilities have reported liking similar qualities, such as a sense of humour (Staub, 1998) or being fun to play with (Hall & McGregor, 2000; Kishi & Meyer, 1994). Teens with developmental delays have also described these qualities as hallmarks of good friendships (Matheson, Olsen, & Weisner, 2007). In addition, some participants in our study valued external reinforcements and positive feedback from others. Recognizing the contribution that each child makes to these relationships may ensure that the experience remains positive and beneficial for both children in the friendship.

### Characteristics of Friendships

Friendships with children who use AAC present unique learning opportunities for their peers without disabilities. Participants in our study described improvements in their own communication skills, such as interpreting body language and non-verbal communication, as well as the chance to learn about different communication modes (e.g., sign language). Participants'

reflections on these advantages highlight how children in inclusive education settings who use AAC can make positive community contributions when their specialist strengths and skills are acknowledged.

In the study by Salmon (2009), shared time and experiences formed the cornerstone of the relationships. Participants spoke of differences between interactions and shared activities with their friends who used AAC and their peers without disabilities. In our study, pastimes with low communicative demands (e.g., craft, chess) facilitated social contact. However, children who have friendships built only around these pastimes may miss opportunities to engage in conversations and discussions that are important components of close friendships. As seen in our study, adolescents who use AAC may miss out on discussing important issues such as sexuality, intimate relationships, and future career choices with friends, if their needs in these areas go unrecognized or if their peers avoid discussing these topics. Adults with cerebral palsy have similarly reported lacking opportunities for discussion in these areas (Ballin & Balandin, 2007). Appropriately resourced AAC systems that enable the discussion of such topics, along with the provision of disability awareness information to peers, may enable greater access to these conversations by children who use AAC.

Physical access barriers (e.g., inaccessible playing fields), policy barriers (e.g., segregated break times and visiting restrictions), and attitude barriers may exclude children with disabilities from activities in which they could otherwise participate. Such barriers impinge on the social participation of children with disabilities (Mulderij, 1996; Salmon, 2009). Still, stories from participants in the current study, such as Jessica and Joe, demonstrate that friends without disabilities can challenge these barriers, and hence can play an integral role in the inclusion of students with disabilities in mainstream educational and social settings (Helmstetter et al., 1994; Staub, 1998). Identifying and addressing existing barriers in mainstream school settings may further assist in the inclusion, and particularly the social inclusion, of students with disabilities.

Another barrier that can threaten the quality and success of these relationships lies in the external expectations placed on friends without disabilities. The high support needs of students with cerebral palsy who use AAC often tested the boundaries between “friend” and “carer” for participants in this study. Difficulties with adopting a caring role are not isolated to the friends of children who use AAC. Other researchers (e.g., Kishi & Meyer, 1994; Meyer, 2001; Staub, 1998)

have described similar role conflicts in friendships between children with and without intellectual disabilities. In our study, participants who were uncomfortable with their friend's physical disability found physical care tasks such as mealtime assistance and mobility support to be a confronting experience. Consequently, some children may require extra support to manage any negative feelings about their friend's disability. Caution needs to be exercised when assigning helping roles to friends, as it is important to ensure that the friendship remains a positive experience for both children (Meyer, 2001). Careful observation of these friendship dyads may also alert parents and educators if the friend without a disability finds the helping role uncomfortable or arduous.

### **Disability Awareness**

Friendship experiences with children who have disabilities may heighten disability awareness and acceptance (Kishi & Meyer, 1994). Indeed, both the older and younger participants in this study demonstrated early advocacy skills relating to the social and educational inclusion of children with disabilities. For example, they remarked that most of their classmates had insufficient awareness and knowledge of disability. Furthermore, they linked this lack of understanding to issues such as bullying and exclusion (as observed in previous studies of children with physical disabilities (e.g., Lightfoot et al., 1999; Mulderij, 1996; Salmon, 2009), as well as to incidences of inappropriate behaviour involving the child's assistive equipment or technology. Two of the younger participants suggested that disability awareness be included in the mainstream school curriculum, and that school students should be encouraged to ask questions about disability-related issues, thus engendering greater respect at school for fellow students with disabilities. An older participant concurred with the recommendations of Meyer (2001), suggesting that disability information and peer training may support other students to interact positively with classmates who have disabilities. Supporting interactions at school between students and their peers with disabilities may not only promote better disability awareness for children without disabilities but also improve the social outcomes of inclusive education programs for their peers with disabilities (Terpstra & Tamura, 2008).

Despite the high levels of disability awareness demonstrated by participants in this study, early trends are apparent in their friendships that may have negative implications for the independence and social experiences of the peer with a disability. For example, participants reported assisting their friends to talk by typing messages

into their communication device, or by guessing what they are trying to say. Often, participants saw these strategies as being not only helpful but also as a yardstick for how well they knew their friends. These strategies have the potential for misinterpretation and disempowerment. Some adults who use AAC have reported that they dislike this type of support, albeit well intentioned (Allan, 1999; Estrella, 2000). Most friends in this study checked their guesses for accuracy and said that their peer would readily correct them in the case of misunderstanding. Nonetheless, underlying assumptions expressed by these friends (such as "You can sort of tell...what he's thinking") may limit the opportunity of the children who use AAC to express their own thoughts and opinions to and be heard by their peers (Beukelman & Mirenda, 2005). Provision of information and informal communication training is required for all children interacting with peers who use AAC to facilitate the establishment of optimum communication interactions between these children (Beukelman & Mirenda, 2005).

Sympathy poses a similar problem. In this study, attitudes of the participants towards their friends who used AAC varied. Most friends expressed empathy for their friend's situation, showing insight into how children with disabilities may feel when they are excluded from participating in regular school life. This level of insight may create more caring and supportive friendships for children with disabilities. Many students value general understanding from peers regarding their physical disability (Lightfoot et al., 1999). When this understanding manifests as pity, however, children with disabilities may be treated differently. This was evident in the Angela's attitude towards her friend: "I think you need to be very kind with Tom, 'cause he's in a wheelchair." In contrast, celebrating a friend's achievements, such as sign language proficiency, notoriety, and community contributions, may foster more positive attitudes towards children with disabilities (Han, Ostrosky, & Diamond, 2006; Staub, 1998) and further their social inclusion in mainstream education settings.

### **Limitations of This Study and Directions for Future Research**

This study has a number of limitations. Our sample size was small and therefore is restricted in the degree to which results can be generalized (Patton, 2002). Participants were all Anglo-Australians from the dominant culture – middle to upper-middle class backgrounds – and therefore the results do not reflect potential cross-cultural diversity in friendship experiences and perspectives. Recruitment for this study proved challenging, as

few children with severe cerebral palsy who used an SGD could be found within the mainstream education system. As a result, the cohort varied widely in age and was drawn from only three schools. Thus, certain issues unique to one friend or one educational program may have been over-represented. The current study does improve somewhat upon previous friendship studies (e.g. Hall & McGregor, 2000; Staub, 1998), where participants were drawn from a single school.

In this study, we did not investigate the views or experiences of the friends who used AAC, as interviews with these children fell beyond the scope of the project. Examination of these perspectives may have painted a different picture of the relationships and added new dimensions to our understanding of friendship between children who use natural speech and their peers who use AAC. This is an important area to be explored in future research.

Other areas identified in this study that warrant future investigation include the impact of disability awareness and education on the initiation and continuing stability of these friendships, changes in friendship experiences across major transition periods (for example when children with disabilities finish school), and an examination of the long-term outcomes of these friendships. Future research may reveal which factors contribute to children with disabilities forming successful and meaningful friendships with their peers.

## CONCLUSION

Through their stories, the children in this study have identified that friendships with peers who use AAC are enjoyable, rewarding, and beneficial experiences. Although these friendships often entail additional responsibilities for peers without disabilities, they can also generate learning opportunities and facilitate personal growth. This study has implications for current practice, including the importance of:

- Celebrating the strengths and skills of students who use AAC;
- Recognizing the contributions that children with and without disabilities bring to a friendship and supporting reciprocity in these relationships;
- Equipping students with AAC systems that enable them to meet age-appropriate social communication requirements;
- Providing students who use AAC with opportunities to discuss issues such as sexuality, relationships, and future aspirations with peers or support workers;
- Identifying access and policy barriers to shared time with friends;
- Using caution when assigning helping roles to friends; and
- Monitoring friendships for signs of tension around these roles.

Recognizing and tackling these common pitfalls may help to ensure that the friendship remains a positive experience for both children. Finally, providing information to increase awareness about children with disabilities and skillfully supporting their initial interactions with peers who use AAC, may promote more of these valuable friendships within inclusive educational settings.

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## Notes

1. This passage was parsed into these particular stanzas to reflect the participant's prosody. The way it reads, with the line breaks, is exactly as the participant said it – hesitantly and almost with reluctance.
2. In many Australian schools, students are assigned to a group, or "house", while they are in school. There are inter-house sporting events, debates, and other activities.

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## APPENDIX

### Interview Topic Starters

- What makes a friend?
- Tell me about [your friend].
- How did you and [friend] become friends?
- What's it like being friends with someone who uses a wheelchair to get around, and a computer to help them talk?
- Can you tell me what's good about it?
- Is there anything difficult about it?
- What do you think makes a good friend to someone who uses a wheelchair and a talker?
- What sorts of activities do you do together?
- What do you talk about?
- Are there times when you help each other out with things?
- Do you think your friendship will change over time?