

**Exploring Experiences of Friendship in Girls and Young Women with High Functioning
Autism Spectrum Disorder**

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Abstract

There is an increasing amount of research focusing on the experiences of girls and young women with ASD, including HFASD, particularly in relation to their social interactions and friendships. However, there remains a lack of research considering the developmental aspects of friendships for this group, despite the fact that girls with ASD are known to experience difficulty in forming and maintaining friendships due to impaired social skills. Research shows that friendships increase in complexity over late childhood and adolescence, however the nature of this potential trajectory for girls and young women with ASD is unknown. Further, it is unclear whether differences in friendship complexity and experience over development may affect what support is most useful during certain developmental periods. This study aimed to explore the friendship experiences and social support needs of girls and young women with HFASD during two distinct developmental periods - childhood and adolescence. Fourteen participants (seven young women with HFASD and seven parents) were interviewed. Data were analysed using thematic analysis, and the results of the two participant groups were triangulated. Results indicated that older girls with HFASD experience unique friendship and social interaction challenges in adolescence and thus require more tailored support to meet those needs. Further support for social skill development and transitions in schools is also needed, as are social groups which address specific needs of girls with HFASD. Future research should look to explore more developmentally appropriate support options for girls with HFASD during childhood and adolescence.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

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Chapter 1

Introduction

1.1 Overview

Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterised by difficulties in social communication and interaction, as well as repetitive, restricted patterns of behaviour (American Psychiatric Association, 2013). Literature on children and adolescents with ASD is extensive, but skewed towards experiences of boys, as samples of girls are often small or missing entirely in studies (Mandy et al., 2012). Recent literature has indicated experiences of males and females with ASD differ (Peters & Brooks, 2016), and thus, further research is needed on females with ASD.

Young people with ASD are also known to experience difficulties with regard to social interaction and friendships (Cage, Bird, & Pellicano, 2016), which is concerning as friendships affect wellbeing and social skill development in neurotypical children (Glick & Rose, 2011). Previous research has investigated whether friendship experiences of children with ASD differ to neurotypical children across development (Petrina, Carter, & Stephenson, 2014), but less research is available on gender differences, and specifically female experiences.

Furthermore, social skill interventions are commonly used in teaching appropriate social and friendship skills to children with ASD (Jamison & Schuttler, 2017), but research has been undertaken in predominantly male samples (Gates, Kang, & Lerner, 2017). There is therefore a need to consider whether girls with ASD require more specialised support than is currently available.

This study aimed to consider friendship experiences of girls and young women with ASD (with a focus on those considered high functioning) in childhood and adolescence, and to determine which social supports would be most beneficial for them.

1.2 Autism Spectrum Disorder

As noted above, ASD affects social communication and interaction (APA, 2013). Common social challenges for individuals with ASD include understanding social and emotional cues (Lord, 1990), and non-literal language (Martin & McDonald, 2004), and engaging in social reciprocity (Petrina et al., 2014). Executive functioning and Theory of Mind skills impairments also occur (Hill, 2006; Frith, Happé, & Siddons, 1994). Common co-morbidities include anxiety, depression, intellectual disability, obsessive-compulsive disorder (OCD), and epilepsy (Mazzone, Ruta, & Reale, 2012; Mpaka et al., 2016). Manifestations of ASD associated characteristics can vary in nature and severity between individuals (Barbaro & Dissanayake, 2009). Higher functioning individuals with ASD tend to have more advanced verbal and social skills, and a higher level of intelligence (Attwood, 2006; Tsatsanis & Powell, 2014). In this thesis, the term ASD will refer to the entire spectrum, while HFASD will refer to higher functioning individuals on the spectrum.

1.2.1 Prevalence of ASD and gender difference in prevalence.

The World Health Organisation (2017) estimates 1 in 160 children worldwide has ASD. The prevalence of HFASD is unknown, as in the current Diagnostic and Statistical Manual of Mental Disorders (DSM-V), there are no diagnostic criteria to differentiate high functioning ASD from other presentations of ASD.

There are gender differences in the prevalence of ASD worldwide, with a commonly reported ratio of 4:1, boys to girls (Loomes, Hull, & Mandy, 2017). Several theories attempt to explain the gender difference in ASD prevalence. One theory relevant to this study concerns gender-based socialisation. From birth, children are socialised differently based on sex, and are typically actively taught appropriate “roles, behaviours, activities, and attributes” (Lai, Lombardo, Auyeung, Chakrabarti, & Baron-Cohen, 2015, p. 11). For example, girls may be expected to be more social and empathetic (Lai et al., 2015), thus impelling girls with

ASD who struggle with such skills to work harder to learn and exhibit these traits. This may explain why girls with ASD appear to have superior techniques (e.g. masking and mimicking) for disguising their social difficulties (Kirkovski, Enticott, & Fitzgerald, 2013). Therefore, according to gender-based socialisation theories, it is likely that presentation of ASD will differ across genders. Assessing such theories is difficult since the preponderance of ASD research is based on male samples (Lai et al., 2015). Thus, current diagnostic criteria for ASD may be based on a male presentation of ASD symptomatology (Lai et al., 2015).

1.3 Friendships in neurotypical children

Friendships are an important part of childhood and adolescent development, with good friendships building self-esteem, furthering social skill development and offering support (Hartup & Stevens, 1999). Friendships are defined as voluntary, mutual and reciprocal dyadic relationships that tend to occur between people of similar age (Finke, 2016). Friendships may be based on many shared characteristics, including interests and experiences (Hartup & Stevens, 1999). In addition, intimacy, mutuality, equality, companionship, reciprocity and stability are considered to be important aspects of friendship (Hartup & Stevens, 1999; Nicholaisen & Thorsen, 2017).

1.3.1 Developmental changes in friendships of neurotypical children.

Friendships evolve during childhood and adolescence, with the concept of ‘friend’ becoming salient in early childhood and increasing in complexity thereafter (Hartup & Stevens, 1999). Friendships in early stages of development are identified through time spent together (Hartup & Stevens, 1999), and proximity is considered important (Bagwell & Schmidt, 2011). Children tend to have fewer friends in early and middle childhood (Hartup & Stevens, 1999), but these developmental stages are especially important for developing social and emotional skills (Linsey & Colwell, 2003).

During adolescence, friendships become central to development as adolescents become more independent (Kohler Flynn, Felmlee, & Conger, 2017). Adolescent friendships are a source of social and emotional support (Wilkinson, 2010), but can also pose issues such as peer pressure (Sherman, De Vries, & Lansford, 2000), in part due to the focus on peer group membership informing social identity during adolescence (Newman, 1982). Use of social media plays a crucial role in adolescent friendships and peer groups, allowing greater connection between friends and peers, and facilitating consolidation of social identities (Barker, 2009). However, social media use has also been associated with rise of cyberbullying, which can have significant negative effects on mental health (Garett, Lord, & Young, 2016).

1.3.2 Friendship and the role of gender.

There are gender differences in friendships across childhood and adolescence. During early and middle childhood, girls typically have fewer friends and close dyadic relationships, while boys favour interaction in larger groups (Markovits, Benenson, & Dolenzky, 2001). However, by adolescence, the pattern has reversed (Hartup & Stevens, 1999).

Friendships also become segregated by gender around the age of four or five, so that older children are more likely to have same-gender friends (Maccoby & Jacklin, 1987). This has in part been attributed to socialisation factors such as those discussed above in Section 1.2.1 (Martin, Fabes, Hanish, Leonard, & Dinella, 2011). Gender-segregation in friendships leads to development of stereotypical gendered behaviours and attitudes (Martin, Fabes, & Hanish, 2014), which continue into adolescence (Ko & Buskens, 2011).

1.4 Friendships in children with ASD

As with neurotypical children, children with ASD also tend to have friendships based around shared interests (Cage et al., 2016), and experiences (e.g. disability) (Petrina et al., 2014), and are likely to prefer friendships with children of the same gender (Dean et al.,

2014). However, Petrina and colleagues' (2014) review found that compared to neurotypical children, children with ASD have friendships of shorter duration, and they have less frequent contact with their friends.

A systematic review of 24 studies including children aged five to 18 with ASD revealed that children and adolescents with ASD tend to have fewer friends than neurotypical peers (Petrina et al., 2014). However, Calder, Hill, & Pellicano's (2012) study suggests that children with ASD may be satisfied with fewer friendships because they have less motivation to make more friends, and their existing friendships fulfil their needs.

Petrina and colleagues' (2014) review found children with ASD experience lower friendship quality than neurotypical peers, specifically with regard to companionship, closeness, intimacy, and help. An American study of 10 boys aged 13 to 19 with ASD in America linked lower friendship quality, reduced motivation for friendships, and social skill deficits with loneliness in adolescents with ASD (Berns, 2016). Friendships in children with ASD also differ to those of neurotypical children in relation to reciprocity, with a review indicating children and adolescents with ASD have lower levels of reciprocity in their friendships than do their neurotypical peers (Petrina et al., 2014).

According to 192 parents of children aged five to 21 with ASD (15% girls), bullying and victimisation of children and adolescents with ASD is common (Cappadocia, Weiss, & Pepler, 2012). Another study of adolescents (including 44 adolescents with ASD) in America, found adolescents with ASD experienced more frequent victimisation than their typically developing peers (Zeedyk, Rodriguez, Tipton, Baker, & Blacher, 2014).

In summary, children with ASD's friendships show similarities to those of neurotypical children, however there are some differences around friendship quality, reciprocity, and bullying.

1.4.1 Developmental aspects of friendships in children with ASD.

With regard to developmental differences across childhood and adolescence, one study of children aged eight to 12, indicated perceived friendship quality is higher in childhood than adolescence (Bauminger, Solomon, Aviezer, Heung, Gazit et al., 2008). In addition, a review found that age of children with ASD is negatively correlated with degree of friendship reciprocity, indicating that older children may be less likely to experience reciprocal friendships (Petrina et al., 2014).

One study on 12 adolescents with ASD (including one girl) in England also found forming and maintaining friendships was difficult due to the social rules (Cage et al., 2016), which become more complex in adolescence. Another study of 11 adolescents aged 11 to 15 with HFASD (3 girls) in Japan found anxiety about friendship retainment and contributing to group conversations to be common in adolescents with ASD (Sumiya et al., 2018).

Several studies have also investigated victimisation and bullying over development in children with ASD. Little's (2002) study of 411 mothers' perceptions on victimisation in children aged four to 17 (18% girls) found physical bullying experiences were more common for children with Asperger's Syndrome during early childhood, with verbal relational types of bullying becoming more prevalent in late childhood and adolescence. Sreckovic, Brunsting, & Able (2014) believe that the increase in verbal relational bullying is due to the development of more advanced social skills, similar to neurotypical children. Sreckovic and colleagues' review also suggested bullying and victimisation of children with ASD is more likely to occur during late childhood and adolescence.

1.4.2 Gender differences in friendship of children with ASD.

Research has shown there are differences in the friendships of boys and girls with ASD (Dean et al., 2014). Conversations differ, with girls using more complex language (Goddard, Dritschel, Robinson, & Howlin, 2014), and engaging in 'girl talk', while boys tend

to discuss hobbies, actions and objects (Sedgewick et al., 2016, p. 1302). Again, gender-based socialisation may play a role here.

Dean and colleagues' (2014) study of elementary school aged children in America (25 girls with ASD), found girls with ASD reported more friendships than boys. Sedgewick and colleagues' (2016) study adolescents aged 12 to 16 (including 13 girls with ASD) reported social motivation was greater in adolescent girls with ASD than adolescent boys, with boys expressing less interest in friendships. Sedgewick and colleagues also found boys with ASD reported less intimacy in their friendships, and girls had better friendship quality overall, which may be explained by either their greater social motivation, or by societally prescribed gender roles.

In contrast, research focusing on friendships of girls with ASD, and specifically HFASD over development, is limited. Masking and mimicking have been shown to be consistently used as tools to allow girls with HFASD to fit in during childhood and adolescence (Tierney et al., 2016; Tsirgiotis, 2016). However, a number of unique challenges for adolescent girls with HFASD have been identified. Firstly, non-verbalised changes in social expectations and rules may be difficult for adolescent girls with HFASD to understand (Tierney et al., 2016). The increased complexity of friendships during adolescence also complicates forming and maintaining friendships for these girls (Cridland et al., 2014). Changing interests in peers and friendship groups can cause difficulty (Tierney et al., 2016). Transitioning to high school has also been identified as a problematic period for adolescent girls with HFASD, due to increased demand on social and communicational skills, as well as increased sensory difficulty in a larger school environment (Cridland et al., 2014; Tierney et al., 2016). Lastly, mental health may be affected in adolescence due to greater social difficulties, with increased risk of clinical anxiety or depression (Tierney et al., 2016).

1.5 Social supports for friendships in children with ASD

Social supports for children and adolescents with ASD are well researched, with most research focusing on specific social skill interventions (Ke, Whalon, & Yun, 2018), which are designed to improve skills such as perspective taking (Finke, 2016). Appropriate social support can improve wellbeing and social competence in individuals with ASD (Bottema-Butel, Park, & Kim, 2017).

It is less clear what social support is most useful for friendships. Finke (2016) found fewer studies targeting aspects of friendship. While some skills overlap between social and friendship skill interventions, others were unique to friendship interventions, such as social network expansion, and use of electronic communication for maintaining contact (Finke, 2016). Although friendship skills intervention studies generally showed skill improvement in participants, interventions did not seem to improve friendship outcomes in the long term (Finke, 2016).

Moreover, there has been little research on social supports specific to the friendship needs of girls with HFASD, with only one intervention found to target adolescent girls with ASD (Jamison & Schuttler, 2017). As indicated earlier, differences in socialisation and social expectations may lead to gender-socialised behaviours and roles, so girls with HFASD may encounter different social difficulties and experiences to boys (Peters & Brooks, 2016). Thus, it is crucial to learn more about what unique social challenges girls with HFASD face, and what support is most helpful for addressing these difficulties.

1.6 The current study

As demonstrated above, literature directly considering girls with HFASD's experiences of friendship over childhood and adolescence is lacking. Research has shown that younger children with ASD have different friendship experiences and challenges to older children (e.g. Bauminger, Solomon, Aviezer, Heung, Gazit et al., 2008), but findings are often

skewed to boys' experiences (Tierney et al., 2016). Researchers have explored girls with HFASD's experiences of friendship in either childhood or adolescence (Tsirgiotis, 2016; Tierney et al., 2016), but have not directly considered differences between experiences in childhood and adolescence. Finally, social supports for children with ASD have been extensively researched (Finke, 2016), but there is less research on which supports assist friendships, and how gender affects support needs (Gates et al., 2017).

Therefore, the two aims of this study were to explore friendship experiences of girls and young women with HFASD over development and investigate what social supports were most useful for friendships of girls with HFASD. The research questions were:

1. What are the experiences of friendship of girls and young women with HFASD during childhood compared to adolescence?
2. What social supports are most useful for girls and young women with HFASD for their friendships?

Chapter 2

Method

2.1 Participants

Two groups of participants were invited to participate in the study: young women with HFASD, and their parents or legal guardians. Young women with HFASD were eligible if they were between 16 and 25 years old and had been diagnosed with ASD at least 12 months prior to recruitment. Parent or legal guardian consent was required for all young women under 18 years of age to participate. Parents were eligible if their daughter was between 16 and 25 years old and had been diagnosed with ASD at least 12 months prior to recruitment. Diagnosis of ASD at least 12 months prior to recruitment was stipulated so participants would have had time to consider how ASD has affected their friendships, and also to reduce the likelihood that participants would experience distress due to a recent diagnosis. Participants were required to be fluent in English, and HFASD was specified in order to ensure that the young women would have the verbal fluency to share their experiences. Researchers relied on the young women's and parents' understanding of ASD and levels of functioning to identify high functioning ASD, and this included specific diagnoses of Asperger's Syndrome under the DSM-IV diagnostic criteria. Summaries of young women and parent characteristics are provided in Table 1 and 2, respectively. Pseudonyms have been used for all participants.

A total of 14 interviews were conducted. Seven parents (all mothers), and seven young women with HFASD were interviewed. There were four instances where both a parent and their daughter agreed to participate in the study, leading to mother-daughter dyads (Melissa and Julia, Amanda and Charlotte, Sarah and Madeline, and Laura and Isabella). The rest of the participants were not related.

Table 1

Participant Characteristics for Young Women (N=7)

Participant's pseudonym	Age	Age at diagnosis
██████	16	11
██████	16	4
███	22	10
██████	15	10
███	25	20
██████	17	12
██████	18	18
	<i>M</i> = 18.43	<i>M</i> = 12.14
	<i>SD</i> = 3.69	<i>SD</i> = 5.37

Table 2

Participant Characteristics for Parents (N=7)

Participant's pseudonym	Daughter's pseudonym	Daughter's age	Daughter's age at diagnosis
██████	██████	22	10
██████	██████	16	11
██████	██████	23	Unavailable ^a
██████	██████	16	4
██████	██████	15	10
██████	██████	15	8
██████	██████	18	16
		<i>M</i> = 17.86	<i>M</i> = 9.83
		<i>SD</i> = 3.34	<i>SD</i> = 3.92

* *Young woman also participated directly in the study.*

^a *Parent did not have an official diagnosis for daughter's ASD.*

The experiences of a total of 10 young women were discussed in the study, including seven young women who were directly interviewed, and an additional three who were discussed by their parents but did not participate themselves. In instances where parent-daughter dyads did not occur, there was a variety of reasons for the other individual not participating, including ethical concerns relating to mental health and practical concerns regarding availability. The 10 young women ranged from 15 to 25 years old ($M = 18.5$, $SD = 3.57$). One young woman aged 15 was interviewed (with ethics clearance), while two parents discussed experiences of their 15-year-old daughters. The young women were included despite being under 16 (which was the original inclusion criteria) because both young women's 16th birthdays fell within the year of research collection. One young woman who was diagnosed less than 12 months prior to the interview was included, as she stated that she knew of her ASD for a number of years before receiving her official diagnosis. Finally, one young woman discussed by her mother lacked an official ASD diagnosis, however her mother had other male children with formally diagnosed ASD and thus, the researchers judged that she could accurately recognise and describe her daughter's HFASD.

Of the seven young women who participated in interviews themselves, four attended (or had attended) either a public or private 'mainstream' school during their primary and secondary education, two young women experienced a combination of home-schooling and mainstream schooling, while one young woman was entirely home-schooled. The three young women who were home-schooled were all enrolled in distance education for their later years of secondary education. The remaining three of the 10 young women were discussed by parents in interviews, and had attended either mainstream schools, or a mixture of mainstream schools, and distance education.

Nine of the 10 young women discussed had identified co-morbidities. These included depression, anxiety, social anxiety disorder, stress, PTSD, psychosis, sensory integration disorder, auditory processing disorder, intellectual disability, epilepsy, cerebral palsy, congenital hyperthyroid syndrome, dyslexia, polycystic ovarian syndrome, anaemia, scoliosis, self-harm and suicidal tendencies. Individual co-morbidities were not linked with participants due to privacy concerns, as in some cases, specific co-morbidities would enable participant identification.

2.2 Procedure

Ethical approval was granted by the University of Adelaide's Human Research Ethics Committee on April 10, 2018 (H-2018-065). An advertisement (Appendix A) was distributed to independent schools (since due to time constraints, ethics approval could not be obtained to advertise to schools within the public education system), ASD support organisations (e.g. Autism SA and Novita Children's Services), and social media support groups. Thirteen independent schools located within 20 kilometres of metropolitan Adelaide were contacted and asked to distribute the advertisement. Nine of the thirteen schools responded (69%), and three schools distributed the advertisement (the remaining six responded to say they did not have students who met the inclusion criteria). In addition to this, passive snowballing was used.

All participants provided informed consent for the interview (see Appendix B and C for Information Sheet and Consent Form). Two interviews with parents were conducted via telephone, while all other interviews were face-to-face. Interviews were conducted from May to July 2018 and ranged from 11 to 115 minutes long ($M = 49$ minutes, $SD = 26.61$ minutes). The 11-minute interview was a pilot interview undertaken with a young woman whose responses

lacked depth, suggesting a need for additional probing questions in subsequent interviews. While short in length, the interview was included as the data gained was relevant and useful.

The exploratory nature of the study led to researcher's use of semi-structured interviews to allow for a more flexible approach where researcher and participants could diverge from the interview schedule to explore other areas relevant to the research or participants' experiences. A semi-structured interview schedule for both groups was developed based on key previous research on friendships of girls with ASD as outlined in Chapter One (e.g. Tsirgiotis, 2016; Vine Foggo & Webster, 2017). Open-ended questions explored young women's experiences of friendship during childhood and adolescence, and experiences of friendship support, with parents asked additional questions about differences between boys and girls with ASD, and younger and older girls with ASD (see Appendix D for full interview schedules).

Initially, two pilot interviews were conducted with the first parent and first young woman participants. The parent pilot participant noted interview questions were worded around experiences of friendship specifically in primary and high school (as these contexts were initially thought to provide a lens into friendship experiences across developmental stages), instead of simply asking about childhood and adolescence specifically. In response, researchers adjusted the interview questions to ask about childhood and adolescent friendships. As noted earlier, the first young woman participant lacked depth in her responses to interview questions, so researchers modified the interview schedule, adding further probing questions to elicit richer responses from subsequent participants.

The initial aim for interview participant numbers was to reach data saturation, which occurs when collection of new data ceases to generate new information or themes (Guest, Bunce, & Johnson, 2006). However, there was considerable diversity of the sample with regard to

schooling and support experiences, and thus, data saturation was not reached. Nevertheless, every individual who expressed interest in participating within the timeframe of the research was interviewed.

All interviews were transcribed using an orthographic, verbatim method which captures both conversation and nonverbal cues (Braun & Clarke, 2006). Following transcription, names and identifying features were removed from all transcripts and each participant was assigned a pseudonym to protect their identity.

Triangulation, the gathering of information from two or more sources, was used in order to increase credibility and quality of research conclusions (Stoker, 2011). Identifying commonalities in data across different sources is an indicator of the validity of research findings (Bloor, 2001). As such, both young women with HFASD, and parents were recruited, allowing for comparison of their data.

Finally, self-reflexivity was considered to provide further evidence of credibility to the research findings. Self-reflexivity refers to consideration of how the researchers themselves can impact on the findings through their research decisions, and strengths and shortcomings in the area of research (Tracy, 2010). The researcher (CY) has not worked with adolescent girls or young women with ASD prior to this study and has limited experience with children with ASD in general. Furthermore, as the researcher is not a person with ASD, her lack of personal understanding of ASD may have influenced the wording of interview questions and thus, participants' responses, as well as data analysis.

2.3 Analysis

Analysis of interview data was conducted within a realist framework, which reports on the participant's reality, experiences and meanings directly (Braun & Clarke, 2006). Sequential

analysis, the process in which data from each interview guides the next interview, was undertaken during the data collection phase (Pope, Ziebland, & Mays, 2000).

Thematic analysis (TA) was the approach selected to analyse the data. TA is an analytic approach that looks for “patterns of meaning” or themes in qualitative data, aiming to extract rich and meaningful information from data (Clarke & Braun, 2017, p. 297). Themes are seen to capture information from data that is relevant and important to the research question, rather than simply prevalent or recurring information within the data (Braun & Clarke, 2006). TA is a flexible approach that elicits a rich and detailed narrative of the data (Braun & Clarke, 2006). TA is appropriate for analysing smaller samples, as well as samples that are heterogeneous in nature - for example, in this study through experiences of schooling and friendships (Clarke & Braun, 2017). An inductive approach to TA was undertaken to identify themes from the data itself and gain a richer description of the data (Braun & Clarke, 2006).

Braun and Clarke’s six-step guide to TA (2006) was utilised to improve the rigour of the analytic process. Data familiarisation was accomplished through transcription, checking, and reviewing of the interview data by the first researcher. Initial codes were then generated from transcripts, each containing a single, basic unit of data that was meaningful and relevant to the research area. These initial codes and their relevant extracts were subsequently grouped in preliminary themes and sub-themes, and then rigorously reviewed, resulting in the removal, collapse or separation of themes to ensure that final themes were relevant and meaningful, and told a coherent story. Finally, themes were defined and named, and the most ‘vivid’ extracts illustrating themes selected for inclusion in the final report of results (Braun & Clarke, 2006). This analytic process was recursive, involving movement between the different stages of analysis

as required (Braun & Clarke, 2006). Themes were also cross-checked with the second researcher (CD) to improve credibility of the study findings.

Chapter 3

Results

3.1 Themes

The results were divided into three sections, with a total of 11 themes. Section 3.2 outlines themes related to the first research question, specifically, experiences related to social interaction and friendship across genders and developmental stages, with a focus on girls and young women with HFASD's experiences. With regard to the second research question, responses were organised around factors that hindered or supported friendships in girls with HFASD over childhood and adolescence. As such, section 3.3 deals with barriers to, and section 3.4, facilitators for friendship formation and maintenance. Specific themes are laid out in the relevant sections below.

3.2 Experiences related to social interaction in children and adolescents with HFASD

Two themes relating to experiences of social interaction in children and adolescents with HFASD were identified: gender differences in experiences and expectations of children with HFASD, and developmental impacts on experiences of girls with HFASD.

3.2.1 Girls with HFASD may face greater social expectations and are more adept at coping than boys.

Both participant groups discussed the differences in societal expectations and coping mechanisms between boys and girls with HFASD. Participants argued that society places greater expectations on girls to behave appropriately. ■■■ (young woman) explained:

I think a lot of the challenges with girls come along with being socialised in a certain way [...] having to conceal more, because you know, women are told not to get hysterical, conceal your emotions [...] sit still, be quiet, be a good girl, whereas if a boy

was maybe stimming (self-stimulatory behaviour) in the same way, they wouldn't face the same kind of backlash. (Lines 694-701).

Furthermore, ██████ (parent) believed that this disparity around acceptable behaviour continued into adolescence:

I've got nephews and when they went through teenage years, we say, well you know, well they're speaking 'grunt' for the next three years and you know, [...] it's more acceptable, but if a girl was to speak 'grunt', there would be way more comment made, way more judgement on her, so I think that's, that the pressure is so much higher to conform to social expectations. (Lines 573-577).

Girls with HFASD tended to internalise their emotions more during social situations such as school and wait until reaching a safe environment before releasing emotions, whereas boys did not have the same imperative to hide their feelings. ██████ (parent) described this:

She held everything in, she was really good at school, and then she'd get home, and things would just, you know, go a bit haywire, [...] it had to come out somewhere, it wasn't coming out at school, because she knew she had to be a good girl at school, yeah, so it came out at home. (Lines 258-265).

This internalisation of emotions was described as a result of using techniques of mimicking and masking:

They've got this sort of like very self-protective thing where they're putting up this front, (she) is always putting up this mask, that she's okay, that she's coping, that she's doing fine. (██████ parent, lines 424-426).

They mimic social behaviours, they're much better at doing that than boys, and so they seem to fit in but it's not until you, you know, you scratch a bit more, you see that they are just like copying everybody else around them. (██████ parent, lines 154-156).

These coping mechanisms were used by both girls and boys, but girls were seen as more adept.

In summary, as one parent said, girls with HFASD “fly under the radar a little bit more (than boys)” (Melissa, parent, line 250), as they develop more advanced coping mechanisms to allow them to conform to society’s expectations of girls and fit in socially.

3.2.2 Adolescent girls with HFASD may encounter unique social and friendship difficulties compared to younger girls.

Parents identified several key differences between the girls’ experiences during childhood and adolescence. Firstly, self-awareness of ASD traits and social difficulties increased over late childhood and adolescence, leading to increased self-consciousness and friendship difficulty:

I think the younger ones just (.) mostly, will be themselves, [...] I think it gets to a stage where at about grade four or grade five, maybe, when you start realising, yeah I am different, I do like different things, you know, that that I think that's when the change starts, and they start to become more self-conscious about what they do and what they say, and you know, they're really wanting to be friends with people but don't know how. (██████ parent, lines 307-311).

During late childhood and early adolescence, friendship activities also changed, with a greater focus on conversation. Girls struggled with the group conversational skills required for friendships in adolescence:

Girls, you know, they're sitting down having conversations about things that happened on the weekend, what they've done, and you've gotta learn how to take turns with that, and listening, and knowing when to jump in, [...] but I think for her, she just, trying to work out when to enter into the conversation. (██████ parent, Lines 136-142).

Girls also experienced difficulty moving on from childhood interests to more age-appropriate areas of interest in adolescence:

With older girls, like Isabella would still love to play with the Pet Shops, but she's, I think she's tried to resist herself now, and they're in boxes [...] she knows she shouldn't talk about it too much. (██████ parent, lines 279-281).

Furthermore, adolescent girls with HFASD faced other problems such as subtle and complex changes in social rules. ████████ (parent) highlighted the difficulty that girls with HFASD experience in attempting to comprehend these changes to rules:

So for younger girls, you know, again, things are more concrete, there's a lot more right and wrong, [...] there's rules about touching people and not touching people, and there's rules about speaking to people, looking at people, [...] how you look after your friendships, and then when you, when you hit those adolescent years, those lines all get crossed, all of the time, and the subtleties of when it's okay to cross those lines, and how to cross, how it's okay, are really, really hard to manage. (Lines 582-587).

Puberty-related changes and romantic relationships were also difficult areas for adolescent girls with HFASD. Girls struggled to self-manage their personal hygiene and found romantic relationships to be a difficult area to navigate:

And there's the whole like relationship things that get thrown in there, and she's still not (ready), you know, still figuring all that stuff out. (██████ parent, lines 156-157).

In summary, parents highlighted that changes in self-awareness, friendship structures and social expectations associated with development were challenging for girls with HFASD.

3.3 Barriers to friendship formation and maintenance over childhood and adolescence in girls with HFASD

Four themes were identified around barriers to friendship formation and maintenance during young women with HFASD's childhood, adolescence, and young adulthood. These related to transitions, friendship conflict and bullying, lack of appropriate social groups for girls with HFASD, and anxiety.

3.3.1 Transitions may cause loss of friendship and complicate friendship development.

Transitions to new environments in a variety of contexts – including school - were regarded as often difficult periods for young women with HFASD with regard to friendships. During transitions, some young women lost close friendships:

She's lost contact with some of the friends that she had, because she went from middle school to senior school, so they're back in middle school so, and she was, she was friends with, quite a few, quite a bit younger kids so, but I think they've lost contact a little bit.

(██████ parent, Lines 241-244).

Particular transitions were more difficult for girls with HFASD, depending on the how close children's friendships already were at new schools or locations. ████████ (parent) explained:

One of the other problems [...] see ████████ went to one school for Reception to grade 3, and then started a different school in grade 4, which was probably at the wrong time, age-wise and friendship-group-wise, because all the kids that were at the new school already

had their own group of friends because they'd been going there since Reception. (Lines 468-472).

However, transitions didn't always lead to negative outcomes. For example, when moving schools was related to conflict or bullying, participants sometimes wanted to transition as it allowed them to start anew. In addition, the difficulty of transitioning to new environments could be eased if the girls already knew one other person in the new environment:

(Amelia and another girl from kindergarten) went to the same school after kindy, so that was good and they kind of saw each other as friends. (██████ parent, lines 60-62).

Similarly, transitions were eased when young women retained friends outside school in other groups, such as church groups. Church-based friendships were important for some girls in ensuring that despite difficult school transitions, at least one friendship group remained stable:

The primary school, [...] which was a really small school, to (the high school), which is like thousands of, thousands of people, so yeah, which is probably why her little group of friends at church were so important because they were just always there every Sunday, and they just accepted her. (██████ parent, lines 473-476).

3.3.1.1 Transitions between educational institutions and levels can be difficult.

Parents perceived that the initial transition to primary school from kindergarten as difficult for girls with HFASD and noted that moving with friends affected their experiences. For example:

We found a kindy (.) that actually only had 12 students in the entire kindy, and like 3 teachers and she loved it because there were some little, some quirky little kids there, so when we, a lot of those kids then went to the local primary school, which was our local

primary school, but then my husband said no, so then, so she had trouble at (primary school) making friends. (██████████ parent, lines 83-87).

Similarly, transitioning to high school was sometimes difficult and could complicate friendship maintenance:

(Julia's best friend) went to the same school, but they weren't in the same class, so that was a bit tricky because (she) then started making friends with kids in her home group and Julia didn't. (██████████ parent, Lines 127-129).

University transitions also presented new friendship problems for young women.

Participants indicated that they lost regular contact with adolescent friends. ██████████ (young woman) remembered having few friends in early university years:

I think I, at the point which I had probably the fewest friends was when I went to university, which was when I was 18 or 19, whatever, because at that point, I had sort of left behind almost all of my adolescent friends, and then I think, probably then I felt a bit lonely and yeah I didn't have many friends. (Lines 455-459).

In addition, the size of a university course cohort or faculty also played a role in friendship formation and maintenance. Larger cohorts and faculties were problematic for getting to know other people, and prevented friendship development:

Especially if you're in a large faculty, you're not going to make friends, like you're not going to know anyone from your lecture, because there are so many people and you don't talk in lectures, hopefully, you're probably not going to meet people from your tutorials, because you see them once a week, and you probably won't be in a tutorial with them next semester. (██████████ young woman, Lines 499-503).

However, small class cohorts were also problematic, and forced young women to find friends elsewhere at university.

3.3.2 Resolving friendship conflict and dealing with bullying can be difficult.

Both participant groups asserted that friendship conflict was a considerable problem for girls with HFASD. Difficulty resolving conflict led to struggles with maintaining friendships where conflict had occurred. ██████ (young woman) reflected on a misunderstanding that caused conflict with her friend:

Now that I look, it, it's stupid really, I still get a bit jealous, but I try not to think of it as much as before, cause I'm tryna like get all that friendship back again, cause it feels really awkward now. (Lines 185-187).

Experiences of being bullied were also fairly common. Bullying was not specific to a certain developmental stage; it was prevalent throughout schooling and varied in severity – with some participants moving schools as a result.

However, the nature of bullying did change with development – most notably due to the introduction of technology. ██████ (parent) described the following situation:

One of the girls, isolated ██████ and just made this other girl be part of the group, so Isabella was ostracised from the two girls [...] it just got really bad, this other girl was sending emails to Isabella, and getting other kids to say it was from other kids, and then using kids from the (school) to go and call ██████ names and do stuff. (Lines 84-88).

Some girls struggled with resolving and moving on from conflict with friends, leading to exacerbation or complete avoidance of the conflict situation.

Furthermore, there was some question regarding girls' interpretation of friendship conflict, as some young women said they did not experience any friendship conflict, but their recollections suggested otherwise:

I don't remember having many arguments with my friends, [...] I would sometimes have factual arguments, because I was right and they were wrong. (██████ young woman, lines 339-342).

3.3.3 Anxiety can cause school non-attendance, as well as social interaction and friendship problems.

Many of the young women experienced anxiety regarding social situations and friendships, which affected their ability to function well at school and with friends. Anxiety was sometimes related to negative past experiences and this affected a girl's openness to new experiences:

She's really got that willingness to give things a go, though I think, anxiety wise, it gets in the way, because of the past experiences she's had. (██████ parent, Lines 176-177).

Girls with HFASD sometimes experienced anxiety about attending school. Anxiety was linked to the busy and loud environment, which caused debilitating sensory overload. Some girls missed school due to this anxiety:

She'd sort of have fits when she's anxious, and she had just a meltdown when she got home, and it became this like she was so anxious about the school, schooling, even though it was just twice a week, that the rest of the week was ruined, she wouldn't leave the house, she, she (was) just too anxious. (██████ parent, Lines 63-66).

Anxiety around sensory overload was sometimes an issue for interacting with friends outside school. ████████ (parent) explained:

So, a group are going out for dinner, and she gets to the restaurant, and she says, mum I can't go in, because there's too many people sitting in that restaurant, and that I, that's anxiety to me, it's just sensory overload, there's too many people here, there's too much happening. (Lines 140-143).

Anxiety was also a problem for girls for retaining friends, as anxiety caused one girl to react emotionally and led to her friends excluding her. ██████ (parent) recalled:

She was worried about doing anything, she thought she had a group of friends that came in Year 8, and they said that she was just too emotional, and they sort of kicked her out of the group, cause she just used to get upset all of the time, but that was cause she was so worried about what would be happening. (Lines 90-93).

3.3.4 The lack of social groups for girls with HFASD may be an obstacle to making friends and receiving support.

Participants commented on the lack of social groups targeting girls with HFASD. Social groups allowed children to build friendships and learn friendship skills. However, participants noted a lack of girls present within mixed-gender ASD social groups:

That's been difficult to, to find, and especially for girls because there's not as many girls diagnosed as boys and you know, that was obvious at that autism social group, there was Charlotte and one other girl, and then about 10 boys, so that's been, that's problematic, is to find those groups of girls. (██████ parent, Lines 216-219).

In addition, some parents expressed frustration at the lack of social groups specifically for girls with ASD compared to the many opportunities available for boys, and thus identified a need for more groups for girls with ASD.

Differing ages and levels of social functioning were also an issue in social groups. Julia (young woman) stated that she believed other girls in her ASD social group were both younger and lower functioning than her:

I was one of the older ones, except for this girl that I did get on with, and I would hazard a guess that possibly me and this other girl [...] we were the ones with Asperger's and the others were ASD, and therefore much lower functioning in terms of like not only social skills but intellectual ability. (Lines 312-316).

Participants recommended new social groups should target older girls to address more relevant issues to this age group and should be directed at girls with HFASD so as to gather girls with similar levels of functioning.

Furthermore, [REDACTED] (parent) was disappointed that the focus of the groups was socialisation, rather than teaching friendships skills, as she believed this would be more beneficial for her daughter. She explained:

She did go to a support group at Autism SA for a little while, but I don't know, she said they were more interested in [...] there wasn't really anything in, in it about teaching them how to make friends or stay friends with anyone, it was a social ...a social event, and Julia says, I can be social if I need to be mum. (Lines 337-342).

Participants also believed social groups based around activities and interests would help recruit girls with shared interests, and mentoring by young women with HFASD was suggested for older girls with HFASD for sharing experiences and discussing difficult topics around adolescence (e.g. puberty and relationships).

3.4 Facilitators to friendship formation and maintenance over childhood and adolescence in girls with HFASD

Five themes around facilitators of friendship formation and maintenance were identified from the data. Shared interests and experience, proximity, existing friends, technology and social media, and a supportive environment all acted as facilitators of friendship for girls with HFASD.

3.4.1 Shared interests and experiences may enable formation and maintenance of friendships.

Young women and their parents agreed that they tended to be drawn to other people with similar interests or experiences as themselves. Girls with HFASD formed friendships with people who shared their interests:

There was one friend that I had called Seb, [...] me and Seb were very good friends, he liked, because he's into that Disney Pixar stuff, and I was a very big Disney fan back then of course, I like Disney Pixar as well, we watched Toy Story all the time. (██████████ young woman, lines 44-47).

For some young women, religiosity was a shared area of interest through which friendships formed.

On the other hand, young women with HFASD struggled to form friendships and fit in if they lacked shared interests with peers. ██████████ (parent) explained:

She really wanted to make friends with kids, but of course, she was so far behind, I mean, same age as them, but not same age as them, she'd still be playing with My Little Pony's and things like that when she was 12, you know, kids didn't understand that. (Sarah, parent, Lines 91-94).

In contrast to finding friends who shared common interests, ██████ (parent) recalled her daughter's adopting other children's interests, and creating complex stories about toys she did not own in her considerable efforts to fit in:

She would fabricate things, some parents told me, [...] the mum told like, 'Does Victoria have these particular toys?', and I said, 'No', she said, 'I didn't think so', but she fabricated like, whole play scenes and discussions about these toys that she 'owned'.

(Lines 146-149).

Furthermore, participants noted that girls with HFASD also tended to make friends with people who had similar experiences as themselves, such as a shared diagnosis or activity. Participants used words like “weird”, “quirky”, and “different” to describe friends of girls with HFASD, suggesting girls with HFASD were drawn to other children who also did not easily fit into the peer group.

3.4.2 Proximity with friends may be important for forming friendships and retaining friends.

Proximity between girls with ASD and their friends was important for facilitating friendships. Participants highlighted the importance of regular face-to-face contact with friends for friendship maintenance. ██████ (young woman), whose family moved regularly for her parent's work, found maintaining friendships across different states difficult:

It's also, if I'm in contact with them lots, it's easier to find something common to talk about, to have an interest in, to catch up, whereas with the long distance, it was, also more like yeah, can't, you can't catch up with them, you can't get to know them anymore, so I, they change, and you just sort of lose contact. (Lines 73-77).

Similarly, ██████ daughter attended a rural school, and had difficulty maintaining her friendships, as her friends lived further away:

She's caught up with a friend outside of, like a school friend outside of school, maybe once every 12 months, [...] I think it's partly school, because there's not a close geographical, you know, there's lots of people spread out across the hills, so we're not like next door, or in the same suburb even as the other kids in her class. (Lines 106-110).

However, living in the suburbs did not increase levels of friendship maintenance, as girls with HFASD tended not to interact with their friends outside school regularly. This issue appeared to differ developmentally, with catch-up opportunities becoming more important in adolescence. For example, ██████ (young woman) lacked interest in seeing friends outside school during childhood, but missed out on catch-up opportunities in adolescence:

I never hung out with my friends in primary school, it was only a school-friend thing, and never really hung out with them outside of that, I wasn't interested in that, I didn't really care, and even like through high school I didn't really hang out with them a lot, mostly because I didn't know they were inviting me to stuff. (Lines 547-550).

Similarly, as noted earlier, attending church weekly allowed regular contact between girls and their friends, enabling stronger friendships.

Parents and other family members also attempted to play an active role in organising playdates for their daughters where possible, enabling their daughter more regular contact with her friends. ██████ (parent) explained:

I've always made sure that we've had friends, or you know, try to organise in the school holidays for friends to come over and you know, play dates from when she was very little. (Lines 371-373).

However, as the young women aged, being in close proximity with other people was no longer sufficient for friendship development in some cases. In particular, friendships at university were difficult for young women due to differing course timetables, and issues with extending the friendship beyond the class environment. ■■■ (young woman) formed connections with fellow students, but did not develop them further:

So there are some (friendships), there are a few that it moved from, yeah we'll sit together in class, to exchanging contact details, but yeah, that's pretty much as far as it's gone. (Lines 258-260).

3.4.3 Existing friends have a role in assisting the development of new friendships.

Young women with HFASD found that existing friends played an important role in introducing them to new people, providing them with the opportunity to form new friendships.

■■■ (young woman) said:

With Daphne (kindergarten friend), I, at the beginning of Year 5, I remember, what do I do, my friends aren't in my class ... I don't know when I started hanging out with her [...] yeah I don't know, just sort of happened, and she was already friends with the two boys from previous years, so you know, we ended up doing stuff with them. (Lines 100-105).

However, existing friends often took an active role in making introductions for the young woman with HFASD, and thus, it was implied that these new friendships would not otherwise occur without the friend's influence. ■■■ (young woman) explained:

(I make friends) from friends introducing (me) to other friends really, or like go to a friend's party and introducing them (to me), they're like, 'I know you', and I'm like, 'okay'. (Lines 126-127).

These new friendships were maintained through various shared interests:

I made friends with one person, and then I sort of became friends with all of their friends ... I made friends through other people's friends, and we obviously have a common interest, because we have a common friend. (██████ young woman, lines 480-487).

3.4.4 Technology and social media provide opportunities to maintain friendships, but can also have negative impacts.

Participants noted technology enabled young women with HFASD to maintain connections with friends during adolescence and young adulthood. Texting, emails, and various social media platforms were all identified as types of technology used. These communication methods allowed adolescent girls to overcome issues of distance and maintain friendships outside school:

(She) sometimes doesn't really see her girlfriends a lot, not at all during the school week and not, hardly at all during the holidays, but how they socialise is through social media. (██████ parent, Lines 89-91).

Social media has emerged as a useful tool for circumventing difficult social group situations and enabling easier communication without the complications of face-to-face interaction. ████████ (parent) described this:

Being able to text and, and chat by text or Messenger or Instagram, that kind of helps, she can keep in touch with people that way, without sort of an obligation to, to be there right away ... so text based communication, she finds quite easy, if it, you know, if it's short, snappy text, text, text. (Lines 243-248).

Social media was also seen as important for young women at university – particularly since university students have varied schedules that often do not match up with those of other

students. Thus, social media was a medium by which young women could maintain contact with friends who they could not see in person:

Now I mostly talk over social media only because you know, we're older now and our schedules do not line up. (██████ young woman, Lines 571-573).

Social media also provides a way for young women with HFASD to plan activities with friends they do not see regularly. ██████ (young woman) said:

Some of them are no longer doing (the same university course), but I will still catch up with them if I see them about the place, one (friend), we talk to each other on Facebook now and then, and arrange to meet up for lunch. (Lines 251-254).

However, some young women had negative experiences with social media. ██████ (young woman) found that using social media led to a misunderstanding and significant conflict with her friend:

I think (social media's) how my depression started getting, and how my low, my low self-esteem started getting, mainly with friendships, and I was actually, and that's when the whole misunderstood thing was going on at the time, and I was banned away from my iPad [...] no I don't want (my iPad) back, I'm fine, I'm completely fine without it, and I still don't have it, and I feel really good about myself (now) that I don't have any social media. (Lines 210-216).

██████ (parent) recalled a situation where her daughter did not understand how to use social media safely:

One day I found on Facebook, [...] there'd been some inappropriate pictures up there, you know, doing the, the cat's bum face, standing up against toilet stalls at school, I'm like, yeah that's actually not okay, [...] and she said but it's just my friends [...] I said,

but your friends can do anything with those photos because they are digital, and they are in a public domain. (Lines 273-279).

Other parents also expressed concern regarding their daughters' safe use of social media platforms. █████ (parent) believed girls with HFASD need training on safe use of social media platforms, which she felt was not being currently addressed through available support options:

They need that, you know, even simple stuff like navigating social media as a female on, with autism, like that's different, how do you look after yourself. (Lines 261-263).

In summary, technology and social media enable young women with HFASD to maintain communication with friends during adolescence and young adulthood, and to more easily develop connections with other people. However, some young women may have negative experiences while using these methods of communication, suggesting training for safe use of these communication methods would be beneficial.

3.4.5 Supportive environments are crucial for overall wellbeing and development of friendship skills.

A supportive environment played an important role in the overall wellbeing of girls and young women with HFASD, also affecting the quality of their friendships. The level of support provided in the school environment was seen as very important for girls' academic success and social wellbeing. Some young women were well supported by their schools, while others were not. Participants shared contrasting stories:

I had an experience with something in science in year 10, it got so much, and I had to drop out of it, my teachers had to pull me out, well my curriculum support teacher [...] she found out science was quite tough and so she pulled me out of it, and it lifted up a lot

of the stress, and so it helped me to get on with year 10. (██████████ young woman, lines 163-167).

She's in Year 10, it's a small school with sort of, one class of Year 10's [...] she has lots of troubles with school, teachers don't recognise that her, her difficulties are real.
(██████████ parent, lines 37-41).

However, parents were concerned about their daughters' continuing opportunities to make and maintain friendships after leaving the safety of the school environment:

I think that girls on the spectrum are [...] at real risk of being lonely, and being isolated, and especially, schools fine, cause you've got people around you all the time, but I really worry about what that looks like after school. (██████████ parent, Lines 231-234).

Participants who had attended or were attending university were mostly positive about the academic support available and provided to them. ██████████ (young woman) commented:

I ended up enrolling in the disability services, [...] when I realised, for (my university course) we were having a listening test, 100 of us in a lecture theatre, and I went no, I actually, that's probably not something I can do [...] I did find it quite helpful that they can get me special consideration [...] like I can, if it's a listening test, I can then go and do it in a separate room, rather than in a room full of 100 other people. (Lines 453-462).

However, ██████████ (young woman) once experienced the opposite situation, a lecturer refusing to adjust the assessment requirements to accommodate her needs:

I sent an email to the professor, saying [...] I'm currently not in a position where I'm realistically deliver this presentation, to participate in this debate [...] (I asked) am I able to just deliver this to you, [...] or could I just present it to a smaller group, and then

I just got this ridiculous email back, saying, you know, you're asking me to complete an assignment without actually doing it. (Lines 771-783).

A supportive therapeutic environment was also important for managing friendships of girls with HFASD. Parents and young women referenced various forms of therapy, including psychology, psychiatry, and occupational therapy, that provided girls with the support and learning opportunities they needed. Non-typical interest-based therapy groups, like gym groups, art therapy, and equine assisted therapy, were also perceived well by participants. [REDACTED] (young women) stated:

This one's a lot better cause it's like an art therapy, it's a lot of fun. (Lines 237-238).

However, [REDACTED] (parent), who lives in a rural setting discussed the difficulty of finding support opportunities for her daughter:

So physical resources, and actual allied health professionals is going to depend on where you live, like we live in a rural town, you know, we've got, (town) is an hour and twenty minutes away, but what we have here, is yeah, there's nothing. (Lines 648-651).

Many parents also raised concerns around their daughter's future in the workplace. Finding employment in a supportive setting and the difficulty of the social environment of work were seen as a potential problems for girls:

Work's actually quite a social environment and if you, you know, don't participate in that at all well, you suddenly become quite isolated in the workplace, people think that you're being difficult, it's not that at all, it's just that you don't have those skills. ([REDACTED] parent, Lines 251-254).

Chapter 4

Discussion

4.1 Overview

This study explored friendship experiences of girls and young women with HFASD during childhood and adolescence and investigated the most useful social supports for friendships in this group. This section provides an overview of key findings, together with their implications.

4.1.1 Experiences related to social interaction in children and adolescents with HFASD.

This study found that girls and young women with HFASD are subject to more stringent social expectations around appropriate behaviour than boys, supporting findings by Tsirgiotis (2016). These gender expectation disparities were perceived to continue from childhood into adolescence, with girls feeling greater pressure to conform than boys. Girls appeared to use different coping mechanisms, and as with previous research, girls were more likely to internalise their emotions (Solomon, Miller, Taylor, Hinshaw, & Carter, 2012). However, while participants believed both boys and girls with HFASD used mimicking and masking as coping mechanisms, girls were thought to do so more adeptly. Research has suggested that a stronger masking ability may be linked to greater internalisation of problems, providing a possible explanation for why girls are more likely to internalise their emotions than boys (Cook, Ogden, & Winstone, 2017).

Findings from the present study indicated that adolescent girls with HFASD experienced greater friendship and social interaction challenges than younger girls. Adolescent girls struggled with increasing self-awareness, greater focus on conversation in friendships, changing social rules, and issues associated with puberty and romantic relationships. Research on these

developmental differences is limited, but problems with group interaction and communication, and understanding social rules for girls with HFASD have been found previously (Tierney et al., 2016; Vine Foggo & Webster, 2017). Puberty-related challenges, self-hygiene practices and romantic relationships are other recognised areas of difficulty for adolescent girls with HFASD (Cridland et al., 2014; Mademtzi, Singh, Shic, & Koenig, 2018). Thus, the current study's findings align well with previous findings.

4.1.2 Barriers to friendship formation and maintenance over childhood and adolescence in girls with HFASD.

Transitions in the current study were often challenging for girls with HFASD during childhood and adolescence. Loss of friends and difficulty making new friends often complicated a transition. This study found that some transitions were easier if participants desired a new start or already had a friend in the new environment. Participants in the current study referenced high school transitions and university transitions as difficult due to the considerable loss of friends, which supported previous research that found transitions may cause distress (Tierney et al., 2016). In the current study, university transitions were often more difficult for friendships due to the size of the faculty or course cohort from which friends could be made. No previous research has addressed this relationship previously, however other studies referenced the university class schedule and routine changes as difficult (Hillier et al., 2018).

This study also identified friendship conflict and bullying as problematic among girls and young women with HFASD. Findings indicating that girls with HFASD struggle with managing and resolving conflict were in accordance with past research (Tsirgiotis, 2016; Vine Foggo & Webster, 2017). Vine Foggo & Webster (2017) found that conflict was linked to friendship loss for girls with HFASD, while this study found girls might choose to terminate friendships to

avoid addressing conflict. In addition, the current study extended past research, identifying the use of technology as a tool for bullying during adolescence, similar to in neurotypical children (Kowalski & Limber, 2007).

The finding that anxiety around social interaction, sensory overload, and retaining friends impeded friendship development is in line with the literature. Previous research also linked difficulties in social interactions and anxiety (Ladd & Tropp-Gordon, 2003), and sensory overload and anxiety (Mazurek et al., 2013). As in the current study, other research has shown adolescents with ASD experience anxiety around retaining friendships (Sumiya, Igarashi, & Miyahara, 2018). It has been suggested that children with ASD who have better social skills and socio-emotional abilities may be more aware of social deficits (Bauminger, Solomon, Aviezer, Heung, Brown et al., 2008), and limited responsiveness and reciprocity in friendships (Mazurek & Kanne, 2010). The current study noted girls with HFASD had a high level of awareness of social skill deficits, which may explain their anxiety around retaining friendships.

Finally, the lack of appropriate social groups for girls with HFASD was highlighted, specifically groups for older girls, who might be encountering unique challenges during adolescence that would not otherwise be addressed. Participants noted that few social and therapy group opportunities exist for older adolescent girls with HFASD. One paper presented research around development of a social skills intervention for adolescent girls with ASD, based on a peer mediated model (Jamison & Schuttler, 2017). Jamison & Schuttler's preliminary study on the model suggested significant improvements in social competence and socio-emotional health, however further research is necessary.

4.1.3 Facilitators to friendship formation and maintenance over childhood and adolescence in girls with HFASD.

Literature on experiences of girls and young women with HFASD has shown they tend to make friends with peers who have shared interests (Cridland et al., 2014), or certain characteristics or experiences (Tsirgiotis, 2016). This is also true for children with ASD in general (Petrina et al., 2014). The present study supports and extends these findings, particularly with regard to mimicking interests in order to fit in.

The current findings around proximity both support and extend previous research. As with this study, other research demonstrates proximity plays an important role in friendship development in children with ASD (Bauminger & Shulman, 2003; Reynolds, 2017). However, the current study found proximity at university was no longer sufficient for friendship formation and maintenance. Participants blamed differences in university course timetables and difficulty developing friendship outside the classroom for this issue. Van Hees, Moyson, & Roeyer's (2015) study also found less predictable class schedules at university were problematic, but with regard to setting routines.

The finding that existing friends supported development of new friendships and larger social groups for girls and young women with HFASD was novel. To the author's knowledge, no studies have previously reported this finding, however research has consistently shown friends play other important roles in children with ASD's lives. For example, friends protect children with ASD from peer victimisation and bullying (Tsirgiotis, 2016). Future research should further examine roles that friends of girls with HFASD have in regard to facilitating friendships.

Social media plays a significant role in neurotypical adolescents' lives, enabling creation of an individual's online social identity (Barker, 2009). Participants in the current study

referenced social media as a prevalent communication method but it was mainly used for friendship maintenance. Findings also revealed adolescent girls with HFASD may lack understanding of safe social media use and thus require education, supporting previous research (Mademtzi et al., 2018). Thus, further research is required to explore social media use in adolescent girls with HFASD with regard to social identity formation and knowledge around safe use of social media platforms.

Finally, this study found support in various settings was particularly important for academic and social wellbeing of girls and young women with HFASD. The importance of attending a supportive school was highlighted, as lack of support increased social difficulties and problematic mental health issues. Other research also identified issues with lack of school support for dealing with bullying and other harmful behaviour (Cook et al., 2017). Young women with HFASD in this study found academic support at university to be relatively good, but argued social support was lacking. In contrast, other research has shown an increase in social support programs for university students with ASD, but these programs were not based on empirical research (Hillier et al., 2018). In addition, as with previous research (Cridland et al., 2014), this study identified that therapists provided a supportive environment, where communication and social skills training can occur. This study also found that non-typical interest-based therapy groups were well received by girls and young women with HFASD, as these groups aligned more closely with their interests. However, access to support in rural settings was an issue for parents. Finally, parental concerns regarding employment for young women with HFASD supported past research where individuals with ASD struggled to find employment (Taylor and Seltzer, 2011), and specifically in a supported work environment (Hendricks & Wehman, 2009).

4.2 Strengths

Firstly, the current research contributes to limited research on experiences of girls with HFASD, specifically in regard to friendship and friendship support. This study extends previous research exploring friendship and social interaction during the developmental stages of childhood and adolescence (Cook et al., 2017; Tsirgiotis, 2016; Vine Foggo & Webster, 2017), and begins to consider friendship and social interaction over development. Furthermore, this study adds to research around useful supports for girls with HFASD, with a focus on those assisting friendship and social interaction. The qualitative design was effective in capturing rich data on girls' experiences and allowed participants to focus on what they deemed important. For example, although social skills support availability was important to parents, more important was the need for social groups for girls with HFASD.

Two other strengths of this research are the inclusion of girls and young women with HFASD in this investigation, and triangulation of their perspectives with parents. Few previous studies have focused on girls with HFASD and friendship, and fewer with girls as participants. Furthermore, triangulation of girls' perspectives with those of their parents enabled a multifaceted exploration of girls' experiences over childhood and adolescence. Only two studies have previously included both parents and girls with HFASD in their research (Cook et al., 2017; Cridland et al., 2014). These studies considered friendship and adolescent experiences in girls with HFASD more generally, without a direct focus on differences during childhood and adolescence. Thus, this study can explore where and when changes occur in friendships of girls with HFASD and provide insight to what support is needed and when.

4.3 Limitations and future research

One limitation of this research was the focus on girls with HFASD, as experiences of girls with lower functioning ASD were not explored. Most research focusing on girls with ASD has focused on higher functioning individuals (Cook et al., 2017), however it is possible that girls with lower functioning ASD may have greater social difficulties, and thus, different friendship experiences to girls with HFASD.

Another limitation was the lack of fathers' perspectives, since all parents interviewed were mothers of girls with HFASD. The scarcity of father's perspectives in this area of research has been previously noted (Tsirgiotis, 2016), and while attempts were made to include both mothers and fathers in this investigation, they were unsuccessful. Future research should seek to target fathers of girls with HFASD, and consider their perspectives alongside those of mothers and girls.

In addition, friends' and peers' perspectives of friendships with girls and young women with HFASD were not explored. Although a body of quantitative research involving friends of children with ASD and reciprocal friendship nominations exists (Zeedyk et al., 2014), there is a lack of research exploring perspectives of friends or peers of children with ASD further. Such research could shed light on what kinds of challenges friends experience in navigating friendships with girls and young women with HFASD during childhood and adolescence.

Finally, as discussed earlier, there was considerable heterogeneity in the participant sample with regard to participant experiences and characteristics. This complicated the process of identifying common experiences, especially with regard to schooling, as home-schooled girls had different experiences to girls who attended mainstream schools. In addition, only four mother-daughter dyads participated in the study, so heterogeneity of experiences and support

needs was increased. However, heterogeneity in the sample was both a limitation, and an accurate reflection of the nature of experiences of children with ASD. In research around ASD, it is important to note both similarities and differences between experiences, as ASD is a spectrum condition, and thus, every individual will have a unique perspective and set of experiences. Nevertheless, research with more homogeneous samples would enable a better understanding of the specific challenges encountered by girls and young women with HFASD.

4.4 Implications

This study demonstrates that girls and young women with HFASD may present differently to boys with HFASD, similar to previous findings in children with ASD (Peters & Brooks, 2016). Gender-based socialisation and social expectations may account for these different ASD presentations. Thus, clinicians and other individuals involved in recognising and diagnosing ASD (and HFASD) in children and adolescents may need further understanding of these differences in ASD presentation across genders, so as to ensure that girls with ASD are diagnosed early and do not miss out on important social skill and friendship support.

Girls with HFASD often find friendships and social interaction to be difficult and may require specific support. Older girls with HFASD may experience unique difficulties compared to younger girls, and thus may require additional and more specialised support during adolescence. Further, support may also be necessary for other life skills that become important in adolescence, such as self-hygiene, romantic relationships and appropriate use of social media, in order to enable girls to fit in, but also remain safe (Cridland et al., 2014).

Thirdly, girls and young women with HFASD require a supportive environment, especially in schools and universities, to enable them to thrive academically and socially. In many cases, school was the environment where social difficulties occurred (Tsirgiotis, 2016), and

support for dealing with these challenges both within and outside school would be beneficial. Specifically, skills in resolving and moving on from conflict and managing anxiety would be particularly useful. Furthermore, school and university transitions were often a difficult period of change for girls and young women with HFASD, both with regard to friendships and other social challenges, and thus, specific transition supports should be designed to address these difficulties.

There is also a need for social groups for girls and young women with HFASD. This study has found that limited opportunities exist for girls and young women to meet other girls with the same diagnosis, and who are of a similar age and level of functioning. In particular, a need for social groups for older adolescent girls with HFASD was highlighted, as few opportunities existed for this age group. Social and support groups should be based around interests of girls with HFASD to enable girls with similar interests to attend and potentially form friendships. Finally, mentoring involving young women with HFASD could be considered for adolescent girls with HFASD, as an additional support.

4.5 Conclusions

This study contributes to the limited literature on friendship in girls and young women with HFASD. In particular, this research highlights differences in social experiences and challenges of girls with HFASD through childhood, adolescence, and young adulthood, and illustrates how increasing complexity of social communication and interaction among neurotypical girls affects friendships of girls with HFASD. Additionally, the present study provides evidence for specific areas of social interaction and friendship in which additional support may be needed during different developmental periods. As such, this study could act as a basis from which developmentally appropriate supports for girls and young women with HFASD can be developed.

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Appendix A

Advertisement Flyer

Exploring experiences of friendship in girls and young women with high functioning Autism Spectrum Disorder.



Do you have Autism Spectrum Disorder and are between 16 and 25 years old? Or are you the parent of a girl with ASD who is aged between 16 and 25 years old?

We would like to invite you to participate in our research!

The aim of this study is to explore you and/or your daughter's experiences of friendship during primary school and high school. We are also interested in what support may be most beneficial to girls with ASD at these different developmental stages.

Participation is voluntary and will involve up to 60 minutes of your time for a face-to-face or telephone interview.

Your participation could provide new insight into the friendships of girls with Autism Spectrum Disorder, allowing you to help other girls with ASD.

Are you eligible?

Girls must be:

- Between 16 and 18 years old, and have received your diagnosis of ASD at least 12 months ago (i.e. before March 2017)
- **Please Note:** You will need parental/legal guardian consent to participate

Young women must be:

- Between 18 and 25 years old, and have received your diagnosis of ASD at least 12 months ago (i.e. before March 2017)

Parents must be:

- Over 18 years of age, and your daughter must be between 16 and 25 years old, and have received her diagnosis of ASD at least 12 months ago (i.e. before March 2017)



Please feel free to pass on this flyer to anyone you think may be interested.

Appendix B

Participant Information Sheet



PARTICIPANT INFORMATION SHEET

PROJECT TITLE: Exploring experiences of friendship in girls and young women with high functioning Autism Spectrum Disorder.

HUMAN RESEARCH ETHICS COMMITTEE APPROVAL NUMBER: H-2018-065

PRINCIPAL INVESTIGATOR: Dr Clemence Due

STUDENT RESEARCHER: Miss Catherine Yeoh

STUDENT'S DEGREE: Honours in Psychology

Dear Participant,

You are invited to participate in the research project described below.

What is the project about?

The aim of this study is to explore you or your daughter's experiences of friendship during primary school and high school. We are also interested in what support may be most beneficial to girls with high functioning ASD at these different developmental stages.

Who is undertaking the project?

This project is being conducted by Miss Catherine Yeoh. This research will form the basis of her Honours degree in Psychology at the University of Adelaide, under the supervision of Dr Clemence Due.

Why am I being invited to participate?

You are being invited to participate as you are a girl or young woman with high functioning Autism Spectrum Disorder (ASD), or the parent of a girl with high functioning Autism Spectrum Disorder (ASD). Please be aware that parental/legal guardian consent is required for girls under 18 years of age to be able participate in this project.

Mothers and fathers must

- be over 18 years of age
- have a daughter diagnosed with high functioning Autism Spectrum Disorder (including Asperger's disorder) at least 12 months ago, aged 16 to 25 years old

Young women must

- be between 18 and 25 years of age
- have been diagnosed with high functioning Autism Spectrum Disorder (including Asperger's disorder) at least 12 months ago

Girls must

- be between 16 and 18 years of age
- have been diagnosed with high functioning Autism Spectrum Disorder (including Asperger's disorder) at least 12 months ago

All participants must

- be fluent in English

What am I being invited to do?

You are being invited to take part in an interview about you or your daughter's experiences of friendship during primary school and high school. Interviews can take place at the University of Adelaide (North Terrace campus), over the telephone, or at an alternative public area at a time that is convenient for you. The interview will be audio recorded so that an anonymous transcription can be made of the interview.

How much time will my involvement in the project take?

Each interview will be approximately 60 minutes in duration.

Are there any risks associated with participating in this project?

Due to the sensitive nature of this topic, you may experience some emotional discomfort during the interview process. Every effort has been made to minimise this possibility, and a comprehensive list of external supports, including telephone helplines, online forums and Autism Spectrum Disorder-related organisations, has been prepared in the case that you would like to seek further support.

You should also know that the researchers are obliged to report any instances of child abuse under mandatory reporting requirements.

What are the potential benefits of the research project?

The research may help to inform healthcare providers and schools about what girls with high functioning ASD experience in regard to friendships during primary and high school. The study may also provide information about what types of supports will be most useful to girls with high functioning ASD at different times during their primary and high school years. Whilst it is not likely that you will receive an immediate benefit from involvement in this study, girls with high functioning ASD in the future may benefit from the results of this study.

Can I withdraw from the project?

Participation in this project is completely voluntary. If you agree to participate, you can withdraw from the study at any time until the start of data analysis.

What will happen to my information?

Your name and any identifying information will remain confidential and will not appear in any publications or reports that arise from the data. In addition, pseudonyms will be assigned to each participant when the interview data is transcribed.

Confidential interview transcriptions will be made from the audio recordings and will be emailed to the participants for feedback and additional commentary. Only the named investigators above will have access to the interview transcripts for the purpose of analysis. The interview transcripts will be kept securely in Dr Due's office in The School of Psychology for a period of ten years.

Your information will only be used as described in this participant information sheet and it will only be disclosed according to the consent provided, except as required by law.

Who do I contact if I have questions about the project?

If you would like to participate in this research, please contact Catherine or Dr Due. They will be able to provide you with further information about the study, and you will be able to organise a time to meet for an interview.

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the University of Adelaide (approval number H-2018-065). This research project will be conducted according to the NHMRC National Statement on Ethical Conduct in Human Research (2007). If you have questions or problems associated with the practical aspects of your participation in the project, or wish to raise a concern or complaint about the project, then you should consult the Principal Investigator. If you wish to speak with an independent person regarding concerns or a complaint, the University's policy on research involving human participants, or your rights as a participant, please contact the Human Research Ethics Committee's Secretariat on:

Phone: +61 8 8313 6028

Email: hrec@adelaide.edu.au

Post: Level 4, Rundle Mall Plaza, 50 Rundle Mall, ADELAIDE SA 5000

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

If I want to participate, what do I do?

Please contact Catherine (details available above). You will receive a consent form and be able to arrange a time for an interview.

Yours sincerely,

Miss Catherine Yeoh

and

Dr Clemence Due

PLEASE KEEP THIS INFORMATION SHEET AS IT CONTAINS VALUABLE CONTACT INFORMATION.

If you want to talk to someone straight away:

Autism SA Info Line	1300 AUTISM (1300 288 276)	9am-4pm Monday to Friday. Information ranging from diagnosis to appropriate supports and pathways.
Parentline	13 20 55	24-hour, confidential telephone counselling and support for parents and carers
Carer Advisory and Counselling Service	1800 242 636	Free call, specialises in supporting family members / carers
Lifeline	13 11 14	24-hour crisis support and suicide prevention services
Beyond Blue	1300 22 4636	National organisation that provides help and information about depression and anxiety
Kids Helpline	1800 55 1800	24-hour, free, confidential telephone counselling and support for young people aged 5 to 25, 24-hour email and webchat services also available https://kidshelpline.com.au/
Mental Health Triage Service	13 14 65	24-hour crisis support service, staffed by mental health clinicians

If you want to join online support groups and forums to chat with people who have had similar experiences:

Adelaide Autism_Yahoo Group
https://au.groups.yahoo.com/neo/groups/adelaide_autism/info

Autism Families in South Australia
<https://www.facebook.com/groups/171128586242696/>

Autism – Adelaide Mums Group
<https://www.facebook.com/groups/11039658105/>

These are some National and International sites that might also be of interest:

<https://www.autismspectrum.org.au/>

<http://www.amaze.org.au/>

<http://www.autismqld.com.au/>

<http://www.autismtas.org.au/>

<http://www.autism.org.au/>

Organisations offering support and resources for ASD

Autism SA

www.autismsa.org.au

Tel: 1300 AUTISM (1300 288 476)

Autism SA is an accredited provider of services, information, training, education and support for children and adults living with ASD, family members, carers and professionals.

Autism Spectrum Australia (Aspect)

www.autismspectrum.org.au

Tel: 1800 ASPECT (1800 277 328)

Autism Spectrum Australia (Aspect) provides information, intervention and services to meet the needs of people with an autism spectrum disorder and other disabilities and their families.

Autism Awareness

<http://www.autismawareness.com.au/>

Tel: (02) 9904 8700

Autism Awareness is a national not-for-profit organisation that provides education programs support and advocacy for the needs of individuals on the spectrum and their families.

Disability SA

<http://www.sa.gov.au/topics/community-support/disability>

Tel: 1300 786 117

Disability SA is the South Australian Government provider of a range of supports and services for children with a disability and their families.

Novita Children's Services

www.novita.org.au

Tel: 1300 NOVITA (1300 668 482).

Novita Children's Services provides child development, rehabilitation and disability services to young clients, as well as support for their families and carers. Novita support children and young people throughout their childhood and adolescent years, in Adelaide, regional South Australia and beyond.

Relationships Australia

www.relationships.org.au

Tel: 1300 364 277

Provides relationship support for individuals, families and communities. Relationships Australia Offers services specific to ASD including counselling and education programmes.

Appendix C

Consent Form



Human Research Ethics Committee (HREC)

CONSENT FORM

1. I have read the attached Information Sheet and agree to take part in the following research project:

Title:	Exploring experiences of friendship in girls and young women with high functioning Autism Spectrum Disorder.
Ethics Approval Number:	██████████

2. I have had the project, so far as it affects me, and the potential risks and burdens fully explained to my satisfaction by the research worker. I have had the opportunity to ask any questions I may have about the project and my participation. My consent is given freely.
3. I have been given the opportunity to have a member of my family or a friend present while the project was explained to me.
4. Although I understand the purpose of the research project, it has also been explained that my involvement may not be of any benefit to me.
5. I agree to participate in the activities outlined in the participant information sheet.
6. I agree to the interview being audio recorded.
 Yes No
7. I understand that I am free to withdraw from the project at any time.
8. I have been informed that the information gained in the project may be published in a journal article, an honours thesis and a short report.
9. I have been informed that in the published materials I will not be identified and my personal results will not be divulged.
10. My information will only be used for the purpose of this research project and it will only be disclosed according to the consent provided, except where disclosure is required by law.
11. I am aware that researchers will report any allegations of abuse, neglect or exploitation to the Head of The School of Psychology at the University of Adelaide.
12. I am aware that researchers will report any reasonable suspicions of abuse, neglect or exploitation to the Child Abuse Response Line.
13. I am aware that I should keep a copy of this Consent Form, when completed, and the attached Information Sheet.

Participant to complete:

Name: _____ Signature: _____ Date: _____

Researcher/Witness to complete:

I have described the nature of the research to _____
(print name of participant)

and in my opinion she/he understood the explanation.

Signature: _____ Position: _____ Date: _____

Appendix D

Young Women Interview Schedule

1. Can you start by telling me how old you are now and what your current education and/or employment situation is?
 - a. (High School) What year level are you in currently?
 - b. (University) What are you currently studying? What have you studied previously?
 - c. (Employment) What is your current job?
2. Can you tell me about how you came to be diagnosed with autism/ASD/Asperger's?
[Year of diagnosis (when), age of diagnosis (years old), co-morbidities]
 - a. Do you have any other diagnoses? Can you tell me about those diagnoses?
3. Can you tell me about your friendships during childhood?
(Prompts: for example, in primary school, out of school, when you were 12 years old and younger)
 - a. Do you have an example of a friendship from childhood/primary school you could tell me about?
 - b. With you friends in childhood/primary school, what kinds of things did you do (e.g. at play dates/at home/during lunchtime)?
 - c. How did you make friends?
 - d. Were you happy and satisfied with those friendships?
OR (see Question 7 if no friendships identified)
4. What have been/were your experiences of friendship during adolescence so far?
(Prompts: for example, in high school, out of school, when you were 13 years old and older)
 - a. Do you have an example of a friendship from adolescence/high school you could tell me about?
 - b. With you friends in adolescence/high school, what kinds of things did you do (e.g. at home/at catch ups/during lunchtime)?
 - c. How did you make friends?
 - d. Were/Are you happy and satisfied with those friendships?
OR (see Question 7 if no friendships identified)

5. Did you have any support for friendships in childhood/primary school?
 - a. If any, what support did you have? Was it helpful?
 - b. What kinds of support do you think would be most helpful to primary school aged girls with ASD based on your experiences?
6. Did you have any support for friendships in adolescence/high school?
 - a. If any, what support did you have? Was it helpful?
 - b. What kinds of support do you think would be most helpful to high school aged girls with ASD based on your experiences?
7. Can you explain why you felt that making friends was difficult during primary school/childhood/high school/adolescence?
 - a. Do you have a specific example you would be willing to share with me of your experiences in trying to make friends during primary school/childhood/high school/adolescence?

Parent Interview Schedule

1. Can you start by telling me a bit about your daughter and how she came to be diagnosed with autism/ASD/Asperger's?
[Daughter's name, current age, year of diagnosis (when), age of diagnosis (years old)]
 - a. Does your daughter have any other diagnoses? Can you tell me about those diagnoses?
2. Can you share with me what your daughter's current education and/or employment situation is? (*adjustable*)
[High school + year level / University + year level + study area / Current job]
3. Can you describe some of your daughter's experiences of friendship during childhood? (Prompts: in primary school, out of school, when she was 12 years old and younger)
 - a. What kinds of activities did she engage in with her friends in childhood/primary school?
4. What experiences of friendship does your daughter have from her adolescent years? (Prompts: in high school, out of school, from 13 years old and older)
 - a. What kinds of activities did she engage in with her friends in adolescence/high school?
5. What kinds of features/characteristics of your daughter's personality and behaviour may help her to make friends and maintain friendships?
 - a. And conversely, what kinds of features/characteristics of your daughter's personality and behaviour may hinder her when she is trying to make friends and maintain friendships?
 - b. Are there any aspects of friendship that your daughter finds to be easier or more difficult?
6. Compared to boys with ASD, do you think there are any unique challenges for girls with ASD?
 - a. Do you think there are any unique challenges specific to adolescent girls with ASD when compared to adolescent boys with ASD?
7. Compared to younger girls with ASD, do you think there are any different or more complex challenges for adolescent girls with ASD?

8. Did your daughter receive any support for forming and maintaining friendships during either childhood or adolescence (e.g. in primary or high school, out of school)?
 - a. What kinds of support do you think would be most helpful to girls with ASD at different points during their development/schooling?
 - b. Are there any friendship-related skills or behaviours that you feel might be helpful to teach girls with ASD so that they are able to make better friendships?