THIS IS WHAT FRIENDSHIP IS TO ME: A GROUNDED THEORY OF
HOW ADOLESCENTS WITH AUTISM SPECTRUM DISORDER
EXPERIENCE AND DEVELOP FRIENDSHIPS

by

Layla Hall

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Abstract

Adolescents with autism spectrum disorder (ASD) experience substantial difficulties developing and navigating social relationships. They are reported to have fewer friends, poorer friendship quality, and increased loneliness in comparison to their neurotypical peers. Despite these social difficulties, youth with ASD report a desire for friendship and they often report experiencing satisfaction in their friendships. There appears to be a mismatch between the empirical literature comparing ASD friendship experiences to neurotypical friendship expectations and the reports of the expressed experiences and desires of youth with ASD. There is a need to better understand the friendship experiences of adolescents with ASD from their own perspective and to integrate these perspectives into the development of theory. In doing so, we may obtain insight into how adolescents with ASD may be better supported in their pursuit of friendship. Using a grounded theory approach, the aim of the current study was to develop, from a psychological perspective, a substantive theory of individual and interactive processes by which adolescents with ASD develop and navigate friendships that are meaningful to them. The grounded theory presented in this dissertation suggests that in developing friendships, adolescents with ASD must traverse the conflict between desiring friendships in which they are accepted for who they are and the struggle to engage in the processes required to establish such friendships due to a range of barriers that promote a tendency to withdraw from and avoid social interaction. This research suggests a core process by which slowly building familiarity with others allows participants to achieve a sense of acceptance within their closest friendships. This research presents a series of sub-processes by which adolescents with ASD interact with their peers to progressively establish more safe and stable meaning in their developing friendships, and by which they subsequently engage in increasingly vulnerable action based on this meaning to support progression of their
friendships. Results from this study have implications for the education setting, as well as for clinical intervention, including the targets, modalities and structure of social interventions.
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Table of Contents

Abstract ......................................................................................................................................................... ii
Acknowledgements ...................................................................................................................................... iv
List of Figures .............................................................................................................................................. ix
Chapter 1 Introduction ................................................................................................................................ 10
    Research Problem and Purpose ............................................................................................................... 13
    Research Question .................................................................................................................................. 15
    Research Perspective and Assumptions .................................................................................................. 16
    Anticipated Outcomes ............................................................................................................................. 18
Chapter 2 Literature Review ....................................................................................................................... 20
    Friendship Among Neurotypical Adolescents ........................................................................................ 21
        Theories of friendship. ........................................................................................................................ 21
        Qualities and trajectories of adolescent friendships. ........................................................................... 23
        Social skills and friendship. ................................................................................................................ 25
        Social cognition and friendship. ............................................................................................................ 27
    Friendships among Adolescents with ASD ............................................................................................ 29
        Friendship characteristics among individuals with ASD. ................................................................. 29
        Friendship satisfaction among individuals with ASD. ................................................................. 30
        Social skills and friendship in ASD. ................................................................................................... 32
        Social cognition and friendship in ASD. ............................................................................................. 34
        Summary. ............................................................................................................................................ 37
Chapter 3 Research Design and Theoretical Orientation ............................................................................ 39
    Characteristics of Grounded Theory ....................................................................................................... 39
    Constructivist Grounded Theory. ............................................................................................................ 40
    Symbolic interactionism. ......................................................................................................................... 41
    Method Selection and Rationale ............................................................................................................ 42
Chapter 4 Methods ...................................................................................................................................... 46
    Sampling Procedures ............................................................................................................................... 46
        Initial sampling. ................................................................................................................................. 46
        Theoretical sampling. ......................................................................................................................... 49
        Theoretical saturation.......................................................................................................................... 50
    Participant Characteristics ...................................................................................................................... 51
        Participant age.................................................................................................................................... 51
Valuing friendship. ........................................................................................................................... 104
Summary. .......................................................................................................................................... 105
Core Process: Building Familiarity....................................................................................................... 106
Methods of Interaction. .................................................................................................................. 108
External Facilitators. ......................................................................................................................... 111
Summary. .......................................................................................................................................... 116
Categories and Sub-Processes of Building Familiarity ......................................................................... 116
Meeting – Establishing Safety. ........................................................................................................... 117
Collecting information. ......................................................................................................................... 118
Feeling it out. ........................................................................................................................................ 119
Relying on external factors. ................................................................................................................ 121
  Becoming Friends – Connecting over Mutual Understanding ......................................................... 123
Clicking ................................................................................................................................................ 123
Identifying commonalities. ................................................................................................................... 125
Participating in interactions. ................................................................................................................ 127
  Maintaining Friendship – Creating Stability .................................................................................... 128
Recognizing consistency ......................................................................................................................... 128
Managing change ................................................................................................................................... 129
Engaging in reciprocity .......................................................................................................................... 131
  Growing Closer – Developing Intimacy and Trust ............................................................................. 133
Allowing vulnerability. .......................................................................................................................... 134
Broadening contact. .............................................................................................................................. 136
Supporting each other. .......................................................................................................................... 138
  Growing Apart. ................................................................................................................................. 139
Loss of trust .......................................................................................................................................... 140
Loss of stability ..................................................................................................................................... 140
Making new friends. ............................................................................................................................. 141
Summary of Results. ............................................................................................................................ 142
Chapter 7 Discussion ................................................................................................................................ 144
Intimacy, Acceptance, and Friendship Quality ...................................................................................... 144
Barriers to Friendship and the Role of Disability ................................................................................ 147
  Disability as a barrier ........................................................................................................................ 148
Building Familiarity: A Taken-for-Granted Ability ............................................................................. 150
Supporting Factors: Methods of Interaction and External Facilitators ................................................. 152
List of Figures

Figure 1. Example of line-by-line coding during initial coding ................................................................. 69

Figure 2. Grounded theory of how adolescents with ASD experience developing and navigating meaningful friendships............................................................................................................................... 90

Figure 3. The relationship between the core problem and core process.................................................... 94
Chapter 1

Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that occurs among more than 1% of children and adolescents in Canada (Public Health Agency of Canada, 2018). With incidences of diagnosis of ASD drastically increasing over the past 10 years (Anagnostou et al., 2014; Public Health Agency of Canada, 2018) there is growing importance for understanding how to support individuals with ASD throughout their lifetime. Establishing theoretical understanding of the ASD experience based on the unique perspectives of individuals with ASD is an essential step towards creating supports that will be most effective in meeting these individuals’ needs. Even more so, giving a voice to individuals with ASD within the research process is a pivotal component of generating knowledge that allows us to align our understanding of support needs with the experiences and expressed needs of such individuals (Milton, 2014). Many authors, both those from the ASD community and those who are neurotypical, have written about how theory developed from a neurotypical perspective struggles to fully capture the nuanced experience of individuals with ASD (e.g., Brownlow et al., 2015; Lawson, 2006). Milton (2012) discusses the “internalized oppression and psycho-emotional disablement” (p. 885) that comes from imposing neurotypical views on individuals with ASD. He further notes that just as individuals with ASD might struggle with insight about neurotypical culture, it is also true that neurotypical individuals lack insight into the minds and culture of individuals with ASD. This type of oversight has led to misperceptions of the intent of the behaviour of individuals with ASD, misinterpretations of the causes or motivators behind such behaviours, and the development of certain interventions that can be experienced as socially
punishing by the individuals they are intended to help (Jaswal & Akhtar, 2019). The importance of considering the perspective of individuals with ASD in the development of theory and intervention may be especially important for more subjective experiences, such as relationship development (Finke et al., 2019). It is for this reason that I have utilized a grounded theory methodology to conduct interviews with youth with ASD and to develop a substantive theory of the processes by which adolescents with ASD navigate friendships.

Autism spectrum disorder is characterized by impairments in social communication, as well as the presence of repetitive and restricted behaviours or interests (American Psychiatric Association (APA), 2013). By virtue of the core features of this disorder, individuals with ASD experience significant difficulties with typical interpersonal relationships such as friendship (Bauminger et al., 2008). Not only is it difficult for individuals with ASD to establish friendships, but as they enter adolescence developing and maintaining friendships also becomes increasingly complex. Neurotypical¹ adolescent friendships are characterized by increased reciprocity, intimacy, and stability over time (Berndt, 1982). Furthermore, friendships are thought to be more intense and closer during adolescence than during any other stage of development (Douvan & Adelson, 1966; Kuruzovic, 2015). These changes in the nature of adolescent friendships are thought to be driven by hormonal and neurological changes occurring through puberty that socially re-orient youth away from family relationships and towards peer relationships (Nelson et al., 2005). Such emerging features of adolescent friendships are thought

¹ The terminology “Neurotypical” is commonly used within the ASD community and throughout ASD literature to refer broadly to individuals who are “typically developing” or who do not have a diagnosis of a neurodevelopmental disorder such as ASD. I first considered using this terminology due to its common use, as well as due to its association with the neurodiversity perspective, which is an orientation that was used to inform the research presented in this dissertation. Ultimately, the decision to use this terminology within the present dissertation was made in consultation with individuals in both academic and ASD communities.
to be associated with an increasing ability to understand the thoughts and feelings of others (Berndt, 1982). Given that these are skills that are difficult for individuals with ASD (Baron-Cohen, 1995; Ryan & Räisänen, 2008), and given that adolescents with ASD do not appear to undergo all of the similar neurological changes underlying social re-orientation as are observed in their neurotypical peers (Picci & Scherf, 2015), it follows that developing friendships in adolescence can be especially challenging for this population. In fact, as compared to neurotypical individuals, children and adolescents with ASD are reported to have fewer friends, poorer overall friendship quality, increased loneliness, and tend to be on the periphery of their social networks (Kasari et al., 2011; Locke et al., 2010).

Challenges in developing and maintaining friendships are especially concerning given that lack of friendships is a major determinant of decreased quality of life in adolescents with ASD (Bagwell et al., 2015; Ikeda et al., 2014). Furthermore, friendship has been shown to act as a protective factor against a number of negative outcomes to which adolescents with ASD are highly prone, such as peer victimization and depression (Brendgen et al., 2011; Kendrick et al., 2012). In addition to these important developmental roles of friendship, adolescents with ASD consistently report a desire for friendship (Bauminger & Kasari, 2000). Consequently, understanding ways to support adolescents with ASD in the development of meaningful friendships is of critical importance. Essential to such an objective is (1) the need to acknowledge there is value in the perspectives adolescents with ASD have about their own friendships, (2) the need to come to understand their perspectives and experiences, and (3) the need to use systematic methods to extend this knowledge to theory.
Research Problem and Purpose

The following is a summary of the research problem as I came to identify and understand it, based on informal conversations with adolescents with ASD, their parents, and the professionals who work with them. My attendance at conferences, and my background knowledge of the literature has also contributed to my understanding of the research problem.

Currently, we have a very limited understanding of the experiences of social processes from the perspective of individuals with ASD. As such, our interventions and theories rely on what has been established about neurotypical populations. This is especially true of friendship. For example, conceptualizations within the literature of which qualities are important for friendship and how those qualities should be defined are derived from what is observed and reported among neurotypical individuals. Interventions are then designed to target the development of such qualities with the aim that individuals with ASD might build friendships that are more similar in quality to the neurotypical standard of friendship. However, there is limited consideration as to whether such a type of friendship is appropriate for, or desired by, an individual with ASD. While the body of literature on friendship in children and adolescents with ASD has extensively evaluated the characteristics of friendship and degree of friendship quality as compared to neurotypical controls, it has largely ignored the perspectives of individuals with ASD with regards to what they value and find satisfying in their own friendships (Petrina et al., 2014). Historically, research on this topic has relied on measures of friendship quality developed from neurotypical perspectives (e.g., the Friendship Qualities Scale by Bukowski et al., 1994). Although rigorously developed and scientifically helpful measures, they do not capture the subjective values and preferences among diverse populations, which are important to developing meaningful relationships that may differ from the neurotypical experience. Relatedly, there is a
growing recognition of the discrepancy between subjective reports of friendship satisfaction and empirical ratings of low friendship quality among individuals with ASD on standardized measures (Petrina et al., 2014). Ironically, foundational literature in the field of developmental psychology addressing friendship has clearly stated the importance of studying relationships such as friendship in a way that reflects individual perceptions of friendship (Bukowski et al., 1994, 1996). This viewpoint is rooted in the symbolic interactionist perspective (Blumer, 1969; Mead, 1934) that we construct meaning from our interactive experiences, and it acknowledges that friendship itself may be considered a matter of individual definition depending on personal experience and perspective. More recently, there has been growth in the number of qualitative studies exploring the friendship experiences of individuals with ASD from their perspectives (Cresswell et al., 2019), which have helped elucidate some of these differences in personal experience and perspective. For example, qualitative analysis of interviews with adolescents with ASD has clarified that some individuals with ASD may have a smaller number of friends, not because they cannot make friends, but because they prefer smaller groups of friends as this reduces the demands of navigating multiple simultaneous relationships and allows them to spend the necessary time with each friend to develop trust and intimacy (Ryan et al., 2020). However, these qualitative studies have been limited to thematic analysis and descriptive conclusions about experience rather than theoretical integration of findings to explicate processes underlying experiences.

There is a need to support adolescents with ASD in developing meaningful social relationships. By and large, research efforts in this domain have been directed toward the dominant approaches of social skill acquisition, social interaction, and interventions to support skill development rather than being directed to understanding and supporting friendship
development in and of itself (Hurley-Geffner, 1995). The difficulty with the current dominant approach is that without an understanding of the perspectives of adolescents with ASD and specific theory to guide our understanding of friendship in this population, interventions and supports impose a set of beliefs and expectations from an outsider neurotypical perspective that may not be achievable or meaningful for adolescents with ASD. By striving to develop a substantive theory explicating the processes critical to the development and maintenance of meaningful friendships in adolescents with ASD, the proposed research will provide a better understanding of how adolescents with ASD establish meaning and satisfaction in their friendships.

Research Question

While we know a great deal about how the friendships of individuals with ASD compare to those of neurotypical individuals, we know very little about what makes a friendship meaningful or satisfying for an individual with ASD. Lacking in the current body of literature is an acknowledgment that individuals with ASD do develop friendships that are meaningful to them. The perspectives of adolescents with ASD are very poorly understood, and there is limited reflection in the literature of how adolescents come to have satisfying friendships (Petrina et al., 2014). Even within the body of qualitative literature, research tends to focus on descriptive qualities of friendship among ASD individuals, and often evaluates such descriptions from a neurotypical frame of reference. There is limited extension of such descriptions into theory, especially with regards to how individuals with ASD engage in the development and growth of their friendships. The present study aims to use a psychological orientation to understand the individual and interactive processes that are experienced by individuals with ASD as they develop and navigate friendships. Specifically, this study will ask the following questions:
1. How do adolescents with ASD experience and manage the initial development of their friendships?
2. How do adolescents with ASD experience and manage their friendships as they grow and change?
3. When adolescents with ASD experience meaningful and satisfying friendships, what processes contribute to these experiences?
4. What processes interfere with the ability of adolescents with ASD to experience meaningful and satisfying friendships?

To understand the aim and questions posed by this research, it is important to clarify how I have defined the terms from which they are composed. In this research, as is common in grounded theory, “process” refers to the typical series of sequential steps or mechanisms that explicate how a change occurs within a social phenomenon (Charmaz, 2014). The social phenomenon of study within the current research was that of developing and navigating friendship. In taking a psychological orientation, I was especially interested in understanding changes in behaviour, emotion, and thinking (Tamayo, 2011). In exploring “individual processes” I was interested in the series of internal conscious or subconscious mechanisms at the individual level that impacted how youth with ASD evaluated their friendship experiences and made progress in their friendships. Further, in exploring “interactive processes” I aimed to capture how interactions with others, and more specifically the perception or appraisals of those interactions, influenced how youth with ASD experienced their friendships.

**Research Perspective and Assumptions**

My decision to explore the above questions using constructivist grounded theory methodology was rooted in the epistemological and ontological perspectives that provide the
The foundation of this research. In particular, I have taken the epistemological stance of constructivism (Piaget, 1967), which is rooted in pragmatism (James, 1907; Peirce, 1992) and relativism (Aristotle, 1908). Through this stance, it is proposed that reality is socially constructed, such that there may be multiple perspectives and lived experiences, which are dependent on context and subjectivity. This is a perspective that is well suited to not only understanding the social construct of friendship, but also to considering the view of friendship within the context of ASD.

The methodological principles of constructivist grounded theory guide the researcher to consider their prior knowledge and experience relevant to the topic of study, so that they can evaluate how this imported understanding might colour their approach to the research, and so that they might recognize when this imported understanding is not fitting with the emerging data and should be revised or expanded (Charmaz, 2014). I will discuss my relevant experiences and background knowledge fully in Chapter 5. Notably, beyond my own experiences, there were particular sensitizing concepts which provided guidance for examining and exploring the data and emerging themes. Sensitizing concepts are interpretive devices or background concepts that sensitize a researcher to particular directions of inquiry that might be relevant to the experiences being studied (Blumer, 1969; Charmaz, 2003; Glaser, 1978). Some of the more prominent sensitizing concepts used in this research were derived from the symbolic interactionism and neurodiversity frameworks. Symbolic interactionism (Mead, 1934) asserts that the process of meaning making is dynamic. It proposes that meaning we attach to and derive from our experiences is subjective and constructed based on one’s interactions with others and their environments. This concept was helpful within the current study as it was important to explore the process by which adolescents with ASD develop a view of their friendships through their
interactions with others, and how they come to understand the changing nature of their friendships over time.

Additionally, the neurodiversity framework was a helpful source of sensitizing concepts in the present study. The neurodiversity framework is a perspective that asserts that neurological conditions are reflective of a natural diversity in neurology that results in a range of experiences which should be acknowledged and respected. This framework encourages consideration of how the natural inclinations of individuals with ASD come into conflict with neurotypical views of friendship, and thus influence development of friendship and friendship satisfaction.

**Anticipated Outcomes**

The anticipated result of this study was the development of a substantive theory outlining the individual and interactive processes by which adolescents with ASD navigate friendship in a way that allows them to establish meaningful and satisfying relationships. Careful methodological considerations with respect to sample size, participant selection, data collection, and analysis were made to support the development of a theory with the explanatory power to describe the friendship experiences of higher-functioning adolescents with ASD within a moderately-sized Ontario city. The resulting theory was anticipated to have transferability in specific ways to other contexts (e.g., other clinical populations, age groups, or locations), which are examined in the discussion.

The results of this study were also anticipated to have implications beyond the production of a substantive theory. By developing theory from the ground up, the results of this study were expected to provide a framework for hypothesis generation, as well as for developing new measures that could support a more accurate characterization and assessment of friendship and the process of friendship development among individuals with ASD. Furthermore, theory
regarding the development of friendship *specific* to adolescents with ASD also had the potential to guide advancements in supports and intervention that promote the development of interpersonal relationships in a way that is meaningful and relevant to this population.
Chapter 2

Literature Review

The study of friendship has been viewed as particularly important since initial theoretical work highlighting the significance of friendship to child and adolescent development and wellbeing (Sullivan, 1953). There is ample evidence across all age groups of the benefits of friendship within neurotypical populations, both with respect to its role as a protective factor against negative outcomes and adjustment difficulties, as well as its role in promoting positive personal and social development (Gifford-Smith & Brownell, 2003). For example, friendship has been consistently associated with being a predictor of happiness (Demir et al., 2012; Myers & Diener, 1995; Saldarriaga et al., 2015), having friendships has been demonstrated to act as a protective factor against victimization (Hodges et al., 1999, 1997), and childhood friendship has been shown to predict self-worth in adulthood (Bagwell et al., 1998). In adolescence, positive qualities of friendship (e.g., companionship, affection, security) have been shown to be helpful in protecting against mental health challenges such as anxiety (La Greca & Harrison, 2005; La Greca & Lopez, 1998; Wood et al., 2017). Even having just one friend has been shown to result in many of these protective benefits (Hodges et al., 1997; Kochenderfer & Ladd, 1997; Rizzo, 1989). Notably, throughout the literature cited above, friendship was measured in a handful of different ways, linking the above benefits of friendship to a range of different friendship experiences including reciprocated best friendships (as identified by comparing peer nominations), self-identified best friendships (without confirmation of friendship reciprocity), having several self-identified intimate friendships, and self-reported higher quality of friendship.

While the beneficial impact of friendship has been less studied in ASD populations, there is evidence from quantitative studies with children and adolescents with ASD that friendship is
protective against loneliness and promotes self-worth (Bauminger et al., 2004; Lasgaard et al., 2010; Whitehouse et al., 2009). There is also evidence to suggest loneliness and smaller social networks among individuals with ASD may contribute to greater experiences of anxiety and depression (Mazurek & Kanne, 2010). Qualitative studies with individuals with ASD provide support for the notion that individuals with ASD desire friendship for reasons including: the impact of friendship on happiness, protection from victimization, reducing loneliness, and increasing their sense of belonging (Daniel & Billingsley, 2010; Rossetti, 2011; Vine Foggo & Webster, 2017). While friendships may present many benefits, and although friendships may be desired by individuals with ASD, establishing meaningful friendships continues to be an area of challenge for many people on the autism spectrum. The work presented in this dissertation set out to elucidate the processes involved in the development and maintenance of friendships to provide insight into how adolescents with ASD may be better supported in their pursuit of friendship.

**Friendship Among Neurotypical Adolescents**

**Theories of friendship.** Perhaps the earliest developmental theory of friendship is Sullivan’s (1953) interpersonal theory. Sullivan argued that interpersonal needs at each stage of development serve as motivators to seek out specific types of relationships. In other words, interpersonal relationships are used to satisfy developmental needs, leading to further development of the self. Notably, Sullivan recognized the pre-adolescent period as being marked by a search for identity and an increased need for intimacy. He viewed these needs as being satisfied through friendships that were based on closeness, self-disclosure, collaboration, reciprocity, and similarity. By spending time in friendships with these qualities, Sullivan proposed that pre-adolescents are reassured of their value and self-worth, and the formation of
their identity is supported. Further, as intimacy develops, pre-adolescents are motivated to maximize each other’s happiness and they begin to think about the needs of their friends, thus promoting the development of social cognitive skills. Sullivan further theorized that friendships could be therapeutic for isolated youth during pre-adolescence, as increasing intimacy in friendships allows for youth to experience consensual validation and improve views of self-worth. Overall, Sullivan emphasized a symbolic interactionist perspective of development such that pre-adolescents build social cognitive skills and an understanding of themselves through their interactions with friends and their subsequent reflected appraisals of what they believe their friends think of them.

Many theorists have expanded on Sullivan’s (1953) work. The work of Bigelow and La Gaipa (Bigelow, 1977; Bigelow & La Gaipa, 1975) has supported the hypothesis that friendship expectations develop from a more “egocentric” perspective in early childhood (e.g., valuing common activities and receiving help from their friends) towards an “empathic” perspective in pre-adolescence (e.g., valuing genuineness, common interests, and intimacy potential). Buhrmester and Furman (1987) also further delineated developmental stages of friendship, emphasizing the role of friendship and interpersonal interaction in supporting the development of social competencies, including skills such as perspective-taking and empathy. Additionally, Youniss and his colleagues (Youniss, 1980; Youniss & Volpe, 1978) built upon Sullivan’s work by incorporating Piaget’s theory of cognitive development (Piaget, 1977). Youniss viewed peer relationships as being mutually constructive, and thus a child’s knowledge of friendship concepts was derived from the interaction between themselves and others. He emphasized a process-based approach to understanding friendship development, focusing on the actions necessary for the establishment and maintenance of friendship. As children (and adolescents) grow in their
understanding of the relation between interpersonal actions and the psychological states of themselves and others, they are able to abstract more meaning from their interactions and extend concepts to new situations. This ability to extract meaning and apply it to new situations drives the development of friendships.

Despite the variety of theoretical approaches to understanding the friendships of children and adolescents, there is considerable consistency among the core features of each perspective. Reflecting on this consistency, Erwin (1993) provides an integration of various theoretical views in an attempt to summarize the main developmental stages of friendship. Erwin refers to the adolescent phase of friendship development as the “empathic” or “internal psychological” stage. He explains that during this stage of friendship development, adolescents engage in increasing organization and integration of information derived from their interactions with friends. As they do this, adolescents further develop their interpersonal cognitive system which allows them to integrate discrepant information about their interactions, better interpret the meaning of their interactions, and make more complex attributions about the thoughts, actions, preferences, and identities of their friends and themselves. As such, qualities of intimacy and trust are particularly emphasized during this stage of friendship.

**Qualities and trajectories of adolescent friendships.** Similar to there being no singular theoretical perspective of friendship, there is also no generally accepted definition of friendship within the literature. While definitions of friendship vary widely between contexts and cultures, these definitions do commonly refer to a relationship that is egalitarian, reciprocal, and voluntary in nature, that involves elements of affinity, intimacy, and closeness between the people involved, and that endure over time (Bagwell & Schmidt, 2011). Notably, the various qualities of friendship (e.g., intimacy, reciprocity, etc.) are commonly referenced in attempts to define the
nature of friendship. These defining qualities are largely derived from theoretical work about friendship development, and they have been further elucidated through empirical studies.

The various models presented in the literature outlining the qualities of friendship are largely consistent with each other. The model put forth by Bukowski, Hoza and Boivin (1994) provides a fair representation of the variety of qualities of friendship presented in the literature. The qualities included in their model are: play (i.e., spending time together, talking with each other, and engaging in fun activities), conflict (i.e., the extent to which children fight, argue, disagree, and annoy each other), help (i.e., helping each other out, providing protection from victimization, and providing mutual assistance), security (i.e., including both transcending problems and trust), and closeness (i.e., the strength of bond with their friend and the “specialness” or affection experienced with their friend). This work includes similar constructs to the seminal work on the topic of friendship quality by Bigelow and La Gaipa (1975), as well as other commonly referenced studies (e.g., Hartup, 1993; Parker & Asher, 1993).

As in earlier childhood friendships, similarity continues to be a quality of central importance in adolescent friendships (Berndt, 1982). Sharing common activities and interests is seen to be an important aspect of attraction among friends (Kandel, 1978). As children become adolescents, they are additionally drawn to similarities among personalities, ideological positions, and preferences in youth culture (Berndt, 1982). Beyond similarity, increased friendship security has been shown to become an increasingly important friendship quality during pre-adolescence and into adolescence (Bukowski et al., 1987, 1994; Davies, 1984). Further, intimacy has repeatedly been referred to as a core feature of friendships in adolescence (Berndt, 1982; Bukowski et al., 1987; Kuruzovic, 2015; Sullivan, 1953). That is, adolescent friendships are marked by higher levels of emotional closeness and sharing of private or personal
details about themselves and their lives. Friendship becomes a primarily important relationship in the lives of adolescents as they become more independent and increasingly turn to their friends (rather than their caregivers) for support and validation (Berndt, 1982). Friendships during adolescence are described to be closer and more intense during this period of development than any other (Douvan, 1983; Douvan & Adelson, 1966). It is hypothesized that this re-orientation of social priority towards peer relationships is driven by hormonal and neurological changes that begin in puberty and heighten adolescents’ abilities to perceive and process social stimuli related to peer interactions (Nelson et al., 2005). This social re-orienting is thought to be necessary for supporting the self-development required for eventually building adult levels of functioning. Cognitive development in adolescence is marked by an increased understanding of the self and personal identity, as well as an understanding of the thoughts, feelings and identities of others, which allows for greater capacity for intimacy within their friendships (Berndt, 1982). Within the literature, intimacy is frequently described as engaging in self-disclosures, reporting feelings of closeness, and sharing feelings or emotional experiences with each other (Laursen, 1993). As adolescents engage in intimacy, they rely on a sense of security that they can trust their friends, that they can rely on their friends for support, and that their friendships will persist despite any conflicts or vulnerable disclosures. Of course, with increasing intimacy and security, friendships become more complex and a greater degree of skill may be required to navigate these adolescent relationships.

**Social skills and friendship.** Social skills encompass a wide range of abilities important for social interaction and the development of friendships. Non-verbal behaviours such as eye gaze, facial expression, and body language, are important for enhancing communication, producing and recognizing emotional intent, and regulating social interaction (Edinger &
Patterson, 1983; Walden & Field, 1990). Additionally, knowledge of appropriate socially reciprocal behaviours is critical to developing and maintaining friendships (Putallaz & Gottman, 1981). Examples of this type of social knowledge might include understanding how to introduce oneself, how to make social overtures, how to disclose personal information, and how to participate in conversation. In particular, interpersonal problem-solving abilities are an important component of social knowledge that allow one to identify and propose solutions to interpersonal conflict, and to be able to influence others in such a way to resolve conflict (Krasnor, 1982).

Finally, having knowledge of norms and scripts is a critical social skill for guiding fluid social interactions. Norms and scripts provide a structure for what to expect in social interactions and how to generally behave as interactions progress. Without common shared scripts, social communication is more likely to break down and result in less successful social interactions (Furman & Walden, 1990).

There is ample empirical evidence for the role of social skills in one’s ability to make more friends (i.e., popularity), one’s ability to establish higher quality friendships, and one’s ability to achieve meaningful or satisfying friendships (Alegre & Benson, 2019; Buhrmester et al., 1988; Demir et al., 2012; Dodge et al., 1982; Edinger & Patterson, 1983; Gottman et al., 1975). Of relevance to the research presented in this dissertation, Buhrmester (1990) provides empirical support for the relation between social skills and friendship development specifically in adolescence. Buhrmester (1990) was among the first to demonstrate that “close relationship competencies” (p. 1102; e.g., initiating relationships outside the classroom context, disclosing personal information, tactfully providing emotional support to friends, expressing opinions and dissatisfactions, and managing conflicts) were especially important to developing high quality, or more intimate, friendships among adolescents as compared to pre-adolescents. Buhrmester
argued that friendships become more complex in adolescence and thus youth require more skill to achieve a high level of quality and satisfaction in their friendships. The findings of Buhrmester’s (1990) study provide empirical support for earlier theoretical views that skills required for intimacy become particularly important to friendship development during adolescence.

Importantly, social competence not only involves acquiring the necessary social skills and knowledge, but also the ability to fluidly apply these skills as necessitated by different situations and contexts (Erwin, 1993). Crick and Dodge (1994) have presented a modified social information processing model of social competence (revised from Dodge et al., 1986) that provides an explanation for how a social scenario may result in different social behaviours of varying levels of appropriateness depending on one’s interpretation of the social cues and their knowledge of social skills. Specifically, their model outlines six stages of social information processing in which one identifies social cues, interprets the social cues, clarifies the desired outcome of the scenario, generates a set of potential responses, decides upon the most appropriate response, and then finds and produces the social skills or behaviours necessary for the response. In this model, Crick and Dodge (1994) illustrate how social skill alone cannot account for social competency. This model is helpful in explaining how social skills and social cognitive abilities interact to influence social interaction and the development of social relationships such as friendship.

Social cognition and friendship. Early theoretical work on friendship has pointed to cognitive development and social cognition as playing critical roles in the developmental trajectories of friendship. Selman (1980, 1976) has put forth a theory of social cognitive development that places social cognitive abilities, and specifically one’s ability to appreciate the
perspective of others (i.e., role-taking), central to the development of friendships. He emphasized that building role-taking abilities is essential for appreciating the thoughts and feelings of others, and as such intimate relationships are only possible once an individual has achieved a certain level of role-taking ability, which typically occurs in adolescence. Erwin (1993) has consolidated the views from many different theories by arguing that perceptual and cognitive processes (such as empathy and perspective-taking, social attribution skills, and understanding friendship concepts) mediate social behaviour by allowing youth to predict behaviour, regulate their own behaviour, and regulate social interactions.

There is a significant body of literature to support the importance of social cognitive skills such as the ones highlighted by Erwin (1993) in the development of friendship at all ages. During adolescence in particular, greater empathy abilities and social knowledge have been found to be associated with higher peer-ratings of popularity (Adams, 1983). Additionally, social-perspective taking (the ability to understand another’s perspective) has been shown to predict higher quality friendships in adolescence (Chow et al., 2013; Smith & Rose, 2011). Further, popularity has been theorized and empirically shown to enhance perspective-taking abilities through providing greater opportunities for social interaction and subsequent skill development (Białecka-Pikul et al., 2017).

As pointed out by Erwin (1993), social perception and attribution abilities are also an important component of social cognition as it relates to the development of friendships. He explains that people with different social interaction histories attend to and interpret social cues differently, resulting in different expectation for the outcomes of social interactions in the future. Specifically, individuals who are more popular and less popular have been shown to interpret social situations differently (Sobol & Earn, 1985), well-liked individuals tend to be more
accurate in their appraisals of social cues (Dodge & Price, 1994), and lonelier individuals have been shown to be more likely to believe others view them negatively even when this is not true (Christensen & Kashy, 1998). Additionally, one’s emotional reactions to social exclusion have been shown to differ depending on how one appraises the social situation and how they believe others might be feeling (Jones & Rutland, 2020). More so, the inclination of less socially connected individuals to negatively appraise social interactions has been shown to perpetuate, and even worsen, their difficulties with making friends (Lee & Robbins, 1998). Differences in social attribution, such as the ones discussed above, are considered to be related to the development of different social scripts based on interaction history (Nelson, 1981) and the development of one’s identity as being someone who is either accepted or rejected (Snyder & Uranowitz, 1978).

**Friendships among Adolescents with ASD**

**Friendship characteristics among individuals with ASD.** There is a fair body of research exploring the characteristics and qualities of ASD friendships, as well as how ASD friendships compare to those of their neurotypical peers. Largely, the research exploring the characteristics of friendships in children and adolescents with ASD is summarized in a systematic review by Petrina and colleagues (2014). This systematic review indicated that, in comparison to their neurotypical peers, children and adolescents with ASD are reported to have fewer friends (but that 80% of youth with ASD are reported to have at least one friend), and that youth with ASD are reported to have a lower frequency of contact with their friends outside of school. They further identified that the main activities youth with ASD engage in with their friends are playing videogames, watching TV, and physical activity outside; however, the review also noted that engaging in conversation was a relatively common activity for youth with ASD.
and their friends. This review also identified mixed reports regarding the duration of friendships such that quantitative studies suggested ASD friendships were significantly shorter than those of their neurotypical peers, while qualitative studies identified many long-standing friendships of three to six years among youth with ASD.

Petrina and colleagues (2014) additionally reported that, despite some mixed results, friendships among youth with ASD were generally reported to score lower on measures of quality in comparison to the friendships of their neurotypical peers. They found that lower quality ratings were commonly indicated with respect to companionship, security/intimacy, closeness, help, and reciprocity, but not for conflict. Interestingly, one study in particular has pointed to a trend in which ASD friendships might be rated lower on affective qualities such as closeness and intimacy, but not on less affective qualities such as companionship (Calder et al., 2012). The authors reported this finding to be relatively consistent with a number of other studies, but acknowledged that overall, the results between studies on friendship quality are mixed. Consistent support for any trend in the types of qualities that are ranked lower or higher among ASD friendships are certainly impacted by differences in methodology and variations in how each friendship quality is operationalized between studies. Regardless, there is strong evidence to suggest that ASD friendships differ in quality in comparison to their neurotypical peers, such that adolescents with ASD do not appear to develop the type of friendship that might be typically expected at this stage of development.

**Friendship satisfaction among individuals with ASD.** There is growing support for the hypothesis that individuals with ASD may desire and appreciate qualitatively different types of friendships than their neurotypical peers. Much support for this hypothesis comes from the first-hand account writings of individuals with ASD (Brownlow et al., 2015). Furthermore, empirical
evidence suggests that individuals with ASD experience satisfaction in their friendships despite findings of lower friendship quality in comparison to neurotypical friendships (Cage et al., 2016; Calder et al., 2012; Petrina et al., 2014, 2017). Additionally, adolescents with ASD report having more friends in comparison to the number of friends their parents identify (Kuo et al., 2011) suggesting that adolescents with ASD may have a different perspective from their parents about what quality of relationship constitutes a meaningful friendship.

On the other hand, there are also reports that adolescents with ASD continue to be lonelier than their neurotypical peers and that they view themselves negatively on qualities they state as being important for friendship (Bauminger et al., 2003; Locke et al., 2010; Mazurek, 2014; Vickerstaff et al., 2007). Furthermore, there is evidence at least within an adult population that individuals with ASD may not be satisfied with the number of friendships they have (Finke et al., 2019). Interestingly, despite desiring a greater number of friends, the adults with ASD in the Finke et al. (2019) study also reported that they preferred to invest their energy into maintaining current friendships, rather than trying to establish new friendships. In comparison to their neurotypical peers, this study also reported a greater preference for having fun with friends over confiding in friends, and placing more importance on their friends having similar interests to them. The results of the Finke et al. (2019) study are suggestive of a tension that arises from a preference for (or possibly feeling more comfortable with) a different quality of friendship than is typical at this stage of development (e.g., being more comfortable with fewer friends, preferring play over intimacy), and a dissatisfaction related to the inability to achieve the type or number of friendships that individuals with ASD believe they should have.

Taken together, studies exploring friendship satisfaction and loneliness among individuals with ASD suggest that rather than interpreting ASD friendships as being of lower
quality, it may be more appropriate to understand the types of friendships valued by individuals with ASD as being qualitatively different from the friendships that are common of their neurotypical peers. Such a perspective is aligned with evidence that there are important differences in how individuals with ASD socialize and think about social interaction. Different types of relationships may come more easily, may be less stressful, and may be more fulfilling to individuals with ASD (Brownlow et al., 2015). Regardless of the viewpoint we hold about the qualities of ASD friendships, and despite the notion that many individuals with ASD achieve satisfying and meaningful friendships, it can still be concluded that individuals with ASD frequently experience significant loneliness and difficulty achieving at least some of what they desire in friendship. A number of factors might contribute to these challenges, such as the increasing complexity of navigating friendships with age, the social pressures to be popular or have normative relationships, and difficulties with social skills and social cognition, as well as increasing awareness of one’s difficulties in these areas as they gain more personal insight with age.

**Social skills and friendship in ASD.** Individuals with ASD have important developmental differences with respect to many areas of social skill, including the acquisition and implementation of social knowledge, the use and understanding of social communication and non-verbal skills, and the awareness of social scripts and norms that guide social behaviour (for a review, see Carter et al., 2005). Observation of these challenges date back to the earliest reports on incidences of ASD and Asperger’s Syndrome (e.g., Asperger, 1991; Kanner, 1943; Wing, 1981) and have provided the foundation of the ASD diagnosis (APA, 2013). Given the extent of these social skill differences and their impact on functional outcomes, many interventions for building social skills and friendship-making abilities have been developed and
empirically tested (Laugeson et al., 2012; Moody & Laugeson, 2020; Rao et al., 2008; Reichow & Volkmar, 2010; White et al., 2007). While many of these efforts have been effective at improving knowledge of social skills and how to navigate social interactions, there is a paucity of evidence to suggest that this knowledge translates into real-life friendship outcomes (Finke, 2016).

Bauminger, Shulman, and Agam (2003) provide empirical evidence for how difficulties using social skills and social knowledge among youth with ASD have a negative impact on friendship and loneliness. Through both observation of the spontaneous interactions of youth with high-functioning ASD in naturalistic settings, and interviews with youth about their understanding of social interaction, this study found that although youth with ASD were able to communicate knowledge of important social interaction skills, this knowledge did not translate into real life social behaviour. They identified that, despite possessing skills for appropriate social interaction, youth with high-functioning ASD initiated and responded to social overtures half as frequently as their neurotypical peers. It was also found that the quality of social interactions was different between youth with ASD and their neurotypical peers, such that they had more difficulty engaging in complex and combined social behaviours in comparison to their neurotypical peers (e.g., less able to coordinate eye-contact and facial expression). Related to these challenges with social behaviour, Bauminger and colleagues (2003) found that youth with ASD report increased emotional and social loneliness in comparison to their neurotypical peers.

Themes related to the impact of social differences on friendship development, as well as difficulties implementing social knowledge and using social skills in the moment of social interaction, are common throughout the qualitative literature exploring the real-life friendship experiences of youth with ASD (Cresswell et al., 2019). Although individuals with ASD may
acquire reasonable knowledge of social skills with age and with intervention, and although they may be able to describe this knowledge in an interview setting, they continue to express having difficulties as adolescents with social interaction and friendship development that suggest challenges with implementing this knowledge in natural settings (Howard et al., 2006). Kelly and colleagues (2018) presented a thematic analysis of interviews with adolescents with high-functioning ASD that revealed interrelated themes of struggling with the application of social communication skills, having negative feelings associated with these difficulties, experiencing social rejection, and self-segregating as a method of protection from social rejection. Further, Tierney and colleagues (2016) highlighted how challenges with the increased demands on social communication in everyday social interactions as an adolescent with ASD impact friendships and mental health, and how difficulties understanding and following social rules lead to perceived experiences of peer rejection. In another thematic analysis of the experiences of female adolescents with ASD, Myles, and colleagues (2019) presented data suggesting that social understanding and perceived social skill competence were critically important for developing friendships. The participants in their study spoke about consciously choosing not to engage in social interactions due to worries about their own social competency, not knowing what to do in the situation, and concerns about awkwardness and social rejection. Findings such as these point to the relation between differences in social ability, rejection, negative self-appraisals, and reduced openness towards further social engagement or future opportunities for friendship development.

**Social cognition and friendship in ASD.** Social cognitive differences, especially with respect to theory of mind (i.e., the ability to understand that the beliefs, thoughts, and preferences of others are different from our own, Premack & Woodruff, 1978), are well documented among
individuals with ASD at all ages (Yirmiya et al., 1998). Differences in abilities such as understanding fundamental friendship concepts, perspective-taking and theory of mind, appraising social situations, and accurately making social attributions have all been hypothesized to impact the friendships of individuals with ASD (Bauminger & Kasari, 2000; Carrington & Graham, 2001; Hobson, 2005; Tager-Flusberg, 2001).

In their systematic review of the literature on friendship in youth with ASD, Petrina, and colleagues (2014) highlighted consistent findings across studies indicating difficulties among youth with ASD in identifying and defining basic friendship concepts, which subsequently impact friendship expectations and the development of friendships. Their summary of the literature indicated that youth with ASD tend to focus their descriptions of friendship on aspects of companionship, and to less commonly express an understanding or awareness of the affective dimensions of friendship. Through interviews with pre-adolescent and adolescent boys with ASD, Daniel and Billingsley (2010) identified how a narrow conceptual understanding of friendship (e.g., more emphasis on companionship), as well as difficulties understanding broader social concepts (e.g., popularity, social hierarchies), interfered with the ability for youth with ASD to make friends. Cage and colleagues (2016) further linked difficulties with understanding friendship and social concepts to different social preferences among adolescents with ASD. For example, they found that some adolescents with ASD did not understand the concepts of “being cool” and “popularity”, and as such preferred to have fewer friends and not to try to be cool.

The relation between theory of mind abilities and friendship development among individuals with ASD was also frequently referenced in the Petrina and colleagues (2014) systematic review, but empirical studies directly examining this relation are limited. This is especially true among adolescent samples, likely because adolescents with ASD tend to be able
to pass lab-based tasks assessing theory of mind (despite showing real life social cognitive difficulties), making this a difficult relation to study (Barendse et al., 2018). Nonetheless, there is some empirical evidence (and substantial theoretical backing) to support the belief that differences in one’s ability to understand the thoughts, beliefs, and preferences of others is related to friendship outcomes in individuals with ASD. Notably, adults with ASD who score higher on measures of emotional and cognitive empathy have been shown to have friendships that are more similar in quality to those of their neurotypical peers (Baron-Cohen & Wheelwright, 2004). Further, in a study of children with ASD ranging in age from 7 to 19 years old, it was demonstrated that children who could not pass lab-based theory of mind tasks scored lower on a parent-report measure of social outcomes (Frith et al., 1994). Interestingly, even most of the youth with ASD in that study who passed lab-based theory of mind tasks failed to show good evidence of theory of mind in their real-life social behaviours. This evidence supports the notion that, although it may be difficult to accurately assess the real-life theory of mind abilities in adolescents with ASD, it is likely that they experience differences in this area of social cognition in comparison to their neurotypical peers which impacts friendship development.

Although the body of evidence connecting theory of mind abilities to friendship development is limited, more support for the relation between social cognition and friendship in ASD comes from the literature assessing abilities for social appraisals and self-perceptions of social abilities, which are related to theory of mind. During adolescence, individuals with ASD become more aware of how they differ in comparison to their peers, and they become more sensitive to the opinions they believe their peers make of them based on how they behave socially (Burnett et al., 2009; Crone & Dahl, 2012; Stoddart, 1999). Acker and colleagues (2018) have presented a phenomenological analysis of the anxiety experiences of adolescent males with
ASD, which identified core themes of struggling with ambiguous social situations, having uncertainty about how others will react in social situations, and concerns about messing up or causing arguments because of inaccurately appraising the social situation. The researchers identified that these challenges with social confusion increased anxiety for youth with ASD and were a driving factor behind withdrawal responses that limited social interaction. The relation between one’s awareness of social difficulties, challenges appraising social situations, mental health, and social withdrawal has been discussed in a number of other studies as well (Mazurek, 2014; Mazurek & Kanne, 2010; Sterling et al., 2008; Vickerstaff et al., 2007).

**Summary.** As Sullivan (1953) has suggested, friendships in adolescence are marked by increased intimacy, which requires skills for thinking about what others feel, need, and want, as well as possessing the skills to meet those needs through social interaction. Achieving intimate friendships helps neurotypical adolescents feel validated and contributes to the formation of identity. It is well documented that individuals with ASD have differences with respect to social skills and social cognitive abilities in comparison to their neurotypical peers. These differences have an impact on the ability of youth with ASD to manage the increasing complexity of adolescent friendships and to engage in levels of intimacy and mutual responsivity expected of this stage of friendship. More so, these differences result in increased experiences of rejection in comparison to their neurotypical peers, making it difficult to feel secure in friendships, and likely increasing apprehension towards future social interaction.

Importantly, many adolescents with ASD do achieve meaningful and satisfying friendships; albeit friendships that may appear to the neurotypical observer to be qualitatively different than what is typically expected at this stage of development. At the same time, many adolescents with ASD consistently describe high levels of loneliness and ongoing challenges
with social interactions related to building friendships even after social interventions. Ongoing challenges with building friendships, and descriptions of differences in friendship preferences, point to an ongoing need for further research that can build upon our understanding of differences in friendship quality and friendship outcomes among adolescents with ASD. There is a need for research that enhances our theoretical understanding of the processes that both help and interfere with the development of meaningful and satisfying friendships in this population based on their own perspectives.
In its approach, qualitative research is committed to using interpretive practices to generate a more comprehensive understanding of human experience and social phenomena (Nelson et al., 1992). Further, it is rooted in a history of bringing to light perspectives of underrepresented populations by emphasizing the experience of research participants (Creswell et al., 2007). In the present study, I have chosen to utilize the qualitative methodology of grounded theory (Glaser & Strauss, 1967), using a constructivist approach (Charmaz, 2014) and informed by a symbolic interactionist framework (Blumer, 1969).

Considering these characteristics, qualitative inquiry is well-suited to the aims of the current study to explore the friendship experiences of adolescents with ASD and to give a voice to their perspective. A large majority of research in relation to ASD has focused on deductive approaches using existing theory about typical development to test hypotheses about the ASD experience, or has relied on reports from parents, siblings, and health care providers to provide accounts of the ASD perspective. As such, research has tended to privilege the perspective of researchers and informants. Much less emphasis has been placed on first-hand accounts from individuals with ASD themselves; however, as previously discussed there is growing recognition of the importance of obtaining these accounts, especially for identifying gaps in knowledge and services (e.g., DePape & Lindsay, 2016).

**Characteristics of Grounded Theory**

Grounded theory provides a systematic and rigorous methodology that allows the investigator to move beyond basic description of social experiences, and instead explores how social phenomena occur. It is an ideal approach when striving to answer questions about process,
and when either no theory exists or existing theory is not adequate for answering the specific questions at hand (Creswell et al., 2007).

From its conception, the core components of grounded theory have included: (1) concurrent engagement in data collection and analysis, (2) construction of codes derived from data rather than a-priori hypotheses or expectations, (3) constant comparison of data and emerging codes within and between data sources (e.g., interviews) at all stages of analysis, (4) constant advancement of the development of theory at every stage of data collection and analysis, (5) use of memo-writing to advance theory development, (6) theoretical sampling, and (7) withholding completion of a thorough literature review until after analysis is underway in order to enhance reliance on the data and reduce bias from pre-existing theory (Charmaz, 2014; Glaser & Strauss, 1967). In summary, grounded theory involves an inductive approach in which theory emerges from the ground up by using iterative strategies that allow the researcher to systematically and flexibly move back and forth between data collection and analysis. The result is a transferable, middle-range theory that is built directly out of the data, often presented as a visual model.

**Constructivist Grounded Theory**

Following the initial description of grounded theory by Glaser and Strauss (1967), the methodology has been developed and evolved over time. Notably, Constructivist Grounded Theory, pioneered by Kathy Charmaz (2000), is one approach that has developed in parallel to evolution in the field of qualitative inquiry away from positivism (Bryant, 2002; Charmaz, 2014). While “constructivist grounded theory adopts the inductive, comparative, emergent, and open-minded approach of Glaser and Strauss’s (1967) original statement” (Charmaz, 2014, p. 12), it differs in its flexibility of method, its ontological perspective, and its acceptance of
constructed meaning. Specifically, in comparison to rigid and prescriptive methodological applications outlined in earlier versions of grounded theory (e.g., Strauss & Corbin, 1990, 1998), which were seen to risk forcing data into preconceived categories (Glaser, 1992) the constructivist approach emphasizes emergent properties over procedural application of coding techniques. Further, Charmaz’s (2000) approach to grounded theory assumes that social reality is constructed, and that the research produced is a result of an interactive process between the researcher and the research subject(s), thus aligning with a relativist ontological stance. In line with this view, constructivist grounded theory also recognizes reflexivity as an essential component to the intersubjective development of theory, rather than attempting to minimize the influence of subjectivity on analysis. That is, by viewing the research as constructed rather than discovered, the researcher is encouraged to examine research decisions and interpretations, and reflect on how their own interests and experiences influence their interactions with the research subject and the final product of the research (Charmaz, 2014).

Symbolic interactionism. Symbolic interactionism becomes an especially important perspective to consider when discussing the notion of co-constructing meaning through interaction. Symbolic interactionism is a theoretical perspective which posits that the meanings we ascribe to the self, to situations, and to society are dynamic and built through interaction with the world, ourselves and others. Symbolic interactionism is derived from the pragmatist tradition which believes that it is through practical action and experience that people come to understand and make sense of the world, and that reality is somewhat fluid and open to different interpretations (Mead, 1934). The tenets of symbolic interactionism propose that (a) people’s actions towards things or other people are based on the meaning they ascribed to the things or people, (b) meaning is not intrinsic to an object but instead has arisen out of prior interaction,
and (c) meaning is modified through an interpretive process of self-reflection during interaction (Blumer, 1969). In other words, meaning guides interaction, meaning arises from interaction, and meaning changes during interaction.

In constructivist grounded theory, symbolic interactionism has relevance not only to the research process, as the researcher interacts with participants and data to build meaning around the concept of study, but also to the research outcome. The outcome of grounded theory, which is a substantive theory of a social process, often accounts for how the participants of the study interact with themselves, others, and society to establish meaning. Miliken and Schreiber (2012) write about how the use of a symbolic interactionism framework within grounded theory brings with it a set of sensitizing concepts that provide the researcher with a starting point from which they can think about these processes and their relevance to the data. In particular, Miliken and Schreiber (2012) discuss how core concepts of symbolic interactions (e.g., the mind, the self, and society) sensitize the researcher to data indicating each participant’s mental processes, their self-reflections, and the social contexts within which each participant’s actions occur. Heightened awareness of this type of data can guide the researcher in examining questions about how the social process of study occurs.

**Method Selection and Rationale**

Following Charmaz’s (2014) approach, I have chosen a constructivist approach to grounded theory based on its ontological and epistemological views, its assertion that the researchers’ own views, perspective, and experiences must be taken into consideration as part of the theory development, and the balance it provides between strategies for maintaining flexible and dynamic development of theory with the promotion of methodological rigor and trustworthiness (2014).
The constructivist approach aligns with the perspective that reality is not absolute, but is subjective and constructed in relation to factors such as culture, society, and historical context. Further, one construction is not more or less true than another, and any one construction can be alterable based on experience and context. In light of this relativist ontological stance, research conducted within the constructivist paradigm subscribes to the belief that the researcher and research participant(s) interact with each other to develop an understanding of the social phenomenon under study. The ontology, epistemology, and methodology that define constructivist inquiry are well suited to the focus of study within the current research.

Specifically, it is reasonable to consider that adolescents with ASD would have unique (yet variable between participants) experiences and understandings of friendship, which may be different from and equally as valid as the experiences of neurotypical individuals. This difference in perspectives and values is well-documented in discussion of the neurodiversity movement (Baron-Cohen, 2017). The process of appreciating and elucidating this experience requires a methodology that allows open interaction between myself, as the researcher, and the research participants to understand and elucidate the implicit meanings of their experiences (Charmaz, 2004).

Constructivist grounded theory requires that the researcher examine the ways in which their past influences the way they understand the world and interpret the data (Charmaz, 2014). Further, this approach emphasizes that being an expert in the field of study confers an advantage such that it prepares the researcher to respond to and receive the messages in the data (Charmaz, 2004). This perspective is especially useful and relevant in the current study, as I have entered into the research process with an extensive history of work within the field of ASD, and a broad understanding of the literature pertaining to social development and friendship in autism. The
constructivist orientation to grounded theory accepts that a researcher will enter into a research project with background experience, and provides methods for both evaluating the influence of such experience and using this experience to enhance theory development.

Finally, my decision to use a constructivist approach has also been influenced by the balance it provides between methodological flexibility and rigor. I have valued this balance for practical reasons related to studying within the field of psychology, as well as for personal preferences for data analysis. While qualitative methodology is being increasingly used within the field of psychology (Hays et al., 2016; Ponterotto, 2005), there continues to be a substantial lack of familiarity and comfort with this approach (Levitt et al., 2017). Constructivist grounded theory provides a more moderate leap into the qualitative realm from the familiar positivist paradigm of inquiry reflected in quantitative research and common within psychological sciences. The concepts of constructivism and social constructivism, or the notion of constructing knowledge and meaning through the use of prior experience and social interaction, are valued concepts within developmental psychology (e.g., Piaget, 1936; Vygotsky, 1980). Further, in comparison to some other qualitative methodologies, grounded theory has a more developed and rigorous set of methods, including criteria for trustworthiness and rigor, which are comparable to criteria such as validity and reliability within quantitative research. The constructivist approach in specific balances flexible guidance for data analysis (e.g., suggestions for initial and focused coding) with acknowledging a role for more structured techniques (e.g., axial coding) to encourage identification of process and encourage theory development when warranted (Charmaz, 2014). This method honours an adaptable, comparative, and iterative approach important for co-constructing meaning and enhancing human agency, while also maintaining the methodologically rigorous tradition of the original grounded theory approach.
On a personal level, the flexibility of the constructivist grounded theory approach was especially appealing to me as it encourages engagement in the interactive process with research participants and data. Rather than following prescribed steps and taking on the role of an outside observer, this active involvement in data collection and analysis promotes awareness of bias and drives the researcher to question their perspectives and decisions throughout the research process. I viewed this orientation as being especially well suited for the current study, as it places the voice of adolescents with ASD at the forefront of theory development and questions bias that may exist in current interpretations of experiences had by individuals with ASD.
Chapter 4

Methods

As discussed above, core features of grounded theory methodology include the simultaneous collection and analysis of data using constant comparison within and across data sources to inform theoretical sampling and advance the development of theory as the research progresses (Charmaz, 2014). The following sections outline the specific methodological decisions and techniques used for data collection and analysis.

Sampling Procedures

Initial sampling. Although theoretical sampling is the defining form of sampling in grounded theory, there is also recognition for the value of initial or purposeful sampling at the outset of the research to ensure selection of participants based on criteria that are to be represented in the sample (Charmaz, 2014; Corbin & Strauss, 2008; Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1998). Charmaz (2014) describes initial sampling as a departure point, involving the consideration of the relevant types of people, cases, and situations that are related to the phenomenon of interest. The intention of initial sampling is to generate a range of categories that establish breadth in the data (Strauss & Corbin, 1998). Additionally, purposeful sampling can be used to restrict demographic heterogeneity in order to obtain more in-depth information while limiting the required sample size (Sandelowski, 1995). The initial sampling decisions made for this study were based on experience with the phenomenon under study, and demographic traits including diagnosis, gender, and age.

A key aspect of initial sampling is the selection of participants based on their experience with the phenomenon under study. As such, a requirement of initial sampling was that participants had to have at least one person whom they would identify as a friend, either
currently or in the past. No restrictions were placed on the definition of “friend” to maintain an openness to a variety of friendship experiences. In particular, I entered into the research with the open-mind that participants might identify family members, care-providers, or pets as friends; however, when participants brought up such individuals in their interviews they clearly differentiated these relationships from friendships. All participants in the study identified their friends as being other children, adolescents, or young adults outside of their immediate or extended family.

Explicit in the questions this research aimed to answer, initial sampling was restricted to individuals with a diagnosis of ASD. While I remained open to the possibility of pursuing the insights of other relevant individuals through later theoretical sampling (e.g., parents, friends of participants, or experts) should this have relevance for the exploration of developing codes and categories, I was cautious of the influence this might have on describing the process of friendship development as it is experienced by adolescents with ASD. Notably, Ryan and Raisanen (2008) use a symbolic interactionist lens to discuss how difficulties among individuals with ASD to adapt to the norms and rules of typical socialization result in interactive experiences that are uneasy for both themselves and the people with whom they interact. The experience of these uneasy interactions often results in others blaming interactional difficulties on individual skill deficits rather than rigidity in social norms and expectations, and have the potential to mask the ability of outside informants to understand the internal processes of meaning making experienced by the individual with autism. In the end, no interviews with outside informants were used in the present study.

Importantly, ASD is a heterogeneous condition which varies in symptom presentation from individual to individual, and ranges in its degree of impairment. Within the current study, I
made the decision to focus on the experience of higher-functioning individuals. The term “high-functioning autism” is somewhat contentious due to discrepancies in its definition; however, for the purposes of this study a simplified definition has been used to refer to people who do not also have a diagnosis of an intellectual disability. I have chosen this definition of higher-functioning autism to preserve a substantial degree of breadth among participants interviewed and the experiences presented in this study, while also recognizing that there may be different and unique processes relevant to the friendship experiences of individuals who also have an intellectual disability, which warrant their own investigation. Of note, no further restrictions were placed on the presence of a diagnostic co-morbidity. Given that the rate of mental health co-morbidities is high among individuals with ASD (Lai et al., 2019), excluding individuals with these diagnoses may have limited my ability to capture the full experience of the group I aimed to represent.

Two further decisions were made regarding demographic characteristics of the sample to be recruited. Firstly, after consultation with my committee, as well as a number of mentors, I decided to include both male and female participants in the current study. The experience of females with ASD is often overlooked in research within this field. This is likely due in part to disproportionate gender representation in the diagnosis of ASD, with a male to female diagnostic ratio of 4:1 (Public Health Agency of Canada, 2018). It has been hypothesized that the female experience and phenotypic presentation of ASD may be poorly understood and may not be well characterized by current diagnostic criteria, which results in under- or mis-diagnosis, further perpetuating a limited focus on research directed to better understanding females with ASD (Kirkovski et al., 2013). Given that an aim of this study was to privilege the perspectives of adolescents with ASD, it felt important to ensure that both male and female perspectives were
included. Finally, restrictions were made on the age to be represented within the sample. Within the current study, I decided to specifically focus recruitment on individuals in middle adolescence, or ages 13 to 16 (Barrett, 1996; Berndt, 1982; Kaltiala-Heino et al., 2003; Laursen et al., 1998). The nature of friendship relationships changes as individuals mature. The decision to focus specifically on middle adolescence was made to ensure that the experiences captured within this study were those of distinctly adolescent friendships, and to minimize the likelihood of including experiences which are more characteristic of late childhood or early adulthood.

**Theoretical sampling.** Theoretical sampling becomes a critical component of grounded theory methodology once preliminary categories have been identified and there is a need to both elaborate on the properties of each category and explore relations among categories. As Charmaz (2014) describes, “Initial sampling in grounded theory gets you started; theoretical sampling guides where you go” (p.197). The researcher engages in theoretical sampling by seeking out participants with specific experiences and adapting interview questions to develop and refine emerging categories. Through the use of theoretical sampling to explore and define categories, the researcher moves away from simple description of the phenomenon under study and towards development of a conceptual theory.

A strategy for theoretical sampling was built into the original research design by acknowledging the need for recruiting specific participants based on background experiences, by establishing flexible interview protocols that could be modified to explore emerging concepts, and by planning for the use of follow-up interviews. In the present study, my primary approach to theoretical sampling was to reflect on categories and concepts emerging from previous interviews and analysis, and to flexibly incorporate questions into future interviews that would help to further develop these emerging concepts. I sought out new participants and carried out
follow-up interviews with previous participants with the aim of capitalizing on the unique backgrounds of participants. Regarding follow-up interviews, I reviewed past transcripts to identify previously interviewed participants who were likely to have experiences that could help to further develop new concepts that had not been considered at the beginning of data collection. I then prepared modified interview protocols to target relevant insights. For example, at the outset of this research I did not anticipate the need to explore the tension between prioritizing engagement with friends versus time spent engaged in one’s own interests, and the relationship of this tension to the value one places on friendship. These categories emerged as the research progressed. The use of follow-up interviews allowed me to return to earlier participants with whom original interviews suggested the presence of this tension, but with whom the original interviews had not explicitly explored this concept.

**Theoretical saturation.** I continued with data collection until the point of theoretical saturation, which is the point at which additional collection of data yields no new information about the properties of the categories being explored, nor any additional theoretical insights about the emerging grounded theory (Charmaz, 2014; Glaser, 1978; Holton, 2007). Theoretical saturation is not to be equated with the point at which nothing new is happening in the data due to repetition in pattern, but rather at the point when there is no further theoretical development. Reaching a point of theoretical saturation indicates that categories have been defined and checked, and that the relationships between categories have been explicated. In the present study, theoretical saturation was achieved through the iterative process of data collection, analysis, and further theoretical sampling to analyze patterns in the data and to drive forward theory development (Charmaz, 2014).
Theoretical saturation and cessation of data collection focuses less on sample size and representativeness, but instead emphasizes sampling adequacy to ensure categories are fully developed and explained (Bowen, 2008). As such, the sample size among grounded theory studies is highly variable depending on factors such as research objectives, the breadth of theoretical scope, and expertise of the researcher (Mason, 2010). In the present study, theoretical saturation was identified at the point of 25 interviews, which is consistent with estimates of typical sample size for a grounded theory of this scope (Creswell, 2007).

**Participant Characteristics**

The aim of grounded theory is focused on establishing a transferable, rather than generalizable, theory. The sampling procedures described above are designed for use in grounded theory to help achieve the end objective of developing a substantive theory that describes the experience of a specific group. As such, the resulting sample should be collected with the goal of theory development and should be sufficiently reflective of the specific group which the research hopes to describe. This differs from quantitative methods which aim to capture a sample that is representative of the broader population and will allow for wide-ranging generalization of findings.

**Participant age.** The final sample for this study included 19 adolescents diagnosed with ASD (13 male and 6 female). Six participants (4 male and 2 female) additionally participated in a second follow-up interview, resulting in a total of 25 interviews. Participants ranged in age from 13.08 years to 16.92 years ($M = 14.81, SD = 1.27$). Additionally, participant grade level ranged from grade 7 to grade 11, with ten participants enrolled in middle school (grade 7 and 8) and nine participants enrolled in high school (grades 9 to 11).
**Intellectual functioning.** In addition to inquiring with parents upon recruitment regarding whether their child had been previously diagnosed with an intellectual disability, the Wechsler Abbreviated Scale of Intelligence (WASI), which is described below, was used as a screen for intellectual abilities. Full-Scale Intelligence (FSIQ), Performance Intelligence (PIQ), and Verbal Intelligence (VIQ) were within the normal range (e.g., above a standard score of 70) for all participants. Specifically, FSIQ standard scores ranged from 73 to 124 (\(M = 100.05, SD = 13.50\)), PIQ standard scores ranged from 80 to 127 (\(M = 104.89, SD = 13.95\)), and VIQ standard scores ranged from 70 to 121 (\(M = 96.79, SD = 14.63\)).

**Diagnostic information.** As reported above, sample recruitment was limited to individuals with an ASD diagnosis and without a diagnosis of intellectual disability. The diagnostic labels reported by the participants’ parents included Autism (\(n = 7\)), ASD or Autism Spectrum Disorder (\(n = 5\)), mild ASD (\(n = 1\)), and Asperger’s (\(n = 6\)). The age at which the ASD diagnosis was first made ranged from 3 years old to 14 years old (\(M = 6.26, SD = 3.51\)). In addition to parent report of diagnosis, the Autism Diagnostic Observation Schedule, 2nd Edition (ADOS-2), which is described below, was also used to help characterize the range of autism symptomatology among participants within the study sample. According to the ADOS-2, twelve participants (63.16%) were classified in the *Autism* range, while four participants (21.05%) were classified in the *Autism Spectrum* range, indicating milder symptoms. Three participants (15.79%) were classified in the *Non-Spectrum* range, suggesting a very mild presentation of autism symptomatology. Best practice in the diagnosis of ASD is based on multiple sources of evidence of symptoms of autism, and should include but not be solely based on the ADOS (The Miriam Foundation, 2008). In part, this diagnostic recommendation is made in light of increasing recognition of the heterogeneity of ASD and subsequent widening of how phenotypic expression
of ASD is characterized, which may not always be captured solely through the use of diagnostic tools. Importantly, Pugliese and colleagues (2015) report on issues with specificity and sensitivity when using the ADOS-2 to assess for ASD in individuals without intellectual disability and caution against relying on it as an independent diagnostic tool, especially when assessing individuals under the age of 16. Specially, they found that 15.4% of their overall sample with a diagnosis of ASD was not classified by the ADOS as having ASD, and that this number increased to 18.4% when considering only individuals under the age of 16. These estimates of sensitivity are consistent with what has been observed in the present study.

Additionally, given that all participants in the present study had been previously diagnosed with ASD and were observed by me during data collection to have notable symptoms consistent with ASD, the participants classified as *Non-Spectrum* on the ADOS-2 were not excluded from this study.

Psychiatric comorbidities are common among adolescents with ASD (e.g., Leyfer et al., 2006; Simonoff et al., 2008) and can influence social relationships. As such, information on comorbid psychiatric diagnoses was also collected through parent report. Twelve participants (63.16%) were reported to have a comorbid psychiatric/developmental diagnosis in addition to ASD. These diagnoses included Attention-Deficit Hyperactivity Disorder (*n* = 8), Learning Disability (*n* = 3), Anxiety (*n* = 4), and Depression (*n* = 1). In some cases, a participant had more than one comorbid diagnosis. One participant was also reported to have been diagnosed with “Developmental Delay” when they were younger; however, this participant was still included within the study as the participant’s parent reported that a specific diagnosis of intellectual disability had not been made and the participant’s scores in our screen for intelligence fell above the range of intellectual disability.
**Intervention and support.** Experience with prior and ongoing intervention or support can have an influence on social challenges and social relationships. As such, information regarding intervention and support was collected to characterize the extent of support received within the current sample. Eight participants (42.11%) were reported to be currently taking medication. In many cases, these medications were prescribed for the treatment of comorbid conditions (e.g., ADHD or anxiety), rather than symptoms and behaviours directly related to ASD. Additionally, all but one participant was reported to have received some type of intervention including: behaviour therapy, speech and language services, sensory integration therapy, occupational therapy, psychological counselling or therapy, and social skills intervention. Further, six participants (31.58%) were reported to be currently in ongoing intervention. Notably, nine participants (47.37%) were reported to have received, or currently be receiving, social skills training.

Information regarding educational support was also collected. Such information provides insight to the level of support provided in school, as well as insight into the social environment participants are immersed in on a daily basis. The most commonly reported educational placement was placement in a mainstream classroom without any additional support \((n = 9)\). An additional four participants were reported to be attending a mainstream classroom full time with support from an Educational Assistant. One participant was reported to have a placement in a specialized classroom with part-time integration. The remaining five participants were placed full-time in specialized educational programs.

**Geography, socio-economic status, and family composition.** All participants were from a few small cities in southeastern Ontario and spoke English as their primary language. While a majority of participants in this study were reported to be within household income
brackets that are comparable to or higher than average incomes in the region, there was variability in income within the group. Seven participants were reported to have annual household incomes over $95,000, while an additional three participants were reported to have annual household incomes between $85,001 and $95,000. Five participants were reported to have household incomes between $45,000 and $85,000. Finally, one participant reported an annual household income below $25,000. Information on annual household income was not reported for three participants. All but one participant were reported to have siblings, with the number of siblings reported ranging from 0 to 6 ($M = 1.89, SD = 1.59$).

**Participant recruitment.** I recruited participants primarily through the participant database in the ASD Studies lab at Queen’s University. This database is comprised of families who have been contacted through recruitment events and have expressed interest in participating in studies conducted by the lab. I recruited additional participants from the Province of Ontario Neurodevelopmental Disorders (POND) Network Queen’s University branch database, flyer postings with community partners in Kingston, and advertisement postings online on Kijiji. Finally, some participants were recruited through word of mouth by research participants and their families sharing information about the study with people they knew.

**Data Collection**

**Diagnostic and demographic information.** General demographic and diagnostic information was collected using a caregiver-report demographic questionnaire designed for use in this study, as well as standardized assessment tools. This information was used to determine eligibility for inclusion in the study, as well as to provide a description of the study sample.

**History and demographic questionnaire.** A demographics questionnaire was completed by each participant’s caregiver. Notably, while the perspectives of participants with ASD were
prioritized when collecting data for this study about subjective friendship experiences, objective historical and demographic data was collected through caregiver report to ensure accuracy of reporting for factual information. The demographics questionnaire inquired about the participants’ family history, the participant’s diagnosis and treatment, as well as general demographic including the participants’ age, grade, diagnoses, and treatment history, as well as family composition and socioeconomic status.

**Autism Diagnostic Observation Schedule, 2nd Edition (ADOS-2).** The ADOS-2 (Lord et al., 2012) is a standardized assessment used to aid in the diagnosis of ASD. The ADOS-2 is comprised of several semi-structured activities that allow the experimenter to observe social and communicative behaviour of the participant. Complete administration requires approximately 30-45 minutes. Module 4 of the ADOS was used in the current study. Interrater reliability for individual items, 88.25%, and for diagnostic classification, 90%, has been found to be high with the ADOS-2 Module 4. I was trained to use the instrument and met reliability with my supervisor, Dr. Kelley, who is a research-reliable administrator of the ADOS-2. The ADOS-2 was used in the present study to help characterize the range of autism symptomatology among the participants in the study sample.

**Wechsler Abbreviated Scale of Intelligence (WASI).** The WASI (Wechsler, 1999) is a standardized assessment of intelligence. It is composed of four subtests, which require approximately 40 minutes to administer, and provides estimated scores for Verbal IQ, Performance IQ, and Full-Scale IQ. The WASI is designed for use with individuals who are between 8 and 89 years old. Internal consistency for the WASI is high for Verbal IQ ($r = .93$), Performance IQ ($r = .94$), and Full-Scale IQ ($r = .96$). Additionally, test-retest reliability for individuals aged 13 to 16 years old ranged from .77-.86 for the subtests, and .87-.92 for the IQ
scales. The WASI was used in the current study as a screener for verbal abilities (to assess for any potential difficulties with engaging in orally administered interview), and intelligence. Participants were required to have a Full-Scale IQ standard score above 70 for inclusion in the present study.

**Interview protocol.** I conducted early-stage interviews using a semi-structured approach, guided by an initial interview protocol (Appendix D). A semi-structured approach using an interview guide is recommended in grounded theory to ensure that a broad set of potentially relevant concepts are explored and that interviewer bias is minimized, while also allowing data collection to follow the expressed experiences of the participant (Charmaz, 2014). The original interview guide was developed to thoroughly address the questions posed in this study, integrating Charmaz’s (2014) suggestions for effective interview questions. Further, the initial interview guide was designed with the understanding that as data collection and analysis progressed questions may be added, changed, or modified in order to explore emerging categories and themes. In keeping with this understanding, the questions evolved as interviews progressed based on the development of the theory. In some cases, modifications to the interview protocol were made prior to the interview. In many other instances, new questions were formulated spontaneously during the interview to inquire more deeply about emerging concepts and their interrelations. Notably, prior to each of the six follow-up interviews, I developed individualized interview protocols by reflecting on each participant’s initial interviews and the remaining questions I hoped to answer to refine categories.

**Data collection procedure.** Participants and their caregivers attended the ASD Studies Lab at Queen’s University to participate in this research. Upon arriving at the lab, I completed consent and assent procedures with each participant and their caregiver. During the consent
process, we also spent some time getting to know each other through casual conversation. For eleven participants, the ADOS-2 and WASI were administered following consent procedures. The administration of these assessments took approximately 1 to 1.5 hours. The majority of these eleven participants then returned to the ASD Studies Lab for a second appointment to participate in the interview; however, a handful of these eleven participants chose to take a brief break and then participate in the interview during their same visit to the lab. Interviews were conducted in a private room within the ASD Studies Lab and lasted approximately 40 to 60 minutes. Each interview was both audio- and video-recorded. While interviews were being completed, caregivers completed the demographics form in an adjacent waiting room.

The remaining eight participants had previously completed the ADOS-2 and WASI in the months leading up to their participation in the current study during participation in another research study in the ASD Studies lab. In all cases, the time from initial completion of the ADOS-2 and WASI to the time of participation in the present study was under 6 months. Consent was obtained to use this data from their previous research participation with the aim of reducing the burden placed on each participant and limiting the effects of practice on test results. As such, I completed an interview with each of these participants immediately following consent procedures. Based on my observations, these eight participants did not appear to differ in their level of comfort nor take longer to warm up to the interaction as compared to the participants who had more time to build familiarity and comfort during testing.

After the completion of the interview, I provided each participant and their caregiver with a debriefing letter. We discussed the contents of the letter and any questions they had about the research. Additionally, participants were remunerated $30 for their participation. Finally, I briefly explained the reasoning behind potential follow-up interviews and informed each
participant and their caregiver that I may be in touch in a couple months to inquire if they would be willing to come in for an additional follow-up interview. I further explained that they could make the decision about whether they would like to participate in another interview if and when I contacted them in the future. In the end, six participants were contacted for and agreed to participate in follow-up interviews. Follow-up interviews occurred between 3 months and 9 months after the initial interview ($M = 6.00, SD = 2.08$). Again, these interviews were held in person at the ASD Studies Lab. The follow-up interviews were shorter in duration than the original interviews, lasting approximately 30 to 45 minutes. Each participant received $10 in financial compensation for their participation in the follow-up interviews.

Collecting rich data with adolescents with ASD. Too often, the body of literature describing the experiences of individuals with ASD is more strongly informed by the perspectives of the neurotypical individuals conducting the research rather than highlighting the voice of the individuals with ASD themselves (Milton, 2012). Fayette and Bond (2018) summarize a number of challenges that might be experienced when conducting research with an ASD population that can interfere with the accurate co-construction of meaning, or that deter researchers from including the voiced experiences of individuals with ASD in the research process. For example, they identify how inherent impairments in the use of idiosyncratic language, identifying and expressing emotions, concrete thinking, understanding abstract concepts, initiation of interaction, and elaboration in responding might all present challenges to traditional research methods. Notably, while these barriers can exist, it may be argued that there is a responsibility on the part of the researcher to recognize their own role in perpetuating these challenges and to examine how research methods might then be adjusted to overcome these barriers.
Developing rapport. Rapport building is critical to interpreting behaviour and meaning, as well as understanding the participant’s thoughts and emotions. In qualitative research, it is essential to build genuine rapport, rather than “faking friendship” with the sole objective of acquiring information from the participant (Brinkmann, 2007). Further, from the perspective of a constructivist grounded theory, rapport is an essential component to the mutual process of meaning making. The importance of rapport building is heightened when working with individuals with ASD, who may be more cautious to build trust due to difficulties predicting social situations and who often feel as though others do not understand or care to understand their experiences (Acker et al., 2018; Wood & Gadow, 2010). Further, challenges with social communication can interfere with the researcher’s ability to understand the client, thus it is imperative that the researcher invest time into building familiarity with how the client communicates.

Taking time to build rapport was prioritized in the present study. Prior to commencing data collection, time was spent in conversation with each client and their caregiver about general topics such as their day and interests. These conversations helped to establish comfort and to enhance my understanding of the strategies and supports that might help facilitate a successful interview. I structured interviews to start with warm-up questions about interests, and engaged in authentic curiosity about the topics each participant raised on their own. As rapport developed, I was then able to transition the conversation to topics of friendship, and then to additional topics relevant to data collection. Throughout each interview, I made a conscious effort to maintain an open mind, genuine curiosity, and interest in what each client had to say. Further, I normalized and validated confusion they might have about answering challenging questions (e.g., “I think I asked that in a confusing way, let me try a different way that might make more sense”), as well
as emotional responses to sensitive topics (e.g., “This can be difficult for a lot of people to talk about, how are you feeling about it?”). Finally, I reviewed interviews after completion and sought feedback from my supervisors to identify instances in which I might be unintentionally disrupting rapport (i.e., early in interviews, it was identified that I was saying “that’s great” or “that’s interesting” to encourage responses, which may have unintentionally impacted the participant’s feelings when they provided a response to which I did not give this feedback).

**Setting the interview environment.** While the process of building rapport can facilitate increased feelings of comfort in the interview setting, there are additional environmental factors that can require accommodation to support data collection with individuals with ASD. In particular, individuals with ASD may have sensory sensitivities, attentional difficulties, and challenges with self-regulation (Geurts et al., 2014; Laurent & Rubin, 2004; Thye et al., 2018), which can all interfere with their ability to participate in an interview. To help manage these challenges, interviews were held in a quiet, private room, set up with comfortable chairs and minimal distractions. The room was well-lit with specific fluorescent lights that do not emit a humming sound. I provided a selection of toys and objects (e.g., stress balls) for each participant to use should they need to fidget or require additional stimulation. In some individual cases, these items were removed when it was identified by myself through observation, or by direct report from the participant, that such objects would likely be distracting to the participant. Throughout the process of interviewing, I monitored behaviour for signs of fatigue, diminishing attention, and restlessness. A range of strategies were used to support these behaviours including offering breaks, changing topics, and increasing the pace of interview questions to maintain interest. Further, I took care to structure interviews so that they could be as concise as possible.
Developing the interview protocol and conducting the interview. Interviewing is generally the primary method of data collection in grounded theory research (Charmaz, 2014; Nunkoosing, 2005). Importantly, data collection in the current study relied solely on semi-structured interviews. As such, it was pertinent to invest considerable effort and care in developing the interview protocol and identifying appropriate strategies and tools for conducting each interview. My prior knowledge about ASD, as well as experiences working with this population in clinical and research settings, prepared me with an understanding of some of the potential barriers to interviewing individuals with ASD and strategies to accommodate for these barriers. In general, individuals with ASD are often more concrete in their thinking and literal in their use of language (Almeida et al., 2019). As a result, they may experience confusion when interpreting more abstract questions, and they may provide straightforward and literal responses with minimal elaboration. Further, challenges with memory retrieval and executive functioning can interfere with the ability to recall episodic memories and identify relevant information for answering open-ended questions (Loth et al., 2008; Maras & Bowler, 2014; Tulving, 2002).

While the above factors can interfere with the interview process, they can also present unique strengths for collecting rich data as they often result in sincere and honest responding. It is critical for the interviewer to understand how to recognize and appropriately accommodate for these differences in thinking and communication style in order to facilitate a successful interview. Crindland and colleagues (2015) outline several considerations for preparing an interview guide when conducting semi-structured interviews with individuals with ASD which helped to address the above challenges. I employed a number of strategies consistent with these recommendations both in developing the interview guide and conducting the interview. Firstly, I integrated a variety of methods for asking questions (e.g., open-ended questions, yes/no
questions, multiple choice/option-posing questions) to provide opportunities to revisit topics in different ways and allow for a diversity of response styles. Additionally, I primarily used single-part (rather than multi-part) questions to support accurate interpretation of the question and reduce the cognitive load of identifying relevant information to report on. Responses were then followed-up with prompts for elaboration on specific topics. Almeida, Lamb, and Weisblatt (2019) have reported that cued invitations, which are “follow-up open-ended prompts that refocus the child’s attention on previously mentioned details (in their own words) and used as contextual cues to elicit narrative or multiword responses” (p. 1124), are particularly effective strategy for eliciting more detailed accounts of experiences in children with ASD. In line with this question style, I also embedded questions from the interview guide within relevant context provided by the participant. For example, if a participant was telling me about a specific friend and mentioned that they were very close with that friend, I might then restate the description they provided about this friend and then ask, “You mentioned you were close, tell me about becoming close with this friend”.

In addition to the interviewing challenges related to cognition and communication style discussed above, there are also behavioural barriers that I took into consideration when preparing the interview protocol and conducting interviews. Individuals with ASD often have a preference for adhering to routine and structure. They may be anxious in a new environment and they may experience challenges following the natural flow of an unstructured conversation. As recommended by Crindland and colleagues (2015), I provided a clear introductory statement to open the interview and set expectations about what would be discussed, and I used warm-up questions to help relax participants into the interview process. For example, we started each interview by discussing the client’s interests and activities of enjoyment (for more detail please
refer to the interview protocol in Appendix D). Additionally, I developed the interview guide to cluster related questions together and limit the number of shifts between topics. I then used summary statements to conclude the discussion of one topic, and transition statements to introduce new topics.

Finally, from an ethical perspective, I was also aware of the implications of the power-imbalance between myself and the research participants on the interview process and collection of rich data. Given my position of power in relation to the research participants, there is an increased likelihood of acquiescent responding. Acquiescent responding is common among individuals with ASD (Woodbury-Smith & Dein, 2014). This was taken into consideration when preparing the interview protocol and when conducting the interview. First and foremost, consent was not only thoroughly discussed at the outset of the study, but was also treated as an ongoing process throughout the interview. Creating situations in which a participant feels forced to answer a question may result in the participant providing a response that is not an accurate reflection of their true experiences, and thus will interfere with the collection of rich data. I regularly reminded participants that they could “pass” on any question they did not want to answer, and I provided opportunities for them to choose to stop the interview or keep going. In addition to consent, I provided multiple opportunities to answer questions about the same topic in different ways using a diversity of question styles (as discussed above) throughout the course of the interview. I revisited questions to establish a consistency in responding, and used follow-up questions to explore reasons for inconsistent responses (e.g., acquiescence, mixed feelings or ambivalence about the topic, different interpretations of the question each time, my misinterpretation of the participant’s response).
Interpreting meaning. During the interview process, not only did I take care to elicit accurate and elaborative responses from participants, but I also put strategies in place to enhance the accuracy of my own interpretation of what participants were sharing with me. Individuals with ASD often experience difficulties with the use of pragmatic language – that is, the social context of language, which is important for communicating feelings, thoughts, and experiences (Marchena & Eigsti, 2015; Volden & Phillips, 2010). They may also rely on scripted responses (repetitive use of phrases that they have heard elsewhere, such as in a TV show, often resulting in out-of-context communication), which can be difficult to interpret and cannot always be taken at face value (APA, 2013). Additionally, their non-verbal behaviours may be somewhat limited, extreme, or poorly integrated with their verbal responses (Lord et al., 2012). Further, individuals with ASD can experience challenges with emotional regulation, which can result in presenting as either under- or over-emotionally aroused (Laurent & Rubin, 2004; Zantinge et al., 2019). I used a handful of strategies to accommodate for these differences in communication. I regularly rephrased participant responses or reflected my understanding of what they were sharing back to them to help confirm or disconfirm my interpretations. This strategy was particularly helpful when the participant was expressing strong emotion or demonstrated very limited emotion which did not necessarily match my interpretation of the verbal content they were sharing (i.e., when a participant spoke about how deeply they value the level of trust, intimacy, and closeness they have achieved with a friend but their body language, facial expression, and tone of voice was flat and unemotional). To reduce bias due to acquiescent responding, I not only inquired whether my interpretation was accurate, but also whether it was inaccurate or incorrect. Additionally, while discussing the topics of closeness and developing friendships, I created visual diagrams of the hierarchy of friendship each participant was describing to me. Specifically, I frequently drew
hierarchical pyramids with the closest friends at the top and less-close friends at the bottom, with arrows pointing up and down the pyramid to represent the movement of different friendships as participants described their level of closeness with different friends and how this might have changed over time. Through using this visual, each participant was able to provide immediate validation or correction to my interpretations as I drew them out on the diagram. Further, we were able to use this diagram as a reference point to contextualize and enhance their responses to additional questions as the interview progressed, which occasionally resulted in modifications to the developing diagram.

Data Analysis

In the current study, I employed data analysis procedures consistent with the recommendations of Charmaz (2014) for a constructivist grounded theory. These procedures are used to strike a balance between providing structure to guide analysis and flexibility required to allow concepts to emerge from the data.

Transcript preparation. The audio recording of each interview was transcribed by a research assistant in the ASD Studies Lab at Queen’s University. To ensure no meaningful data was missed, audio recordings were transcribed word-for-word, including filler words (e.g., “like”, “ummm”), emphatic sounds (e.g., grunts, sighs, laughter), and lengths of pauses. The research assistants then reviewed each transcript by listening to the audio recording and reading along the transcript, making any necessary corrections. Following transcription, I reviewed each transcript while listening back to the interview, and inserted my notes on observations made during the interview. This process was completed within 48 hours to one week of the date each interview was completed.
Memo-writing. Charmaz (2014) advocates for the role of memo-writing to encourage the maintenance of a constructive and interactive approach to data analysis. Memo-writing is essential to formulation of theory as it helps to develop categories and explore theoretical links that serve as the foundation for the theory (Strauss & Corbin, 1990). I produced memos throughout the process of data analysis for the purposes of facilitating theory development and as a technique to promote reflexivity. After completing each interview, I produced memos about salient thoughts, impressions, and observations related to the interview. Further, I produced memos about each interview while reviewing the transcript and during coding. At the end of coding each transcript, I produced additional memos about concepts emerging from the data. I reviewed post-interview, post-transcription, and post-coding memos to identify consistencies and inconsistencies in my thinking over time, and to reflect on any growth in conceptualization of the data. I also used memos to ask questions of the data, elaborate on categories, explore links between concepts, and to experiment with visual representations of the theory. My memos took on many forms, including hand-written and typed notes, voice memos, point form thoughts, diagraming, and concept mapping.

Coding. I used NVivo qualitative data analysis software (QSR International; version 11 and 12) to support the management of data. I uploaded all transcripts to NVivo, assigned codes within the NVivo platform, and wrote some memos within NVivo so that they could be linked to codes and their associated transcript text. As coding progressed, I engaged in exploration of emerging focused and theoretical codes outside of NVivo, using paper-and-pencil idea mapping and memo-writing. I reviewed the emerging coding structure by assigning new higher-order codes to interview data using NVivo. Coding was conducted using the method of constant comparison (Charmaz, 2014; Glaser & Strauss, 1967), which involved continuously comparing
codes, categories, and incidents across the data. Additionally, an iterative approach was used to allow flexible movement between coding and further data collection. Consistent with the approach presented by Charmaz (2014), I engaged in three styles of coding: initial coding, focused coding, and theoretical coding.

**Initial coding.** In initial coding I examined the data line by line, assigning codes that used the language of the participants and stuck closely to the data as to avoid making conceptual leaps or imposing personal beliefs and expectations onto the data (Charmaz, 2014). An example of this initial phase of coding is provided in Figure 1. As much as possible I assigned action words ending in “-ing”, (e.g., building familiarity, connecting over interests)\(^2\). Using this type of language helps to direct focus towards action and process rather than categorization (Charmaz, 2014; Glaser, 1978). At this stage, codes were short and simple. The initial codes were provisional, open to different interpretations, and created with the aim to provide a basis for identifying what is suggested about a social process by the data. As I examined each line of data, I asked myself questions to help identify action and support the creation of codes that preserved the participant experience, such as the following recommended by Charmaz (2014, p. 127): (1) What process is at issue here? (2) How does this process develop? (3) How does the research participant act while involved in this process? (4) What does the participant think or feel here? and (5) What are the consequences of the process?

\(^2\) One might be familiar with the term “gerunds”, which is the word used by Charmaz (2014) to refer to these action works ending in “-ing”.

68
I conducted line-by-line coding on the first six interviews, which produced just over 800 codes. To facilitate the use of consistent language and comparative analysis, codes were collapsed together when they could be best described under the same overarching code. For example, the codes “bonding by doing activities together” and “getting closer by sharing good times” were both collapsed under the code “getting closer by doing things together”. Using chart paper and post-it notes, I clustered conceptually similar codes together and made note of explanations and descriptions of the clusters I was creating. At this time, I also identified codes that appeared to be irrelevant to the research question and clustered these together to simplify the analysis while also allowing for later examination should it become evident that these codes do have relevance. To review these modifications to coding structure, I revisited the original coded data segments from the transcripts to ensure that the new labels and descriptions of clusters continued to accurately describe the data. The resulting coding structure was then used to code an additional three interviews in this style of line-by-line coding.

**Focused coding.** Once analytic direction is established through initial coding, focused coding can be used to identify the most significant or frequent codes in the data in order to sort...
and synthesize the data (Charmaz, 2014). Focused coding is more conceptual and abstract than initial coding. It builds upon the analytic foundation that is established during initial coding to identify relationships between codes and develop categories. As such, focused coding centers around initial codes that have greater theoretical reach, and trims or refines codes that are more descriptive in nature.

To begin engaging in this level of coding, I returned back to the nine transcripts that had been coded and used to establish the initial coding structure. I reflected on the codes and the data with which they were associated to explore their similarities and differences, as well as how they might interact with each other. Through this reflection, I began collapsing initial conceptual codes into more focused codes with a higher level of abstraction. For example, the codes “identifying friendship as important”, “viewing friendship as advantageous”, “friendship improving life”, “friendship improving mood”, “enjoying doing things with others more”, “decreasing loneliness” and “having friends confirm your thinking” all became clustered under the one focused code “establishing value in friendship.” I was then able to compare these intermediate-level codes with new data as I completed additional interviews. With each additional interview, I further defined the emerging abstracted categories and the relationships between them. Additionally, I was able to identify further questions to drive theoretical sampling and future interviewing. For example, out of the construction of the focused code “establishing value in friendship” I identified that some of the benefits to friendship communicated by participants were egocentric in nature (e.g., focusing on how friends satisfy their needs and not the other way around). This insight stimulated further questioning about reciprocity in friendship, valuing personal needs versus the needs of the friendship, and becoming an active participant in the friendship (rather than a passive recipient). In turn, this line of questioning eventually gave
rise to the sub-process *Engaging in Reciprocity* which was a critical process for driving friendships forward into deeper levels of closeness and intimacy.

**Theoretical coding.** Theoretical coding is the most advanced stage of coding, which serves to develop a higher-level conceptual framework by organizing focused codes and reintegrating fragmented data into an emergent theory (Brinks & Mills, 2015). Theoretical coding relies on the researcher’s ability to identify theoretical concepts that underlie substantive codes emerging from focused coding, and which can be used to explicate the core social process and the relation of subcategories to this core category. These theoretical concepts are derived from prior personal experience, knowledge of the literature, and understanding of broader constructs related to the specific field of study. They must earn their way into the theory rather than be applied to it. Charmaz (2014) warns against applying preconceived frameworks for theory development, instead recommending using theoretical codes to clarify your analysis and position your theory within the broader disciplinary knowledge while remaining critical of whether these codes are an appropriate fit with the data. In line with this approach, Brinks and Mills (2015) recommend first establishing the storyline of your data, and then considering how theoretical codes might fit with the storyline to help enhance the explanatory power of the storyline.

In this study, I used a storyline approach to support the final advanced stage of theoretical coding. In this process, I identified codes that appeared to be particularly important to the reports I was collecting from participants, such as *Being Able to Be Myself, Feeling Comfortable, Understanding* and *Sharing Interests*. In relation to these codes, I asked myself questions such as “Why do these codes feel so important?”, “What is happening here?”, “What is the main problem participants are working through?”, and “What message is coming through, even if it is
not explicitly stated? (Strauss & Corbin, 1998). I returned to the original interviews to search for the answers to these questions and found myself struck by the contrast between the uncertainty the participants expressed commonly feeling in social interactions compared to the security they expressed feeling in their closest relationships. From this point, I engaged in a wealth of memo writing to explore how the codes fit within this process of change from uncertainty to security, which helped to identify a core category of Building Familiarity. As I wrote memos, I explored how my background knowledge fit or did not fit with the storyline. In particular, I explored the relevance of concepts from the literature on symbolic interactionism, the neurodiversity movement, friendship qualities, friendships in ASD, and social-cognitive development in ASD fit (or did not fit) with what the data was saying. I continued to revisit the interview data, and collected new interview data, as I explored and integrated these concepts to ensure fit and theoretical saturation. The end result of this process is the substantive theory presented in this dissertation.
Chapter 5
Rigor and Reflexivity

Akin to the concepts of validity and reliability common in quantitative research, rigor refers to the strategies and methods used to ensure the integrity and quality of research findings in qualitative research. In the words of Morse and colleagues (Morse et al., 2002), “Without rigor, research is worthless, becomes fiction, and loses its utility” (p. 14). While there is disagreement within the field regarding terminology used to describe strategies that promote rigor, there is consensus that paradigm-specific approaches are required in qualitative research to ensure consistency with the epistemological stance of this paradigm (Guba & Lincoln, 1994; Hall & Callery, 2001; Morse et al., 2002).

Lincoln and Guba (1985) present one of the most widely recognized sets of guidelines for rigor, which they term “trustworthiness”, in constructivist qualitative research. In their guidelines, Lincoln and Guba (1985) posit four principles of trustworthiness: credibility (findings should represent the perspective of participants and should be reflective of the intended phenomenon under study), transferability (findings should be applicable to other contexts), dependability (repeating the study should lead to similar findings), and confirmability (the influence of researcher bias should be limited and research findings should be true to the data). Further, Lincoln and Guba argue for the use of a variety of strategies to achieve trustworthiness, such as member checking, audit trails, peer debriefing, and negative case analysis. While these guidelines provide a structured approach for assessing the reliability and validity of qualitative research, they are not intended to be used as immutable criteria for rigor (Guba & Lincoln, 1982).
Importantly, specific strategies for achieving the goals set out by these guidelines may not be appropriate in all cases and must be used with consideration for their methodological coherence. For example, member checking in the form of confirming abstracted theoretical findings with research participants may be particularly problematic within the constructivist grounded theory methodology as it can be difficult for participants to identify their own specific experience within the abstracted theory, leading researchers to feel restricted to descriptive rather than theoretical presentations of their findings (Meadows & Morse, 2001; Varpio et al., 2017). Such a strategy might be especially problematic in the current study given the challenges experienced by individuals with ASD with abstract thinking and theory of mind. As will be discussed later, I did not use a traditional approach to member checking in the current study for this reason.

Aside from Lincoln and Guba’s (1985) recommended guidelines for trustworthiness, there have been many other proposals for guidelines, standards, and criteria for evaluating rigor within qualitative research (Morse et al., 2002). Specific to constructivist grounded theory, Charmaz (2014) proposes the following four criteria for evaluating grounded theory studies: credibility (the extent to which research findings are founded in sufficient data derived from strong logical links), originality (the extent to which research findings offer new insights), resonance (the extent to which research findings portray the fullness of the studied phenomenon and offer deeper insight to the experience of this phenomenon), and usefulness (the extent to which research findings contribute to knowledge, have everyday implications, and inform further research).

Within the literature on grounded theory methodology, there is a growing recognition that rigor criteria like those presented by Charmaz (2014) and Lincoln and Guba (1985) are
frequently used as an evaluation framework once the research has been completed. Morse et al (2002) have cautioned against using rigor criteria in this way, and instead encourage reflecting on and employing rigor criteria throughout the research process. They warn that viewing rigor criteria as a set of evaluative criteria place too much emphasis on outcomes and can discourage the researchers from considering how verification strategies are used throughout the research to shape its development. Morse et al (2002) argue for the integration of strategies to establish reliability and validity throughout the research process, through the use of investigator responsiveness, methodological coherence, an active analytic stance, theoretical sampling, and saturation. The recommendations of Morse et al (2002) were used in planning the current research project, throughout the research process, and to evaluate the quality of research at the project’s completion. These recommendations allow for a flexible and planful approach to rigor, encouraging the integration of a variety of strategies and tools, such as those proposed by Lincoln and Guba (1985) or Charmaz (2014), as they fit with the individual research project and its paradigmatic and methodological underpinnings.

**Investigator responsiveness.** Within qualitative research, it is of the utmost importance that the researcher take responsibility for the rigor of the study, remaining open-minded and responsive to the research process from beginning to end. Reflexivity is a major component of encouraging the researcher to remain open, listen to the data, resist pushing preconceived frameworks onto the data, and remaining sensitive to their own biases, experiences and knowledge (Charmaz, 2014; Hall & Callery, 2001). Throughout this study, memo-writing for personal reflexivity was used to evaluate the influence of bias and prior knowledge.

In addition to personal reflexivity, memo-writing was used to reflect on, explore, and evaluate both methodological decisions and interpretations of data. Charmaz (2014) identifies
memo-writing as crucial for maintaining active engagement with the data, reflecting on emerging relations between codes, constructing theoretical categories, and engaging in critical reflexivity. The use of this type of memo-writing also created a detailed audit trail outlining the process for decision-making related to methods and data analysis, which enhances the capacity for replicability.

The use of memo-writing and reflexivity practices ultimately led to the decision to refrain from using typical member checking strategies in which the emerging concepts and theoretical categories are presented to participants for the purpose of acquiring their feedback and verification. As discussed above, such an approach was deemed inappropriate for the present study due to the potential challenges of engaging in the process of evaluating abstracted data with an ASD population. Specifically, I had a concern about how participant feedback might create pressure to focus on and reflect each individual participant’s experience rather than a holistic, abstracted experience, which could ultimately restrict theoretical interpretations. Instead, a less traditional approach to member checking, as developed by Albas and Albas (1988) and outlined by Charmaz (2014), was used to encourage investigator responsiveness. In the current study, select follow-up interviews were not only used as a method of theoretical sampling, but also provided an opportunity to present major categories to past participants and engage in conversation about the extent to which these categories are relevant to their own experiences. In many instances, participants were quick to see the relevance of emerging categories in their own lives; however, when participants were less able to elaborate on their own experience with certain categories, this allowed for further discussion to generate new properties of the category.

In addition to conducting member checks with study participants, discussions were also held at various stages with committee members, my supervisor, students in the ASD lab,
mentors, and members of the Grounded Theory Club\textsuperscript{3} to discuss insights related to theory development and methodological decisions. These discussions further promoted openness to interpretation and helped to identify and limit researcher bias that could introduce misinterpretations into data analysis. For example, an early discussion of the term “friendship satisfaction” within the Grounded Theory Club increased my awareness of how operational definitions of friendship satisfaction from my quantitative research background were imposing restrictions on how I conceptualized the friendship experience among individuals with ASD and encouraged me to reflect on how the term “friendship satisfaction” may or may not be relevant to my own experiences.

\textbf{Methodological coherence and active stance.} In support of methodological coherence, the audit trail derived from methodological memo-writing outlined above enhances transparency of the timeline and processes for making methodological decisions. A number of strategies were employed throughout the research process to ensure that the methods used in this study were congruent with and guided by the research questions. The conception of this study was driven by first establishing the most appropriate research questions given the state of knowledge related to friendship among individuals with ASD, and then identifying the most appropriate methodology for answering this question through expert consultation, review of the literature, and additional coursework in qualitative methods. As a result, the development of this research idea transitioned from using experimental design to answer questions about the qualities and outcomes of online friendships in ASD, to psychometric methods to develop more adequate tools for assessing

\textsuperscript{3} Grounded Theory Club is a research seminar based out of the University of Victoria. It is comprised of graduate students and faculty conducting grounded theory research in universities across Canada. Bimonthly meetings are held over webinar and are intended for the discussion and critique of developing grounded theory research projects.
friendship in ASD, to a phenomenology exploring the essence and nature of friendship among adolescent with ASD, and ultimately landed on using constructivist grounded theory to answer questions about how adolescents with ASD experience and manage the development of their friendships.

The methods in this study outlined in the prior chapter were specifically selected to encourage movement beyond data description and encourage the gradual progression of theory development. Use of the constant comparative method (Corbin & Strauss, 2008; Glaser, 1992; Glaser & Strauss, 1967), in which I was concurrently moving back and forth between data collection and analysis rather than waiting to perform analysis at the end of data collection, provided an opportunity to maintain active engagement with the data by making comparisons at each level of analytic work and creating a dynamic relationship between sampling, data collection, theoretical thinking, and theory development (Meadows & Morse, 2001). Furthermore, this method encouraged triangulation of data across different participant interviews, and across different interviews for the same participant.

**Theoretical sampling and saturation.** With the aim of a grounded theory that was focused on developing a transferable, rather than generalizable theory, I utilized strategies to ensure the acquisition of a sample that is representative of the specific phenomenon which I intended to describe. Establishing a sample that consists of participants who have the best knowledge on the topic of study is essential to ensuring rigor. In the current study, my aim was to establish an understanding of friendship experiences among individuals with higher-functioning ASD across mid-adolescence and across gender. Careful consideration was made for initial purposive sampling criteria to generate an adequate range of categories, and theoretical sampling was introduced to fulfill the theory development objectives of this research. As part of
the aim to achieve an appropriate sample, I introduced the use of standardized measures into data
collection to help describe the sample characteristics. Furthermore, sampling decisions were
made with the aims of obtaining a breadth of experience, and also to obtain replication in
categories in order to ensure completeness of data. Finally, as recommended by Charmaz (2014),
negative cases (i.e. data that appears to notably diverge from most of the other data) were not
actively sought out through sampling, but when they emerged through data collection they were
used to refine categories by highlighting tacit aspects of the developing theory that had been
initially less obvious.

**Reflexivity**

Reflexivity commonly refers to the practice used by researchers to examine and make
explicit the influence of their own behaviour, knowledge, and experience on the research
(Ccharmaz, 2014). Reflexivity encourages self-reflection through the process of journaling and
supervision (Rager, 2005). Within constructivist grounded theory, it is recognized that the
researchers’ prior experience and knowledge will inevitably play a role in the construction of the
theory, and thus the use of reflexivity to explore this influence is a critical component of the
methodology. Gentles and colleagues (2014) outline five categories of researcher interaction,
which I have used in the current study to guide my own process of reflexivity.

**Researcher influence on research design and methodological decisions.** Throughout
the course of this research, memos were kept outlining not only my own decisions as the
researcher, but also discussions from supervisor and committee member meetings that influenced
methodological direction. At all stages of the research process, I have made a conscientious
effort to record and disclose my personal influence and justifications for methodological
decisions. Many of these justifications have been previously outlined. One topic that warrants further discussion in this section is my rationale for pursuing this specific topic of research.

**Selection of research topic.** The conceptualization of this study emerged from my own personal experiences working with clinical clients with ASD, as well as my experiences with participants during my Master’s thesis. My Master’s thesis was conducted in conjunction with a larger study investigating the use of a computer game training program to enhance attention and executive functioning skills in adolescents with ASD. Throughout the duration of that project, I became acutely aware of the conflicting views of videogame play between parents and their children with ASD. Specifically, while parents repeatedly inquired about their concerns of the potential negative impacts of videogame play on social development, their children consistently reported that videogaming was a unique platform that promoted development of meaningful relationships. These opinions were often echoed by clients in my clinical practice. It was at this point that I began to develop an awareness that (a) there is a pervasive tendency in research to overlook the voiced experiences of individuals with ASD (especially children and adolescents), and (b) we know very little about the social implications of videogaming. As such, my original intention for my dissertation was to explore the nature of online and videogame friendships among adolescents with ASD. In pursuit of this objective, I quickly learned that not only is our understanding of online friendship very limited in this population, but more so our theoretical and conceptual understanding of friendship among adolescents with ASD in general is largely inadequate. It was clear that there was significant need for a theoretical understanding of how the development of friendship is experienced in this population.

**Researcher-participant interactional influences during data collection.** In constructivist grounded theory, the progression of theory formulation is driven by interaction
between the researcher and research participants throughout the iterative process of data
collection and simultaneous analysis. Hall and Callery (2001) point to premises of symbolic
interactionism that underlie this process and emphasize the importance of examining
investigator-participant interactions in the co-construction of the theory as a strategy to enhance
rigor.

**Researcher influence on participant perceptions.** Each point of contact with the
participants and their caregivers has the potential to influence perceptions of the research
process. For each participant, initial contact was made through a phone call or email with their
caregivers. At initial contact with caregivers, I communicated general information about the
study and specifically explained that I was interested in talking to teens with autism about their
friendship experiences. I balanced providing enough information without creating a situation in
which caregivers might coach adolescent participants about what to do and say during the
interviews. In a number of instances, families had prior experience with our lab and their
decision to return for a new research study was partly influenced by a positive relationship with
the lab and the value they place on contributing to research. These factors helped to create an
initial openness to participation. Additionally, caregivers were informed that participants would
receive financial compensation for their participation. Many caregivers expressed that this was a
major source of motivation among their children to participate.

The first interaction between participants and the research occurred when they attended
the lab for their appointment. An informal conversation was held with the participants and their
caregivers prior to conducting the formal interview to provide them with information about the
study, explore their understanding of the study, and clarify any concerns they might have about
participation. Further, given that research participation can be generally intimidating and might
be especially intimidating for an adolescent expected to engage in a one-on-one interview with an adult, these initial conversations were critical for developing familiarity and rapport. Notably, in these initial conversations I emphasized to the adolescent participants that the goal of this study is to learn about what they think about friendship and to clarify misconceptions that other people might have about friendship experiences among adolescents with ASD. The aim of this discussion was to empower adolescent participants to share their experience and reassure them that I would value their perspective. Typically, this introduction ignited some passion and agreement among adolescent participants about being misunderstood, and contributed to the development of an alliance between myself and each participant.

Finally, I engaged in personal preparation prior to each interview by reflecting on my own personal biases, as well as biases I am aware of within the field. This prepared me for responding openly to variability in the views of friendship among my participants. The aim of this preparation was to help me express a stance of curiosity, such that participants could feel safe and accepted. For example, I considered the possibility that participants might speak about friendships with people who they do not spend a lot of time with or who they do not appear to have a deep level of intimacy with. I considered how an adolescent with ASD might find value in this type of friendship experience so that I would not react dismissively towards something that is important to them.

**Outsider position.** As a graduate student interviewing adolescents with ASD, it was critical to acknowledge that I would be an outsider in many ways, and especially with respect to two important characteristics: I am not an adolescent, and I do not have a diagnosis of ASD. Underwood et al. (2010) emphasizes the importance of considering the influence of differences in age cohort between the interviewer and research participant. I reflected on my own
experiences as a teenager and considered how my experience of adolescence might vary from the participants of this study given differences between generations and the context in which I grew up. I acknowledged that these differences presented a barrier to my ability to fully understand the situation of my participants. To manage this, I prepared for interviews by familiarizing myself with lingo, technology, and trends common to today’s adolescent experience. This supported my understanding of what was being expressed by research participants and helped to reduce participant frustration. Further, I integrated this knowledge into the interviews where appropriate to create an environment in which adolescents could feel better understood. When participants introduced topics I was unfamiliar with (e.g., a specific videogame or meme), I demonstrated genuine curiosity. In many cases, I found adolescents were eager to explain their interests, and they appreciated the change in power such that they had an opportunity to be the expert in the room. This helped to develop rapport and to enhance my understanding of their experience.

Additionally, I reflected on the influence of being an outsider with respect to diagnosis. I was able to use my background in the field of autism to recognize when and how this outsider perspective might be helpful. For example, it helped me to identify nuances, common themes, and patterns which subsequently allowed me to probe for taken-for-granted meaning that participants may not identify on their own due to a focus on their individual experience. Further, my background knowledge helped me identify where my outsider stance had a potential to hinder the research process. For example, I considered how my own non-verbal communication may not be informative to adolescents during interviews, and likewise I considered how I might be prone to misinterpreting my research participants due to differences in their non-verbal communication and emotional expression. This prompted me to consider specific methodological strategies for limiting misreading intention and meaning, such as frequent
summarizing and rephrasing. Further, I considered the possibility that differences in theory of mind abilities might limit the capacity of research participants to recognize my outsider role and thus fail to instinctively offer detailed insights to fill gaps in knowledge. This insight prepared me to prompt for additional details when they were not spontaneously offered, which I recognized and framed as my own failing in perspective to ensure blame was not placed on the research participant.

“Researcher persona”. In her discussion of “researcher persona”, Chesney (2001) stresses the need for the researcher to acknowledge and consider how their projected identity influences what participants share and how data is constructed. The researcher persona evolves over time as the researcher develops comfort with the interview process and gains insight for understanding participant reactions to the interview. In developing my own “research persona”, I drew on the skills and characteristics that would facilitate comfort in the research process. I specifically relied on the set of skills I had developed throughout graduate school in clinical psychology for rapport building, interviewing, and engaging in therapeutic work with adolescents. This helped to create an empathic atmosphere and reduce distance between myself and research participants. Over the course of the research study, I developed increased confidence in conducting interviews and my ability to establish a safe interviewing environment. This led to increased comfort in asking targeted questions, which resulted in more rich and vulnerable responses from participants that brought more depth to the data.

Sensitive topics. Particular consideration was given to establishing a procedure for addressing sensitive topics. My background knowledge provided me with an awareness that topics such as loss of friendship, bullying, and loneliness may be relevant to the friendship experiences of the research participant. Further, I was aware of the potential for discomfort in
discussing these topics. In preparation, I reflected on strategies for reducing pressure to share while also increasing comfort. During consent and again at the outset of the interview, I reminded participants that they could choose not to answer, or “pass”, any questions that I asked. I paid close attention to avoidance of topics or changes in nonverbal communication that might indicate discomfort. In these cases, I provided validation for difficult feelings related to the topic of conversation. I also attempted to structure interviews such that they progressed in degree of sensitivity. For example, I would open interviews with general conversation about interests, then move to discussions of friendship in general, followed by discussion of their current friendships, and eventually moved into discussing friendship loss and other areas of difficulty in friendship. This process was used more explicitly in earlier interviews and became more flexible as the research progressed and I became more comfortable with the interview process and participant reactions.

Overall, I was struck by the ease and frankness with which most participants responded to discussion about sensitive topics, such as conflict and friendship loss. I reflected on my reaction of surprise and considered explanations for this unexpected comfort. My background knowledge of ASD provided some insight, by priming me to consider how individuals with ASD tend to be more straightforward in their communication and may not always respond to potential emotional vulnerability in the same way that neurotypical individuals might. Further, I evaluated how my assumption that these topics would be difficult to talk about influenced my willingness to directly address such subjects during interviews. Supported by these reflections, I began to approach interviews with less trepidation, following the lead of the participant.

**Researcher influence on the analysis.**
**Theoretical Sensitivity.** In the current study, theoretical sensitivity was achieved by exploring the fit of my background knowledge from the literature and personal experiences with the data. Sensitizing concepts (i.e., interpretive devices or background concepts that sensitize a researcher to particular directions of investigation) often provided a starting place for tentative lines of inquiry in the process of theory development. I used reflexivity practices to identify my background knowledge, personal experiences, and sensitizing concepts. This equipped me to use sensitizing concepts to ask deeper questions of the data. Additionally, through reflexivity practices I evaluated how my prior knowledge from reviewing literature in preparation for this study and from my many years of clinical and research involvement in the field of ASD might impact the data analysis by making note of data that supported or contradicted my preconceptions or expectations.

**Supervision.** Throughout the research process, discussions with my supervisor and committee introduced new ideas for exploring emerging concepts, which on occasion led to deeper interpretation of categories that influenced the theory development. For example, an early discussion with one committee member heightened my sensitivity to the impact of location (or friendship ecology) and parental supervision in friendship development and encouraged me to consider these as contextual factors in my data analysis.

**Researcher influence on the writing.** Mruck and Mey (2007) caution about the temptation to avoid writing about certain interpretations of the data as to prevent unwanted reactions from the intended audience of the final written documents. During the data collection process, a number of participants, and more frequently their caregivers, expressed an interest in reading the findings. During the writing process, I have been conscious of potential reactions to my interpretations. Specifically, I have been conscious of difficulties with representing the
collective ASD voice, which will not specifically explain the experience of any one participant. I have examined how this might influence my writing and have strived to maintain a stance that is true to the data, as well as empowering for the readers.

In writing, I have also been concerned about my ethical commitment to confidentiality. I have been cautious to limit inclusion of details that might serve to identify the participants of this study. Additionally, some contextual information has been excluded in the writing of this dissertation to maintain the confidentiality of schools, and the students who attend these schools.

**Understanding of qualitative inquiry.** I also used reflexivity to examine my personal uncertainties about the value of this research. Throughout this research process, I have swayed back-and-forth between feelings of trepidation about the value and justification of qualitative research within the field of psychology and feelings of excitement about the fit of grounded theory methodology with my own ontological stance and the topic of research. Further, until embarking on this research project, my research training had been entirely based on quantitative research methods. A substantial amount of time and effort was placed in developing a strong foundation of knowledge in qualitative methods. While I have immersed myself in literature and sought out supervision and guidance, I have been apprehensive in some of my application of methods, interpretation of findings, and ability to express this process and the findings in writing. As a result, I have been thorough in the development of my knowledge and rigorous in my application of the methodology.

**Influence of the research on the researcher.** Finally, it is important to acknowledge the influence of conducting this research on myself as the researcher. Throughout the course of this study, I have reflected on my own experiences of friendship throughout my life; in some cases helping to resolve confusion and deepening my understanding of particular friendships. Further,
engaging in this research has helped me to develop a deeper sense of research method theory, and it has equipped me with a stronger and broader set of tools for addressing research questions. In identifying research methodology more in line with my own ontological views, I have experienced a renewal of passion for the research process. Both the experience of developing skills and confidence as a researcher, as well as my reflections on personal friendships, have fed back into my role in the research. Building skills and exploring reflections has increased my ability to more expertly interact with participants, improved my ability to apply specific methods through the course of the research project, and provided me with insights that have played a role in theoretical analysis by questioning different interpretations of the data. Further, the impact of developing new skills and insights through this research process has had practical implication on my maturation as a clinician, which has the potential to benefit the clients I work with. In particular, this work has broadened my views of how individuals with ASD might experience friendship, it has encouraged me to consider a greater diversity of factors beyond social skill deficits that might be impeding the progression of a client’s friendship goals, and it has honed my skills for listening to client experience rather than jumping to conclusions about their experience based on what I know from the literature.
Chapter 6

Results

The purpose of this study was to better understand individual and interactive processes that are experienced by individuals with ASD as they develop and navigate friendships. Specifically, this study aimed to elucidate how adolescents with ASD establish meaning in their friendships as they experience initial friendship development and manage changing friendships over time. The resulting substantive theory from this study enables us to understand the barriers that adolescents with ASD face in establishing meaningful friendships, the way they think about and define what makes a meaningful friendship, and the processes that support their ability to achieve such friendships.

Through data analysis, Building Familiarity emerged as the core process by which participants became able to engage in the development and navigation of friendships. Figure 2 provides an illustration of the categories of Building Familiarity at each stage of engaging in friendship development, as well as the associated sub-processes. It is through this process that participants were able to transition from a state of social Withdrawal and Avoidance and established meaningful friendships in which they reported feeling Being Able to be Myself. The progression of Building Familiarity is defined by four categories (Establishing Safety, Connecting Over Mutual Understanding, Creating Stability, and Developing Trust and Intimacy) which coincide with each of four stages of engaging in friendship navigation (Meeting, Becoming Friends, Maintaining Friends, and Growing Closer). One additional category (Diminishing Contact) coinciding with a fifth stage (Growing Apart) was identified as running in opposition to the central process of Building Familiarity.
Figure 2. Grounded theory of how adolescents with ASD experience developing and navigating meaningful friendships.
The stages of friendship navigation and associated categories of *Building Familiarity* may not necessarily be discrete; adolescents with ASD are likely to experience overlap between stages as their friendships develop and change, especially with respect to stages of *Maintaining Friends*, *Growing Closer*, and *Growing Apart*. Further, as adolescents develop their friendships, they may still engage in the sub-processes associated with earlier stages of friendship development as they continue to build familiarity.

**Using Symbolic Interactionism to Integrate the Theory**

As previously discussed, symbolic interactionism is a theoretical perspective that views our actions as being driven by meanings that have been constructed through our interactions with others and the world (Blumer, 1969). It is closely associated with the concept of the looking-glass self, which asserts that people develop beliefs about themselves based on interactions with others and how they perceive others to view them, and that these beliefs influence how they subsequently behave (Cooley, 1902). At the outset of this study, I was aware of the tenets of symbolic interactionism and its use within grounded theory research. During the process of data collection and analysis, I became increasingly aware of the fit between symbolic interactionism and what participants were conveying, as well as the potential use of this perspective in supporting theoretical integration of the concepts and categories emerging from the data.

Prior to using symbolic interactionism as a framework to guide theory development, I observed many examples within the data of how adolescents’ meaning making occurred through interactions and influenced their actions aimed at navigating friendship. A common narrative shared by participants was the process of creating and revising meanings they attached to different people based on their observations of, and direct interactions with, each person. They relied on particular symbols to help guide interaction and meaning-making (e.g., interpreting a
smile and greeting made by a peer as an indicator that they are a nice person who will be accepting), which then helped them to determine who they should approach, engage in conversation, and continue to interact with. As stages of friendship development progressed, the meanings participants ascribed to others and themselves were refined and became more nuanced. This built each participant’s sense of agency over their actions navigating friendship and allowed participants to feel comfortable taking more risks in pursuing the friendships they desired. As data collection progressed, it became apparent that this central storyline emerging from the data was one that echoed symbolic interactionism, and that this perspective could be used to enhance the explanatory power of the storyline.

Core Problem

In discussing their friendship experiences, participants communicated about many different friendships. They described experiencing varying degrees of challenges and successes establishing the type of friendships they aspired to have. Implicit in their voiced experiences was the expression of a tension between their desire to develop friendships and their hesitancy towards engaging in the processes required to develop said friendships. It became evident that the basic problem participants were attempting to traverse in their progression towards achieving meaningful and satisfying friendships was overcoming barriers that interfere with their ability to feel understood and accepted. In order to progress towards friendships in which they are able to feel comfortable being themselves, participants had to find ways to transition out of, and continuously move away from, inclinations to withdraw from and avoid social engagement.

I viewed this core problem experienced by the participants as being situated within the context of socialized intolerance. This is a stance informed by perspectives from critical disability theory and the neurodiversity movement, which I have used to characterize how
rigidity in social expectations and normative behaviour contribute to limited acceptance of 
behaviour that does not abide by these socialized, neurotypical rules (e.g., Milton, 2012; Ryan & 
Räisänen, 2008).

In their discussion of fear of rejection and difficulties engaging in interaction, participants 
implied an internalized experience of shame and intolerance due to the difference in how they 
behave and engage in social communication. This was reflected in comments they made about 
perceiving themselves as “weird” or “strange”, as well as comments about being hesitant to share 
diagnostic information with their peers and trying to be normal. For example, Stephanie spoke 
about an internalized sense of something being wrong with her because of a history of bullying 
and negative social interactions, and being cautious around new people as a result:

“We are more afraid that people won’t like me because of how I 
am...like, I’m different than other people and I already know this. 
I know I have autism, but I don’t say this, because when I was 
younger and I used to say that a lot, I used to get bullied.” 4

Participants assigned a value to being “normal” and a pressure to behave in “normal” 
ways. For example, Aidan provided the following explanation about how he felt when he finally 
disclosed to his friends he had autism and his friends told him they were surprised about the 
diagnosis:

“It makes me feel a little, it makes me feel happy though. It makes 
me feel like I’m sort of normal though. And kind of odd though to 
know I am able to act normally apparently to others, even though I 
have autism... I’m trying to act quote ‘normal.’”

4 To ensure the integrity of the voiced experiences of participants, quotations included throughout 
this document have been presented in their original state with inferred punctuation inserted to 
support translation from the oral to written format. In some cases, minor grammatical changes 
have been made to support comprehension. When referring to participants or including their 
quotations, identities have been protected by either using descriptors (e.g., “one participant who 
recently transitioned to high school”) or pseudonyms in place of names.
Further, participants reported that they often were only able to share diagnostic information with their friends once they had developed a high level of trust. Participants perceived they were not immediately able to be accepted for who they are, but instead had to work at establishing familiarity and mutual understanding with their peers to (a) make it easier for them to interact the way they are expected to, and (b) to change the way that peers viewed them, and subsequently how they viewed themselves.

The following section discusses in detail the theoretical synthesis of what participants voiced about the two related factors that make up the core problem they faced when developing and navigating friendships: *Withdrawing and Avoiding* and *Being Able to be Myself*. By explicating the core problem that emerged from data collection and analysis, I aim to set the foundation for then understanding how the core process and its categories support the development and navigation of friendship among adolescents with ASD. *Figure 3* depicts the categories that make up the core problem and core process, and it illustrates the relationship between these categories.

![Figure 3](image)

*Figure 3*. The relationship between the core problem and core process. When adolescents with ASD develop and navigate friendship they transition away from *Withdrawing and Avoiding* and move towards *Being Able to be Myself* by engaging in interaction, which is made possible through the process of *Building Familiarity*. 
**Withdrawing and Avoiding.** *Withdrawing and Avoiding* refers to the challenge participants faced taking action in the process of engaging in friendship development. Inaction was influenced by the participant’s perception of how they were viewed by others, which was developed through their interactions. These perceptions subsequently informed their own perception of themselves, which perpetuated hesitance to engage in social interactions in the future. A range of barriers presented threats to participants’ ability to have positive interactions, thus contributing to persistent negative beliefs about how they were perceived and intensifying the challenge of engaging in the process of friendship development.

Participants regularly described themselves as being shy and introverted. This was especially true of participants who experienced more challenges engaging in friendship or who had experienced difficult social experiences in the past (e.g., substantial bullying). Further, participants described having a degree of uncertainty about new people and exercising caution in their early social interactions with another person. This was especially communicated among participants who viewed themselves as shy, but was also expressed among participants who viewed themselves as more extroverted. It was apparent that this caution and resulting social avoidance was partly related to a lack of knowledge and skills for social engagement (e.g., not knowing what to talk about with another person, not knowing how to respond when an unfamiliar person greets them). However, participants who demonstrated substantial insight regarding how to engage in social interaction, and who provided multiple examples of the skills they possessed to do so, also expressed uncertainty about social engagement. This was linked to concerns about rejection and the perception others might have of them. The effect of these concerns on participants’ willingness to take initiative in social interaction is exhibited in the following explanation provided by Ryan, who despite recently developing a number of
friendships upon starting high school continued to struggle with concerns about how he might be perceived by these new friends:

“I don’t really go up and talk to people…I don’t ignore people, I mean I would if I could…[approaching people] just feels, it feels awkward. I feel like I don’t know if people might find it awkward. Like, I don’t know. I don’t know how to explain it. Like an awkward, they might not like it or they might not want to talk to me, and I don’t want to bother someone who doesn’t want to talk to me.”

Another participant, James, reflected on how the relation between the risk of rejection and associated inaction reinforced each other, and how this had influenced his own negative appraisals of himself:

“When you’re a lone wolf people start to form opinions of you. Often times, at least from what I heard and what I’ve educated myself on, being a lone wolf and seeing that trait in you means that the opinions others form upon you - it’s very likely that they’re going to think something very, very, disappointing about you, something that’s undesirable to an extent. That’s why for the most part I’ve always been sort of afraid to an extent of not really being an enjoyable enough person for anybody to really want to be friends with.”

Exacerbating this cycle of perceived appraisal, negative self-views, and subsequent inaction, participants spoke about a variety of barriers which contributed to the challenge of engaging in the processes supporting friendship development. I came to understand these barriers as factors that increased the likelihood of negative interactions with peers, thus reducing the opportunity for receiving positive feedback for making attempts at social interaction and reinforcing participants’ damaging beliefs about how they are viewed by others. Most saliently these barriers were reported to create challenges in the early stages of friendship, including being
able to meet people and initially connect\textsuperscript{5}. However, many barriers also continued to present challenges to friendship as relationships developed and changed. The barriers discussed by participants were behaviours and social challenges that I viewed as corresponding to the diagnostic traits of ASD. At times, participants themselves explicitly linked the barriers they experienced to their diagnosis, while other times they described the barriers as internalized personality traits.

**Behaviour related barriers.** Participants identified a number of traits they viewed as problematic for engaging in friendship development which are comparable to the repetitive and restricted behaviours and interests (i.e., rigidity in routine, repetitive behaviours, restricted interests, and sensory sensitivities) outlined as diagnostic criteria for ASD in the DSM-5 (APA, 2013). In addition, they spoke about other behavioural challenges related to difficulties with emotional and behavioural regulation, which are common among individuals with ASD (Laurent & Rubin, 2004). Specifically, participants discussed how their unique interests could make it difficult for them to meet people with whom they had something in common, and further that these unique interests might cause others to think they are strange or create challenges for mutual understanding. For example, in my interview with Jillian, she was notably guarded about discussing her specific interests with me. Linking her unique interests to challenges in friendship, she explained:

“[A friend would accept] that I’m not into a lot of things that they might be into, that I’m autistic, that I’m, I’m just kind of different from other people... because I’m not into like a lot of people who I’ve talked to who are into video games and makeup and other

\textsuperscript{5} As will be discussed later, *Building Familiarity* over time helped to counteract the influence of barriers as friendships developed.
Jillian continued to explain that she had never found someone in “real life” who had understood and shared her interests; however, she experienced some success connecting over interests and subsequently making friends online.

Additionally, participants spoke about how their preferences for routine or having things done in a particular way could cause them to become upset or uncomfortable during interactions. Participants reported becoming annoyed with peers or becoming involved in conflict as a result of rigid behaviour and preferences. Further, they reported that their peers often could not understand or accommodate these preferences. Participants reported that the effort involved in being more flexible and the potential emotional risk in disrupting their routine was not worth it – that it was easier and safer to keep to themselves. This is illustrated in the explanation James provided about the challenge he faces asking his friends from school for their contact information so that they can do things together outside of school. He explained the primary barrier as follows:

“I think it’s just because [my routine of just being on my own] has worked out for me so well in the past that it’s hard to get out of it when you’re in a comfortable place….The way my routine is structured right now, it could be improved upon, there are a lot of areas in which it can be improved upon but it’s just that I guess I just don’t really have the motivation to improve upon it because I’ve just never really experienced any sort of risk, in maintaining the same, the same okay but flawed routine for an extended period of time.”

Finally, participants identified that they could be hyperactive, inattentive, and overstimulated, and further that they might become physically agitated at times (e.g., moving around a lot) or that they might engage in behaviours to manage emotion or sensory stimulation (e.g., using a squeeze ball). They perceived that these behaviours could cause them to present as
“annoying”, “weird”, or “crazy” to their peers, which made it difficult to engage in developing friendship. These type of behaviours were viewed as the direct reason for being teased, bullied, or excluded. The following excerpt from my interview with Stephanie helps to highlight how behaviours related to ASD, which she referred to as being “crazy”, impact friendship development and self-perceptions:

“I know I’m pretty crazy so it’s kinda hard to [get higher in someone’s friendship level]….like I am more afraid that people won’t like me because how I am. Like I’m different than other people and I already know this, I know I have autism.”

**Social Barriers.** Participants also identified a number of social challenges they viewed as problematic for engaging in friendship development. These barriers largely correspond with the deficits in social communication and interaction (i.e., social-emotional reciprocity, nonverbal communication, and understanding relationships) outlined as diagnostic criteria for ASD in the DSM-5 (APA, 2013). The range of social barriers expressed by participants appeared to impede their ability to view themselves as socially capable and interfered with their ability to engage in positive social interactions with peers.

In particular, participants discussed challenges with interpreting interactions with other people (e.g., misinterpreting friendly teasing) and experiencing discomfort when they perceived the behaviour of other people to be “random” or unpredictable. These social interpretation challenges were linked to subsequently avoiding peers or ending a developing relationship. Illustrating this challenge, Harrison described how his misinterpretation of teasing by a new friend in robotics club caused him to leave the group:

“We used to be in a club together though uhhh and then he was like teasing with me but at the time I thought he was being bullying to me so I left the group to find something else, though and he told me he was just teasing and my parents told me he was
teasing so we tried to get back together…we kind of had a bit of a
talk about it though and then we were good and then we just
stopped seeing each other for quite a bit of time.”

This example provided by Harrison highlighted not only how misinterpretation of behaviour
could result in an initial disruption of a growing relationship, but also how avoidance of or
cautions towards the relationship could persist as a result of initial misinterpretation and the
negative interaction history.

Difficulties with misinterpreting behaviour and interactions also underpinned broader
challenges with understanding the nature of their relationships with peers (e.g., being uncertain if
someone is a friend). This type of difficulty was more salient among participants who reported a
greater degree of challenge establishing friendships. For example, one participant, David,
expressed substantial ambivalence about his friendships; he frequently wavered between
identifying particular people as friends and then questioning whether he really had any friends at
all. It was apparent that David relied on distinct and obvious indicators to determine if someone
was interested in him and could be a potential friend (e.g., people approaching him, greeting him,
and talking with him on a regular basis), as well as to determine if someone disliked him (e.g.,
someone directly telling him to go away). Further, he expressed uncertainty about his peers’
opinions of him when their behaviours were more nuanced (e.g., sitting near him but not
engaging in conversation, ignoring him, inconsistently initiating interactions with him). These
challenges with understanding the nature of his relationships, as well as his conceptual confusion
about what it would mean for someone to be a friend to him, created barriers in David’s ability to
develop his friendships. He stated, “I just stay on one level. I just can’t seem to go onto the next
level for anything at all.” Like David, the other participants in this study expressed varying
degrees of difficulty understanding their social relationships, which created a barrier to their
ability to feel secure in their relationships and subsequently to be able to take initiative in interactions that would help to develop friendships.

Participants also spoke about fundamental challenges associated with reciprocal conversation, including: introducing themselves, not knowing what to say or talk about, “blanking” in a conversation, relying on others to carry the conversation, struggling to discuss topics unrelated to their interests or experiences, and worrying about saying something embarrassing or inappropriate. Conversational challenges were linked to difficulties with attending to and remembering socially relevant information. For example, participants expressed having difficulties recognizing people and remembering names, as well as struggling to recall information about a person or the context of prior conversations, as illustrated in the following excerpt from my interview with James:

“I for one consider myself to have a very piss poor memory when it comes to remembering the people that I have interacted with in the past…. It creates a very awkward situation when the person remembers me but I don’t remember them and comes up to me and tries to start a conversation, and I’m like how the heck am I supposed to respond to whatever they’re saying.”

The combination of these conversational challenges was reported to result in awkward interactions, exacerbate feelings of discomfort, and fuel social withdrawal and avoidance. They made it difficult to initiate interaction and get to know new people. The following excerpt from my interview with Julia highlights this experience:

“I feel like I’m awkward and maybe that’s why I don’t talk ‘cause I feel like I might say something wrong or stupid…even just little things like maybe say something rude or maybe offensive, which I try not to do that I don’t think and it just comes out of my mouth….and [people] kind of just look and me and are like [participant makes a strange facial expression] and then they look away, or they just I don’t know I get dirty looks sometimes I don’t like that.”
**Being Able to Be Myself.** *Being Able to Be Myself* reflects participants’ desire to achieve friendships in which they were able to be themselves without subsequently feeling that they had been negatively perceived and wanting to withdraw. Establishing a sense of *Being Able to Be Myself* was described by participants to involve feeling comfortable in their friendships, feeling as though they were understood, and feeling as though their friends were respectful, non-judgmental, and accepting. While the processes involved in developing and navigating friendship identified in this study support movement towards these goals, the category of *Being Able to Be Myself* also highlights participants’ sentiment of having trouble achieving this experience. By engaging in the processes involved with creating meaningful friendships, participants were navigating the problem of regularly experiencing challenges achieving this level of satisfaction within their friendships.

Participants described a broad range of experiences that characterized the types of friendships they wanted and enjoyed. These descriptions varied greatly with respect to factors such as what they would do together, how much time they would spend together, where they would spend time together, and what their friends would be like. The common thread across all the varied descriptions of friendship was that each characterization of friendship was preferred by each participant because of the ability of that type of friendship to increase the participant’s comfort within the relationship. Ultimately, *Being Able to Be Myself* was identified as being the most valued factor within friendships. For example, Mary discussed how experiencing comfort being herself takes precedence over the traits her friends possess:

“…I’m friends with the, with a bunch of different people that have many different personalities from like one friend to a different friend. And, yeah it’s just a matter of me being myself around other people and they accept me for who I am even though they have different personalities I still get along with them.”
Participants associated the experience of *Being Able to be Myself* in friendships with a reduced sense of burden related to managing their behaviour and decreased worry about how others would perceive them and respond to them. The following excerpt from my interview with Alex provides one illustration of how perceiving friends to be non-judgmental influenced how participants were then able to act within their friendships:

“’cause when I’m with them umm cause I’m with them I know that I can say stuff wrong of course they’ll make fun of me for it, but it’s not like the bully making fun of just kind of joking around, so I’m just more comfortable with that, so I can say the wrong thing and I know I won’t be I won’t get judged for that.”

Similarly, perceiving other people as being judgmental had a negative impact on participant’s ability to be themselves and engage in friendship. Participants expressed discomfort engaging with peers who they perceived were less understanding and accepting. For example, Bailey spoke about the importance of trust within her friendships; being able to know that she could goof around and act in strange ways in front of her friends without being judged. She explained how feelings of discomfort that arose from lack of trust made her feel as though she couldn’t be herself and caused her to avoid engaging with certain people:

“…just the way I can be comfortable around [my friend], like that’s something that’s like so huge for me, like if I can’t be comfortable around them then I just won’t associate with them. So like if I can’t tell them about myself, if I can’t be comfortable in the way I act, because I, like, I’m a weird person, if I can’t act the way I wanna act I just won’t associate with the person.”

This category of *Being Able to Be Myself* highlights the contrast between what participants hoped to achieve in friendship and the challenges they faced in building this type of a friendship. The description of this category adds to our understanding of the core problem adolescents with ASD must work through as they develop and navigate friendships.
Valuing friendship. Related to the core problem, it is also important to discuss findings regarding the value participants placed on friendship. These results help to establish understanding of participants’ motivation to engage in processes that helped them navigate and overcome the challenges that interfered with their ability to achieve the friendships they desired. Although participants did express valuing time on their own and being able to engage in preferred activities without having to accommodate other people, all participants still explicitly expressed seeing value in friendship.

Most saliently, participants spoke about the enjoyment they experienced being with friends and how they were prone to feeling bored or lonely without friends. They expressed wanting to have other people with whom to hang out, play, and talk. Further, participants expressed wanting friends so that they had someone to actively engage in activities with or keep them entertained, and participant also expressed a desire for company even if they were both doing different things. Ultimately, having companionship was reported to bring participants joy and happiness. The following two excerpts from interviews with Stephanie and Sam help to illustrate the effect friends had on mood:

“Because when, when I was at my other schools I didn’t really have friends, I was more like the loner kid and I just, yeah. And so at this new school I made a lot of new friends and I’m surprised because normally I only have like one friend or two and like with all these friends I’m just like ‘Oh my God I want to do all kinds of stuff with you guys! I’m gonna be, I have actual friends I’m going to invite you all to the Beach!’”

“…friendship means a lot to a lot of people…It means to them that, ah, it’ll make them have a better life. [it makes me have a better life] because you can like have someone there to talk to and hangout with and play with. [It makes me feel] happy.”

In addition to friendship contributing to happiness, participants also expressed concerns that without friends they might feel depressed, more anxious, or have difficulties regulating their
emotions. For example, describing why he likes having friends, Cameron explained how friends helped him manage emotions and self-regulate because they kept him busy and engaged in activities:

“…[having friends] is just a way for me to – um - express myself. Because if I didn’t do anything with anybody, then I’d be very, like, I’d probably be a lot more likely to have like emotional explosions just like trying to get myself—trying to release all that pressure. But having friends like keeps me going…”

Overall, participants were unanimous in their expression of wanting friends and seeing value in having friends. Any instances in which participants expressed uncertainty or mixed feelings about the value of friendship were linked to the concepts described within the category Withdrawing and Avoiding (e.g., being worried about rejection, worrying about the risk of negative interactions, feeling discouraged by the effort involved, etc.)

**Summary.** These results outlining the core problem identified in this study help to elucidate how interactions influenced the meaning adolescents with ASD ascribed to their friends and themselves, how this influenced their behaviour engaging in friendship, and ultimately how this could promote or interfere with their ability to achieve the friendships they felt most satisfied with. Participants expressed how experiences of others’ behaviour in interactions contributed to their constructed understanding of whether a person might be kind or mean, trustworthy or deceitful, understanding or judgmental. Further, they explained how these interactions contributed to their own sense of whether they could be accepted for who they are, or whether they felt uncomfortable and avoidant. Together these appraisals affected future action within friendship. Working in opposition to the core problem is the core process, which will be explicated in the upcoming section.
Core Process: Building Familiarity

The core process (also commonly referred to as the basic social process, basic process, or core category) in grounded theory is the central category around which the other categories are organized, and through which the other categories are related (Corbin & Strauss, 2008). It describes the overarching process by which participants attempt to navigate the core problem (Glaser, 1978). In the present study, navigating the core problem required participants to transition away from a state of Withdrawing and Avoiding in order to establish friendships in which they became Able to Be Myself. To do this, participants needed to become engaged in interactions with their peers, which they achieved through Building Familiarity.

Building Familiarity refers to the process of participants getting to know each other, which participants expressed promoted their ability to build comfort engaging in interaction. Participants spoke about how inclinations to Withdraw and Avoid were greatest with new and unfamiliar people. In these cases, the risk of engaging in interaction felt most palpable because there was no (or very limited) foundation of knowledge upon which to determine how someone might perceive them or react towards them. Limited familiarity was described to present challenges for many aspects of friendship development including introducing oneself, approaching people, talking to other people, and finding ways to connect. For example, in my interview with David, he agreed that knowing someone better might help him better predict their behaviour. He explained how lack of familiarity makes it very difficult to introduce himself to people:

“Hmm, I mean, I usually wait for them to introduce themselves to me. Cause I don’t know what they’re like and I don’t know if they’d like me…I mean like, it could be someone I don’t know that well, I mean, I’m scared that they won’t respond if I say hi to them, they won’t answer if I like, ask them something.”
Similarly, participants expressed that building knowledge about friends supported the development of closer and more secure relationships in which they were increasingly able to feel comfortable interacting and being themselves. For example, Mary emphasizes the role of trust in developing closer relationships and pointed out that growing trust is the product of getting to know each other:

“Well, we both like trust each other with a lot of secrets, and, um, yeah just, um that’s about it. I can’t really explain it’s kind of about building friendship rather than just becoming friends on the spot. We got to know each other, we got to know each other a lot and it kind of like just developed into a really good friendship because at the beginning of the year, we weren’t like the bestest of friends ever, and then we did this project together and we started becoming a lot closer, we started having classes together… so we just became really good friends after that.”

Mary also went on to explain how familiarity promotes the ability to get along with each other:

“Just like what I said before about the trust factor is definitely very very important there. Especially since like at that point they’ve gotten to know you and it’s just an easier, like, to communicate with them and knowing their strengths and weaknesses…that kind of thing…just like in case there are any disagreements or arguments that you know how to work it out.”

It was a commonly expressed sentiment among participants that building familiarity promoted their ability to get along with others. They identified that increased familiarity meant there was a stronger understanding of each other on both ends of the friendship which promoted being able to interpret and predict each other’s behaviour. Further, increasing familiarity and the associated growing sense of security and confidence within the relationship helped support persistence in the face of threats to the relationship, enhanced participants’ views of themselves as being likeable, and increased their likelihood to continue to engage in the processes required to develop and navigate friendship.
Conceptually, *Building Familiarity* accounts for variation in patterns of behaviour across a number of key factors that contribute to participants’ process of engaging and getting to know each other. These factors include methods of interacting with friends (engaging in fun activities and talking) and external facilitators (time, locations, and other people).

**Methods of Interaction.** The method by which *Building Familiarity* occurred for the participants was by engaging in interaction. Participants described that they were able to get to know their friends by engaging in fun activities together and talking with each other. Not only did engaging in these activities promote the development of familiarity and understanding, but also the nature of these activities was reported to change and evolve as familiarity developed. Additionally, failing to maintain engagement in these methods of interaction were reported to result in diminishing familiarity and eventually loss of friendship.

**Engaging in fun activities.** As previously discussed, one of the reasons participants expressed valuing friendship was because friends had the ability to make things more fun. Related to this, participants reported engaging in a variety of fun activities with their friends, such as playing (e.g., playing tag/games at recess, playing videogames, playing sports), watching digital content (e.g., watching movies, watching TV, watching YouTube videos), going places together (e.g., to get food, to the pool, to the mall, to the park), engaging in shared interests (e.g., acting, sports), and generally just hanging out together. Engaging in these activities created a more comfortable and less intimidating context to get to know each other. For example, Stephanie explained her preference for engaging in activities as a method of interacting during earlier stages of friendships development as activities made it easier for her to mask some of her behaviours related to ASD and thus provide better opportunities for peers to get to know her:

“[It’s easier to be goofing around and physical than sitting and talking], like for me I can be like my crazy self like, but sitting
around I actually get really antsy and like all of that energy will like go (higher voice) kabloom!”

Participants also talked about being drawn to people who had a good sense of humor, who were able to be silly, and who could joke around. This helped to break the awkwardness or discomfort of not knowing each other well. Additionally, participants expressed that interacting in this way created a safer context to engage because there was a clear understanding that they were likely to have fun together. In this excerpt from my interview with Bailey, she is explaining the process of meeting friends at a new school and how she had an easier time becoming good friends with peers she perceived to be funny:

“So it was the first day of high school and I remember I was laughing because she wanted everyone to call her “Banana” and I just thought that was so funny and I dunno so like, I was like, she’s really cool. But like I had been, I have another friend named “S”, but, I dunno she, I tended to not really like her as much because she’s kind of more sad all the time and serious…”

Further, as comfort and familiarity grew, goofing around and teasing allowed for the opportunity to test limits of friendship in a safe way. For example, Jason spoke about the importance of being able to roughhouse and tease with friends to help establish comfort in his relationships. Jason had been extensively bullied at a previous school and placed substantial importance on identifying friends who would be able to stand up for him. Goofing around, pulling pranks, and play fighting with friends became a primary method for Jason to determine if he could feel secure with friends at his new school. This process of engaging in teasing and joking to establish security in relationships was echoed by many participants.

**Talking.** While many participants reported preferring methods of active engagement with friends, especially early in their friendship development, they also identified that talking with friends was a critical component of *Building Familiarity* at all stages of friendship development.
Further, it was acknowledged that friendships could be limited by not talking, as this inhibited the ability to get to know each other.

Talking was described as having a cyclical relation to *Building Familiarity*. While talking was important to developing knowledge about friends, it also became easier to talk with friends as knowledge about each other grew. Growing familiarity allowed for trust and comfort to build, which decreased fear or nervousness associated with conversation. While talking was reported to occur secondarily as a byproduct to engaging in fun activities earlier in friendships, as relationships developed participants stressed the importance of talking as its own form of engagement. They reported increased comfort engaging in talking for the sake of talking as they got to know people better.

As familiarity developed, the content of conversations changed from relying heavily on mutual experience (e.g., talking about the class they have together), to shared interests, and then to broader information about each other and eventually information about personal and intimate experiences. With growing knowledge of each other, it became easier to know what to talk about, to develop conversations, and even to take the lead in conversation, which further perpetuated the growth of familiarity. One participant, Timothy, illustrated this process by describing the contrast he experienced talking to two different classmates at school. He reported that it was difficult to reciprocate conversation with the classmate he did not know well because he did not know what to talk about. He reported conversations would end abruptly after introductions and he was not able to get to know this classmate better. Alternately, he attributed having an easier time talking to a more familiar classmate, whom he considered a friend, because he knew more about her, had a better idea of what to talk with her about, and subsequently felt
more comfortable with her. As a result, he continued to build his knowledge about the more familiar classmate and they established a closer relationship.

**External Facilitators.** *Building Familiarity* is also influenced by a number of external facilitating factors, including: time, location, and other people. In many ways, these factors helped to ease the burdens associated with engaging in interaction. Similar to methods of interaction, the role and nature of external facilitators changed across stages of friendship development as familiarity grew.

**Time.** Time was linked to the development of familiarity in two ways; both spending more time together and knowing each other for longer were identified as helping with familiarity. Participants identified how spending more time together early in friendships would help with beginning to recognize a person, remember them, and remember important information about them. Participants reported fewer challenges with this type of memory with friends they had known for longer. Both increasing contact with peers and knowing them for longer made it easier to identify commonalities and develop a stronger connection. As participants grew closer to friends through this bonding, they reported wanting to continue to spend more time together, which subsequently helped to established deeper levels of familiarity and supported continued growth of the friendship.

Participants largely reported being friends with people they had known for a long time (e.g., since childhood or for many years). There was certainly a greater risk associated with developing a new relationship with someone they know very little about in comparison to maintaining a relationship with someone whom they had established substantial familiarity with. By comparing his relationships with friends he had known for longer to friends he had made more recently, James provides a comprehensive explanation of how knowing each other for
longer influenced building familiarity and developing friendship:

“If we’re judging it specifically on [time] I think the most significant differences would be in terms of how well you happen to know the person. If you know somebody for quite a bit of time and see them periodically you get to know what kind of person they are, you get to identify their personality traits you start to get to catch on to what their interest are without needing to ask them about it and start to recognize how maybe, even how they would respond to different scenarios and maybe even what their needs might be. With some, if you don’t know the person for a long time, then often times it just becomes a gamble when it comes to responding to their actions, you need to recognize how, what, you need to really pay attention to how the person acts and choose an action accordingly.”

Participants also spoke about the importance of balancing time with friends. Participants identified challenges with finding time to engage with friends due to busy schedules. For some participants, they wanted to spend as much time as possible with their friends. This was especially true for friendships that had achieved a particularly close level of comfort and intimacy. For other participants, a personal preference was identified for limiting the time spent with friends. Participants expressed they wanted to spend time doing things alone without worrying about someone else, or they needed time to recover from the effort required for social engagement. Regardless, all participants identified it was important to maintain some level of consistency in their contact with their friends to uphold their knowledge of each other. The following excerpt from my interview with Christopher summarizes the role of regular contact in building familiarity, and the importance of finding balance in the frequency of contact:

“We sort of saw each other more often, and when we did we would always try and come up with conversation to keep ourselves occupied with each other and to get to know each other better. I see [him] numerous occasions at school, and on occasion as well at our [Church], so that certainly helps to get us to know each other. … what’s most important is the time that you spend apart and together … if you were locked in a room with someone for an entire day, do
you think you would be able to tolerate their presence without any sort of conflict going on throughout the entire day? I find that highly unlikely. It’s best to spend short bursts of plenty of time with somebody, so maybe like a couple of hours and if you’re spending a bit more time apart from each other than that means that you gotta make up for that with more time to talk with each other and get to know each other and get caught up with what’s going on.”

**Location.** Most saliently, friendship experiences discussed in this study were described to occur within the context of school. Participants described coming into contact with friends and engaging in interactions during class, lunchtime, recess, and breaks in the hallway or while passing by each other’s lockers. Participants also spoke about coming into contact with friends through school-sanctioned clubs or groups. I viewed the regular contact created by the school environment to be particularly helpful for creating safe opportunities for participants to build familiarity while requiring minimal effort or risk. Notably, the school environment allowed for opportunities to observe peers’ behaviour and interactions with others, and it created an obvious mutual experience that could generate ideas for conversations. This is apparent in the following excerpt from my interview with Aidan:

“All at school we can talk about how we feel about school. But when we’re outside of school we don’t really have much to talk about though… We talk about school, how we are doing at school, about how we feel about teachers, about how we feel about other classmates and then sometimes we talk about how we feel about our households.”

Beyond the context of school, other locations in which participants spoke about initially developing friendship were also locations in which participants experienced regular and frequent opportunities for contact (e.g., in the neighborhood, at church, on a sports team) and which provided similar benefits to those seen within the school environment.
High school presented an especially unique environment for building familiarity and developing friendships. Participants spoke about making new friends in high school, despite also reporting that it could be difficult and scary to make new friends in a new school. Participants identified that high school was an environment in which there was a large variety of people. Such an environment increased opportunities to encounter someone who might have common experiences or interests that could serve as a launching point for getting to know each other. Additionally, participants identified that being able to have some control over the courses they enrolled in meant that they were more likely to come into contact with people who shared similar skills and interests within those classes. Finally, participants spoke about appreciating a fresh start in high school. They reported that high school provided an opportunity to build familiarity with peers who were not aware of past behavioural challenges that could otherwise colour their opinions.

Finally, participants spoke about the relation between familiarity and the locations in which they engage in activities related to developing friendship. Participants expressed that as they developed familiarity with friends, and subsequently their sense of comfort and closeness, they were able to move friendships to new locations, such as visiting each other’s houses. Further, participants spoke about the importance of interacting with friends outside of the school environment to enhance their knowledge of each other. As described by Stephanie:

“…if you’re in school like, we can’t, you can’t like really like focus cause like the teachers always like “be quiet”, you know? But like if I’m with someone for like a long time outside of school or like we do stuff together and I can actually like get to know the person instead of like them being like focused on school….like I just want them to like, like to see their actual, actual selves like what they’re like…”
Other People. Participants identified a variety of ways in which other people helped them to facilitate interactions or provided support during interactions in such a way that enhanced comfort. This was especially true during early friendship development. The role of others facilitating introductions will be discussed during the presentation of results outlining the processes associated with the Meeting stage of Building Familiarity. Briefly, participants spoke about relying on their friends, and to a lesser extent adults (e.g., parents and teachers), to introduce them to new people or accompany them when interacting with a new person or group of people. Participants expressed that meeting new people through a friend was more comfortable because the association created some level of knowledge about the new person.

In addition to meeting new people, participants reported varying degrees of reliance on friends to take the lead engaging in interactions (e.g., initiating interaction, carrying conversation, come up with activities to engage in). They further expressed some reliance on adults to also create opportunities through which they could then engage with friends (e.g., placing them in groups with peers, introducing ‘ice-breaker’ games, inviting friends to their home or on outings). This facilitation reduced barriers to engaging in interaction by lessening the need to identify what friends might want to do or talk about, and minimizing the risk of rejection that would otherwise exist if participants had to take initiative themselves. Notably, reliance on others to provide this facilitation was reduced in friendships where participants felt there was strong mutual understanding and a sense of comfort.

Participants also discussed how the number of people involved when engaging in interaction could have an influence on their comfort level. Some participants communicated a preference for interacting with groups. This reduced pressure on them to carry the interaction and allowed for them to blend into the interaction. This type of interaction was reported to be
particularly preferable when participants had not established substantial knowledge about their friends and as a result felt more comfortable assuming a passive stance. Other participants found groups to be somewhat intimidating or overwhelming, especially if they did not know everyone in the group. Regardless of preference for group size, participants reported that spending time individually with friends was also a critical component of getting to know each other and became easier as they built familiarity with each other.

**Summary.** *Building Familiarity* is the process by which participants were able to overcome barriers in friendship development, engage in interactions with others, and progress towards establishing friendships that were meaningful and satisfying. Not only did *Building Familiarity* promote participants’ ability to engage in interactions, but also the method by which participants and their friends got to know each other was through engaging in interactions. Further, engaging in interactions was assisted by a number of external facilitators including time, location, and other people. By *Building Familiarity*, participants became more comfortable in interactions as they became better able to understand and predict the thoughts and behaviours of their friends, and as their friends built a stronger understanding of them.

**Categories and Sub-Processes of Building Familiarity**

The core process, *Building Familiarity*, is composed of four categories: *Establishing Safety, Connecting over Mutual Understanding, Creating Stability, and Developing Trust and Intimacy*. These categories reflect the processes of *Building Familiarity* at each stage of developing and navigating friendship, including: *Meeting, Becoming Friends, Maintaining Friends, and Growing Closer*. Additionally, a fifth stage, *Growing Apart*, runs in opposition to *Building Familiarity*. 
While engaging in data collection and analysis, I began to see that participants were describing engaging in cyclical processes of meaning-making to help them move forward in developing closer friendships. Within each stage of friendship development, participants were undergoing a process of interaction, meaning-making, and action that was both informed by and drove forward *Building Familiarity*.

In their discussion of their friendship experiences, participants typically expressed a linear movement from *Meeting* to *Becoming Friends* to *Maintaining Friendship*, and they expressed fluctuating back and forth between the stages of *Maintaining Friendship*, *Growing Closer* and *Growing Apart*. However, as they progressed to new stages of friendship development, they reported behaviours that suggested they might continue to engage in the processes of *Building Familiarity* associated with previous stages of friendship development to continue to enhance and build security in their relationships.

**Meeting – Establishing Safety.** *Meeting* is the stage in which participants were initially coming into contact with peers who could become friends. In this stage, participants were making preliminary movements away from inclinations to withdraw and avoid engaging in interaction by beginning to build knowledge about their peers. *Building Familiarity* at this stage was focused on *Establishing Safety*, which refers to the cognitive and behavioural processes participants engaged in to build a foundation of familiarity from which to launch friendship. Given the limited familiarity between participants and their peers at this point in time, the barriers to engaging in interaction were substantial and the perceived risk of engaging was high. Participants frequently identified “meeting people” and “introducing myself” as some of the most difficult elements of developing friendship. To support *Building Familiarity* and reducing
perceived risk, participants engaged in three sub-processes during this stage of friendship development: Collecting Information, Feeling It Out, and Relying on External Factors.

**Collecting information.** When Establishing Safety, participants were engaged in a process of Collecting Information which helped them to develop foundational knowledge about prospective friends. At this stage, participants communicated an uncertainty about who they should try to be friends with. For example, Aidan expressed that upon starting high school he did not know anyone. He recalled finding it very difficult to initially develop friendships because there were so many new people and he did not know how to determine who might be an appropriate person to try developing a friendship with. Further, Julia described how concerns about the risk of meeting someone new were related to this process:

> “First of all, I’m the type of person, I don’t know why, I always kind of judge people on, depending on who they are, if I want to be friends with them or not, cause I always fear of getting in [a bad situation].”

Collecting Information helped to clarify this uncertainty by supporting the formation of initial impressions.

Participants described that at this stage they were becoming familiar with basic facts about the peers they came into contact with, such as their names, ages, and other personal details. They were also building visual recognition of peers. Repeated interactions or contact with peers helped participants to remember who they had met and information about them. Christopher described his challenges with remembering names and details about people he had met and the role of time in facilitating this process:

> “I think [remembering them] is just the repetition, after a certain amount of time you sort of get to know the person. And off by heart, you can tell many of the details about them, not just their name, but also a lot of personal information about them.”
Participants further described collecting information that informed initial impressions of the personalities of their peers. Participants described focusing on whether they perceived people to be “nice” during this phase of friendship. They conveyed initially wanting to be friends with people who smiled at them, greeted them in the hallway, and who all-round appeared to have a friendly or positive attitude. In some cases, this meant initially focusing attention on people who were more popular, as having a lot of friends was seen as an indicator that the person was likely to be nice and could also potentially introduce the participant to more prospective friends. As participants collected more information about their peers and revised their impressions, they tended to adjust their focus to peers who seemed more similar to them. Illustrating the relationship between collecting information and subsequently ascribing meaning to peers, Mary described how her impression of people changed over time and influenced who she wanted to meet and become friends with:

“Actually, at the beginning of the year, I don’t know, I was just really trying to get to know the popular people. And as the year went on I kind of accepted that I was kind of an outsider, I didn’t really want to be a part of that seeing what they’ve done, with like drama and a bunch of that.”

Feeling it out. To facilitate the collection of information through which initial impressions were formed, participants engaged in a process of Feeling It Out. This is the method by which participants interacted with peers to form their initial impressions when Establishing Safety. By Feeling It Out, participants engaged in interactions primarily through observation. At this stage of friendship development, participants expressed being cautious about the potential risks associated with social interaction. Watching and waiting allows participants the opportunity
to collect pertinent information about their peers’ personalities in a safe way. The following excerpt helps to illustrate this function of *Feeling It Out*:

“Just watching what they do, how they talk to other people, how they treat others type of thing. Cause I don’t like people who bully and stuff. And I see that and they’re the type of people, or if they’re really peppy, I don’t know why I hate people like that. Who are all selfish? I hate it. And if they’re like that I just… I just stay away.”

In addition to collecting information about their peers, participants used observation to collect information that could support attempts to engage in interactions with the person. Participants spoke about looking for signs or signals that might imply that they were of interest to a peer, such as a peer looking at them, smiling at them, sitting near them, or greeting them. Further, participants conveyed attempting to use observation to collect information about the activities and topics their peers were interested in. This process and the role it played in increasing the likelihood of interaction is explained in the following excerpt from my interview with David:

“To see like yeah, uh, like how they act around other people and uh also to see if they like ever pay attention to me like and yeah uh I also like to see what they are talking about too, like the people they talk to uh yeah and also like what they are talking about… cause uh maybe it might be something interesting.”

Finally, participants reported that they might engage in the process of *Feeling It Out* for an extended period of time before they were able to engage in an interaction. Participants especially stressed the need to develop substantial knowledge about a person before they might be willing to take initiative in introducing themselves. A salient theme was that participants had known their friends for many months to years before they actually became friends.
Relying on external factors. As has been established, the level of familiarity between participants and their peers is limited and the risk associated with engaging in methods of interacting is high during the Meeting stage of friendship development. Participants are forming initial impressions of peers through observation, but these initial constructed interpretations from the behaviours they observe are unstable and founded on limited information. As such, during this stage, where Building Familiarity is focused on Establishing Safety, participants primarily Rely on External Factors to become engaged in the activities required for friendship development.

Most saliently, Relying on External Factors refers to participants’ reliance on other people to initiate and facilitate interaction. Participants identified that when Meeting new people, they would rarely take a proactive stance to introducing themselves. Instead, they would wait for others to approach them, as explained by Julia:

“[It’s easier when they approach me] cause it’s clear that they want to talk or that it makes it easier for me to know that obviously they want to talk to me if they are trying to talk to me.”

Notably, there were instances in which participants reported feeling comfortable enough initiating an introduction. All such instances were under circumstances that served to increase the likelihood that the introduction would be a positive experience. Namely, participants reported introducing themselves when they felt they had established a strong base of knowledge about the person and a certain degree of familiarity had been built between them and the peer. Participants also spoke about finding it easier to introduce themselves to people who did not appear to have many other friends, such as new students or peers who had been bullied. Participants expressed insight into the person’s need for a friend and connected this to their own historical experiences of what it was like to not know anyone. Finally, participants also reported that they might take
initiative in introductions with someone who was associated with their larger group of friends, but with whom they had not yet engaged.

Participants also reported that they would rely on their current friends to facilitate meeting new people, either by introducing them to other people or by accompanying them when socializing with a new group of people. The following excerpt from my interview with Stephanie helps to explain how the familiarity associated with new people because of their connection with current friends can make meeting people through current friends feel less risky:

“[My friend] was hanging out with M.M. a lot so that’s how me and M.M. had become friends….That’s how I meet my friends cuz I trust my friends with their choices in friends…So I’m like, oh if my friend hangs out with you than that means you’re pretty good.”

A similar experience of increased sense of familiarity and reduced risk was also communicated by participants when meeting friends was facilitated by other familiar people, such as parents or teachers.

In addition to relying on other people, participants also relied on location to facilitate their ability to meet people. As discussed earlier, school was reported as the primary location in which participants met and came into contact with their friends. Meeting friends in this context reduced the burden of needing to make an effort to go elsewhere to find friends, and it also provided an environment in which it was easier to identify commonalities that made it easier to interact. Notably, a handful of participants expressed having challenges meeting friends within the context of school. This was linked to being placed in an ASD or disability classroom in which the peers they came into contact with may have differed in the level of impairment related to their disability or may have engaged in behaviours that made it difficult to feel safe engaging in interactions (e.g., unpredictable and potentially violent behaviour).
Finally, participants also conveyed having success with meeting friends online. In general, participants emphasized a preference for meeting friends in real life and prioritized these friendships over online friendship, but the online world became a helpful format for participants who struggled to make friends in “real life”. Interactions online were reported to occur through player versus player videogames, massive multiplayer online role-playing games, or through engaging in specialized message groups on social media. Participants described that these formats were conducive to meeting friends because they could connect easily to people who shared their interests. Further, the virtual format was felt to reduce the intensity of risk of rejection in comparison to rejection experienced in person.

**Becoming Friends – Connecting over Mutual Understanding.** *Becoming Friends* is the stage in which an initial friendship is established. *Building Familiarity* at this stage is focused on *Connecting Over Mutual Understanding*, which refers to the processes by which the foundation of knowledge participants developed enhanced the feeling of connection between participants and their friends. Specifically, as participants continued to build familiarity, they were able to begin identifying commonalities (e.g., demographic similarities, shared interests, common experiences) that helped them to relate to each other, establish a feeling of connection, and enhance their comfort engaging in interaction with friends. To support *Building Familiarity* at this stage of friendship development, participants engaged in three sub-processes: *Clicking*, *Identifying Commonalities*, and *Participating in Interactions*.

**Clicking.** When asked about how participants thought they transitioned from knowing someone to *Becoming Friends*, they almost unanimously expressed experiencing some variation of clicking, bonding, gelling, connecting, or having chemistry. When *Connecting Over Mutual Understanding*, participants engaged in a process of *Clicking* with friends as a result of their
growing foundation of knowledge about each other. This process enhanced the meaning that participants ascribed to friends; participants transitioned from focusing on friends “being nice and friendly” during the stage of Meeting, to focusing on a sense of similarity during the stage of Becoming Friends.

Participants described the process of Clicking to being a natural feeling that happened relatively quickly upon starting to interact with a peer. Clicking was viewed as resulting from getting to know each other and connecting. This is illustrated by the following comments made by Peter:

“I guess you really, it’s just kind of a natural feeling, you just kind of feel like, ‘hey I know that person better, maybe I’ve connected with them more, I’ve built more of a connection’. It just kind of clicks naturally, instead of just receiving that big red card that just says ‘you’re friends now, be free’.”

Participants also saw Clicking as being intrinsically linked to their growing understanding about things they had in common with their friends. Most saliently, participants spoke about the role of sharing interests with peers in helping to develop mutual understanding. By sharing interests, participants felt that they better understood their friends, and they perceived that their friends were more interested in interacting with them. In discussing his ideal friendships, Christopher placed the role of shared interests at the center of building mutual understanding:

“I think the person that would be ideal for me would be somebody who can understand what I have a passion for and what my interests are to the point where they could potentially share those interests with me…It just gives us a reason, it just helps us to connect with each other better…”

Further, participants expressed struggling with friendship development when they were unable to identify shared interests. Lack of shared interest became a major barrier to being able to develop familiarity beyond a foundational level, as well as to being able to establish a feeling
of connection that motivated deeper levels of engagement with each other. For example, in explaining his relationship with one peer, James described how even though he liked this person and knew about them, he did not feel they had really established a friendship:

“\textquoteon{I think it’s just because we haven’t really found something that we are both majorly interested in and that we can talk about on a regular basis. I know a lot of her interests, but I’m not particularly into the same things that she is into. And I think that’s one of the major reasons [we aren’t closer].}”

In addition to shared interests, participants also reported that identifying common experiences helped to create mutual understanding and connection. Participants spoke about how identifying a similar outsider status (i.e. both being on the periphery of their friend group), similar personalities (e.g., both being shy or smart), or similar social experiences (e.g., both being bullied) enhanced understanding between themselves and their friends. In my interview with Julia, she discussed how having similar personalities and being placed on the periphery of their social group initially helped to build comfort and mutual appreciation between herself and her now best friend. She explained:

“Yeah I’m a better listener I’ve always been. I think that’s also why [we became friends] ‘cause I- I’m the one that listens to her. The big group that we used to hangout she was always the person sitting there reading her book she didn’t- now she didn’t feel comfortable I guess or she didn’t feel like she was involved much, just like I was.”

Julia went on to describe how this initial insight into each other’s experiences created a sense of connection that allowed them to identify further commonalities and develop their friendship.

\textit{Identifying commonalities.} In contrast to the sub-process \textit{Feeling it Out}, in which participants constructed meaning through observation, the sub-process of \textit{Identifying Commonalities} describes how participants actively interacted to seek out information that helped
them construct meaning and build familiarity. By engaging in interactions that supported *Identifying Commonalities*, participants built on the familiarity that had already been developed until they established a bonded feeling of connection with their friends.

In describing the transition from *Meeting* to *Becoming Friends* in friendship development, participants spoke about the importance of continuing to interact after introductions had been made in order to build a connection. Participants elaborated that by continuing to talk with peers they were able to discover what their interests were and whether they shared any interests in common. Identifying similar interests created a starting point from which conversations could evolve and the meaning of commonality could take on more significance. For example, Jillian described how, after making an initial interaction with someone online, they were able to identify common interests through continuing to talk. Jillian explained how this process functioned to support building a connection and becoming friends:

“So, I guess in August last year I was playing one of my games, and I wasn’t sure how to do something on the game, so I asked another player for help, and they helped me and then we just started talking a lot. I don’t really remember, like very much. But I just remember that. And then we talked the next day, and the day after, and then we just started talking every day. So we just became good friends.”

Participants also stressed the importance of hanging out or engaging in activity to help identify commonalities. They reported a qualitative difference between talking about shared interests and engaging in activities related to shared interest. It was apparent that engaging in activities together helped to identify additional nuances about the connection shared through their mutual interest. To this point, while discussing identifying and engaging in common interests with his friends, Christopher explained:
“Being able to do things with my friends outside of just having a conversation about that specific topic is an important to the relationship. You can say that you’re really into something, but it’s only when you take that into action that you can really prove that, and really show your friend that you two have something in common with each other and you two have a chemistry that may work with each other.”

**Participating in interactions.** Participating in Interactions is the process by which friendships continued to grow and develop during the stage of Becoming Friends. It describes participants’ increased comfort taking on a more active role engaging in interactions with their friends as the result of Identifying Commonalities and Clicking.

While participant action was defined by passive reliance on external facilitation during the Meeting stage of friendship development, participants were now asserting more effort towards engaging in interactions. Although participants continued to express some resistance to initiating interactions at this stage, they spoke about hanging out with friends more, talking with friends more, and overall taking part in a range of activities with their friends more frequently. Participants connected this increased engagement with their friends to a growing sense of ease that they felt with talking to or spending time with their friends. This comfort was facilitated by identifying commonalities. Julia illustrates this experience when describing early interactions with a close friend: “Well I mean she’s a lot like myself …so she’s someone who’s really easy to talk to for me because she was- we were connected in the same way.”

Participants also expressed experiencing increased enjoyment interacting with their friends at this stage of friendship development. This was associated with generally beginning to find interactions with friends easier. Once participants established a connection with friends, they reported that they liked hanging out and talking with friends; they found this to be fun. This experience was different from what they conveyed about their feelings towards interactions when
first *Meeting* peers, which they described as being associated with worry, fear, and nervousness. Participants’ increased ease engaging in interactions, combined with their growing enjoyment of spending time with friends, became a catalyst for wanting to engage with friends, or actively *Participate in Interactions* that furthered the development of their friendships.

**Maintaining Friendship – Creating Stability.** *Maintaining Friendship* is the stage during which friendships had been established and participants were creating security in their relationships. Change can present a significant threat to familiarity and to the stability of friendships at this stage. As such, *Building Familiarity* is focused on *Creating Stability*, which refers to the processes by which participants built more consistent knowledge of their friends and established a sense of equilibrium in their friendships. As such, *Creating Stability* is composed of the following three sub-processes: *Recognizing Consistency*, *Managing Change*, and *Engaging in Reciprocity*.

**Recognizing consistency.** As participants transitioned from stages of establishing friendships to *Maintaining Friendships*, the meaning ascribed to friendships shifted from focusing on similarities and mutual understanding to building security in the knowledge and beliefs they have about their friends. *Recognizing Consistency* refers to the process of *Building Familiarity* in which participants identified that they were able to continue to share commonalities and feel connected to their friends over time. As a result, *Recognizing Consistency* built confidence in the perceptions participants had developed of their friends during earlier stages of friendship development.

Participants stressed the importance of regular contact and keeping in touch for *Recognizing Consistency*. In the stage of *Maintaining Friendship*, participants continued to emphasize the central role of talking and hanging out with their friends regularly to continue to
build familiarity. As Harrison described about maintaining friendships, “You keep talking to
them and making sure they know you as well as you know them.” In comparison to the stage of
_Becoming Friends_, the function of this interaction when _Maintaining Friendship_ was to preserve
knowledge instead of solely to create knowledge of each other. Participants expressed that their
existing knowledge about each other and their commonalities provided a foundation of
connection, but that talking and hanging out regularly was required for participants to stay
connected to their friends over time. Aidan provided the following explanation about how he had
managed to maintain one of his longest friendships:

> “Like we hang out quite a lot we share a lot of things in common
and uh we have always have like that separation time where we
don’t see each other for a bit and then we always get back and see
each other and see how things are.”

It was the case for most participants in this study that the friendships in which they felt
most secure were the ones that they had maintained for the longest amount of time. Participants
reported that by knowing each other for a long time, they were able to acquire substantial
information about each other and develop more accurate insight to interpreting each other’s
behaviour. Further, they were able to base their perceptions of each other on long-standing traits
they had observed over time, rather than one-time behaviours that were inconsistent. This
supported their ability to continue to get along and persevere through conflict. Most of all, this
experience built confidence that they might be able to remain friends for a long time.

*Managing change.* Participants reported that as they attempted to maintain friendships
over time, they were required to navigate a variety of changes. These might include, but were not
limited to: friends making new friends, having fewer classes together, friends changing schools,
friends moving away, and developing new interests. *Managing Change* refers to the processes by
which participants interacted with their friends to uphold their knowledge of each other and
instill confidence in the perceptions they had established of their friendships in the face of change.

The school environment was again strongly described to provide considerable support for maintaining regular contact with friends and *Managing Change*. Many participants identified that consistently interacting with their friends in school was satisfactory for keeping each other up to date on their lives and experiences. Alternately, if friends changed schools or moved away, participants reported that they had to exert more effort to maintain familiarity and update their knowledge of each other. In my interview with Bailey, she described how the foundation of familiarity she had established with one of her friends helped to sustain connection once her friend moved away, but that they relied on spending time together whenever they could to update each other on what was happening in their lives as they began to have different experiences. Notably, their established mutual understanding served to facilitate the maintenance of their connection even as they made new friends and developed new interests.

Regardless of whether friends changed schools or not, participants did acknowledge that additional effort was required to maintain friendships over time. Without making the effort to connect with friends during school time, friendships could deteriorate. James talked about his experience struggling to manage changes in his priorities as the school year progressed. As his focus shifted away from activities of interest and towards his schoolwork, he struggled to maintain one of his long-standing friendships. He described how, even though he and his friend were still at the same school, the stability of the friendship suffered because James chose to direct his time and energy elsewhere instead of engaging in the effort required to maintain the friendship.

“…even though our friendship has been intact for a long time, I feel more recently it’s been somewhat difficult to maintain it,
especially since I’ve been out of the chess club for a long time now…And mostly because I want to focus on other things to an extent…Like I’ve been trying to take on lunch periods to go work on some of my assignments because it is getting very close to exam period.”

Participants also expressed beginning to use technology to obtain updates or reconnect during times when they had less contact with friends. Alex described how texting helped him to maintain friendships when he wasn’t always able to engage in meaningful interactions at school, such as when he had fewer classes with a friend:

“But ya, texting and stuff…it’s important because you need to be able to talk to them, get to know each other, and have random conversations, let them know that you’re still there and that you’re still friends with them kind of thing.”

**Engaging in reciprocity.** As participants progressed through stages of friendship development and were able to *Build Familiarity* within their friendships, they became increasingly active in their interactions with their friends: from observing, to participating, and now reciprocating. *Engaging in Reciprocity* refers to the increasing initiative participants took in their interactions with friends, as well as their growing efforts to reciprocate investment in their friendships. By engaging in these actions, participants further contributed to *Creating Stability* and the development of their friendships.

As participants developed certainty about their perceptions of their friends, they reported continuing to grow in their comfort engaging in interactions. A range of behaviours indicating increased initiative and reciprocation were reported by participants at this stage. Some of these behaviours included: inviting friends to engage in activities, starting conversations, leading conversations, seeking out friends during spare time, engaging in friendly teasing, and providing practical help to friends (e.g., helping them with their work or explaining a new concept at school).
Participants acknowledged that a key component of *Engaging in Reciprocity* involved needing to negotiate between their own priorities and the demands of friendship. Where in the past participants might have remained in their comfort zone, with increased development of their friendships they reported being more willing to push themselves to do what they knew would be best for the friendship. Participants who struggled to engage in this negotiation reported experiencing more difficulty *Creating Stability* within the friendship. They acknowledged that pushing themselves to prioritize the demands of friendships was important to developing a closer relationship. As explained by Christopher:

“I feel like an ideal friend would want to push to be able to do things with a friend. I’m unfortunately lacking in this ability but I feel [being the kind of friend] with the motivation to go out and do something with their friends is a good idea because it helps to build the connection between the two friends and makes it feel like they actually do care about their relationship with each other.”

Christopher reported that this was a skill he was currently working on, but he was struggling to achieve. He was acutely aware of the negative impact this had on the stability of his friendships, but he still did not feel secure enough in any of his relationships to take this risk of pushing himself to do things that felt uncomfortable.

In relation to negotiating personal priorities when engaging in interactions, participants also reported needing to find balance in the amount of time they expected to spend with friends. Participants who preferred to spend less time with friends became more able to engage in consistent interactions with friends as their comfort and security in the relationship increased. Other participants, who expected friends to spend a lot of time with them, became more comfortable with having time apart from their friends as they developed trust that their connection with each other was stable. For example, Luke explained that when he first connected with one of his friends, he was very excited about identifying common interests and constantly
wanted to talk with her about this interest. He would regularly linger around this friend hoping that they would engage in a conversation. Luke explained that eventually this friend had to explain that she liked him, but that she needed some space to do other things. Luke described that it was difficult to do this at first, but as he got to know this friend better and established confidence in their connection, he became more successful at balancing his time with her.

Finally, when Engaging in Reciprocity, participants also spoke about maintaining relationships with people who were equally invested in the friendship. It was easier to reciprocate interactions when they perceived that their friends were genuinely interested in the relationship and were not trying to take advantage of them. Participants’ ability to differentiate this developed through Managing Change and Recognizing Consistency. As a result, participants were able to invest more in relationships they perceived to be authentic and reduce their engagement with people they perceived to have insincere intentions. In my interview with Aidan, he repeatedly spoke about the importance of equality and reciprocity in his relationships. He provided the following description when discussing what he most liked about this best friend:

“He’s not really relying on me in order to do something, so like sometimes we go to the mall for lunch and he’s sometimes…like “oh I can pay for myself” or “oh I can pay for both of us”, but it’s not always like “Can you please pay for me? Can you please pay for me?”

Growing Closer – Developing Intimacy and Trust. Growing Closer describes the stage of friendship development in which participants approached and achieved the ability to be able to be themselves within their friendships. While Growing Closer is placed as the final stage of friendship development in the model, participants often expressed fluctuating between stages of Growing Closer and Maintaining Friendship over time. Building Familiarity at this stage is focused on Developing Trust and Intimacy. This describes how participants and their friends
established a deeper level of knowledge of each other, which allowed participants to feel more comfortable being vulnerable and created opportunities for participants and their friends to focus on being supportive of each other. During this stage, participants were engaged in the following three sub-processes that compose Developing Trust and Intimacy: Allowing Vulnerability, Broadening Contact, and Supporting Each Other.

**Allowing vulnerability.** As participants navigated their way through the stages of friendship development, the process of Building Familiarity supported the development of deeper levels of knowledge about each other, as well as greater confidence in the validity of this knowledge. Consequently, participants continually enhanced the meaning they ascribed to friendships, which in turn supported further development of their friendships. At this final stage of friendship development, Growing Closer, the meaning making process of Allowing Vulnerability refers to how participants became able to reveal their most personal information to their friends and subsequently came to recognize that they are able to be themselves and be accepted within their friendships.

Central to establishing a sense of comfort in being themselves, participants needed to experience being vulnerable with their friends and then experience the positive feedback of having friends accept and understand them. To increase the likelihood of this occurring, participants spoke about Allowing Vulnerability with friends they felt they were close with and could trust. As described by Mary:

“‘cause I might not talk to [acquaintances] as much I would a good friend or a close friend and umm I don’t tell them as many personal things as I would with a close friend because I don’t know them as well and I don’t trust them as much…Well close close friends is what I said before, like ge- like we can talk to each other about anything but like friends are just like people we can hang out with but we don’t really know them that well.”
The above quote highlights that when participants felt as though they could trust their friends, they were able to talk openly about anything, including very personal information (e.g., struggles with mental health, bullying, or family relationships). Through allowing themselves to be vulnerable, participants would come to feel even more strongly bonded to their friends and more secure in their relationships. Further, participants expressed that their ability to share information and develop closeness in a friendship would be impeded if there was a lack of trust:

“Like if there’s a friendship and you two are best friends but you have zero trust in them, obviously you’re not going to be close, right? Like if you’re like, if she goes and tells everybody my secret, obviously you wouldn’t want to trust that person, you wouldn’t want to hang out with that person anymore right? So I think that’s the most important thing is trust.”

Of importance regarding *Allowing Vulnerability* were participants’ comments about being able to disclose their diagnosis to friends. While some participants were comfortable with making this disclosure to anyone, the majority of participants expressed hesitancy worrying about disclosing this information, even to their closest friends. Participants conveyed a concern that once people knew that they had autism, they would be rejected, bullied, or ostracized. Some participants did express reaching a level of comfort and security in particular friendships such that they were able to share their diagnostic information. In these instances, participants expressed surprise that their friends generally did not care that they had ASD; this disclosure did not affect their friendship for the worse. I came to view this disclosure as a particularly pivotal experience of acceptance within the context of this grounded theory; by accepting the ASD diagnosis, participants’ friends were demonstrating an understanding and acceptance that addressed the fundamental barriers to friendship related to their diagnosis and socialized intolerance.
**Broadening contact.** Until this point in friendship development, participants had spoken about making contact with friends almost exclusively within the context of school. The school environment provided a security net in which participants did not need to exert much effort to come into contact with their friends and in which participants were constantly engaged in mutual experience over which they could connect. During the stage of *Maintaining Friendships*, participants identified the need to begin to expend more effort to maintain stability in changing circumstances. Further, they expressed having increased comfort making this effort as their friendships came to feel more secure. In the stage of *Growing Closer*, participants expressed that *Broadening Contact* with friends supported the continued development of trust and intimacy in their closest friendships. *Broadening Contact* refers to the process of extending the contexts in which participants interacted with their friends, which occurred both through making contact in a wider variety of locations and using a larger range of methods for contact.⁶

As friendships built security and entered the stage of *Growing Closer*, participants described broadening the locations in which they made contact with their friends. For example, participants spoke about going to each other’s houses, going out in the community (e.g., to the movies, to the mall, to get food), and in general getting together outside of school. Participants reported that engaging with their friends in different contexts promoted their ability to develop a deeper and more intimate level of knowledge about each other as they were able to observe each other’s behaviour in environments where they were unsupervised and could be more relaxed.

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⁶ Participants who struggled to make friends in the school environment and instead primarily made friends online also reported engaging in *Broadening Contact* as their friendships grew closer. In these cases, participants spoke about expanding their friendship from one online context (e.g., an online gaming platform) to other online platforms (e.g., social media), which served the same purpose of facilitating participants’ and their friends’ abilities to establish more intimate knowledge of each other.
Participants also indicated that new contexts presented novel environmental factors that might trigger learning something new about each other that they otherwise would not have been primed to talk about. For example, Hilary spoke about how going to the mall with her friends and poking around the shops could help her understand more about her friends’ likes and dislikes, and could even inform what she might buy them for a gift:

“… because [at the mall] I get to see them outside of school and I get to see what they’re actually, actually like cause I know people like, they’re like ‘Oh let’s be good but like kinda like be ourselves too’ but we have to be good because of like teachers … I just like I just want them to see what they’re like and what kind of things they’re interested in cause at the mall there’s like a whole bunch of stores and you get to see what they like and stuff…and ya, think about birthday presents…And like hangout alone too to see like actual people because I know when grown-ups are – eh – are around –it’s like you have to put on like a student like mentality like not like going ‘woohoo!’”

Participants also conveyed that engaging with friends in new contexts provided opportunity for insight into each other’s private lives. For example, going over to a friend’s house created an opportunity to see the environment in which their friend lived, to build knowledge of their friend’s family, and to observe how their friend interacted with their various family members. Illustrating this point, Bailey specifically talked in her interview about how she and her closest friend regularly went to each other’s homes. Bailey reflected that she came to feel a stronger bond with her friend once she learned that they had similar home environments. Bailey explained that her own home could be quite messy and hectic, and she conveyed some embarrassment about this; however, seeing that her friend’s home was quite similar helped Bailey to feel as though her friend would be understanding and accepting of her home as well. This level of acceptance and understanding was only achieved because Bailey had felt secure
enough in her friendship to go over to her friend’s home and subsequently invite her friend over to her own house.

In addition to location, participants spoke about Broadening Contact to include a wider variety of methods of contact. As participants developed more familiarity and comfort in their friendships, they collected information important for connecting on social media or over the phone (e.g., phone numbers to text). Obtaining this information meant that participants no longer had to rely on school to facilitate their interactions with friends, and that they could more easily make contact with friends outside of school hours. Notably, participants spoke about using digital platforms to connect mainly when they were interacting with closer friends. In part, this was related to placing enough trust in the security of their friendship that they could obtain the necessary contact information without being rejected. Further, interacting with friends outside of school meant that they could not rely on all of the same environmental factors to drive conversation; they required having a stronger sense of mutual understanding beyond the context of school for this to be a comfortable and positive experience. Ultimately, participants reported that connecting in this way outside of the context of school was another format by which they were able to build more intimate knowledge about each other.

**Supporting each other.** Now that participants had established a level of closeness in which they were able to be more relaxed being themselves, they were able to engage in the process of Supporting Each Other. This signifies a shift in the focus of engaging in interaction in friendships. Supporting Each Other reflects the process by which participants had become secure in their relationships and developed such a deep level of knowledge about their friends that they were able to transition the focus of their interactions away from establishing knowledge or security and towards helping their closest friends. Further, by Allowing Vulnerability and sharing
such a personal level of information about themselves, participants created the opportunity for their friends to be able to support them through difficult experiences.

When talking about their closest friendships, participants stressed the importance of “being there for each other” in different contexts. Participants described close friends providing emotional support such as making them feel better, calming them down, expressing empathy, and helping them to talk through emotional experiences:

“I think the most important thing about friendship is somebody that you can trust and be comfortable with…when times are serious and you’re really not having a good time, and you tell them, like you know, “I’m really not having a good time”, they’ll like, ya know, comfort me about it but like having somebody that you completely trust is so, so important”

Participants also expressed being able to rely on friends to back them up. Participants valued having friends they could turn to if they needed someone to validate or verify what they were saying, if they needed someone to take their side in an argument, or even help keep them safe in a fight. Finally, participants not only spoke about appreciating when friends provided them with this support, but they also conveyed that they felt it was important to engage in these same supportive behaviours for their friends. This is something they wanted to do for the people they felt closest to and cared the most about.

**Growing Apart.** *Growing Apart* is a stage of friendship development that acts in opposition to the stages of *Maintaining Friendship* and *Growing Closer.* This stage refers to the deterioration of familiarity that can result in loss of friendship. In this stage, *Building Familiarity* diminishes through two sub-processes: *Loss of Trust* (which runs in opposition to *Developing Trust and Intimacy*) and *Loss of Stability* (which runs in opposition to *Creating Stability*).

*Growing Apart* was acknowledged by participants as being a difficult but natural component of developing and navigating friendship. Participants spoke about *Making New Friends* as a process
that can both contribute to the deterioration of current friendships and help to recover from the experience of friendship loss.

**Loss of trust.** In the stage of *Growing Closer*, participants were engaged in the processes associated with *Developing Trust and Intimacy* so that they continued to develop closeness and security in their friendships. Opposing this process, *Loss of Trust* refers to the experiences in which the security of their relationship was threatened as the result of a breach in acceptance, understanding, or reliability. Participants acknowledged either their friends or themselves could be responsible for the behaviour that breaks trust. Friendship ending due to loss of trust was not a salient sentiment expressed by participants; however, when participants did have these experiences, it was primarily in the format of being deceived by someone they thought was a friend and had entrusted with personal information (e.g., having a friend spread gossip behind their back). Participants also expressed *Loss of Trust* due to conflict, which was often accompanied by their own inability to identify how to resolve the conflict or an unwillingness to engage in the actions necessary to resolve the conflict.

**Loss of stability.** Experiencing diminishing familiarity and *Growing Apart* as the result of *Loss of Stability* was a more salient sentiments expressed by participants. This is the process that runs in opposition to *Creating Stability* and refers to situations in which the degree of change within a friendship was so substantial that it could not be accommodated or in which participants were not able to engage in the processes necessary to manage change. Participants reported sometimes growing apart from friends when they moved away or changed schools, thus losing their ability to rely on external facilitators that supported the regular contact important for maintaining friendships. Participants also reported that their friends made new friends and no longer had time for them. Additionally, participants expressed that on some occasions they
perceived a change in their friend’s personality or interests, which created a rupture in mutual understanding or their sense of safety during early stages of friendship development. This was commonly but not always linked to their friends becoming part of a new friend group. For example, Julia describes how one of her friendships deteriorated after they transitioned to high school when her friend got caught up with a group of students who had a bad influence on her:

“I tried to be friends with her and even though there was some things that I didn’t like I tried to work through it…I mean I felt bad in a way, and I thought, I thought that she was a good person except for ‘till she started getting herself into drama and stuff…I tried to help her you know, tell her ‘stay out of it.’…Then she started getting herself into smoking and things, bad things. I just finally had enough and I told her we couldn’t be friends anymore.”

**Making new friends.** While participants expressed that it was difficult to grow apart from or lose a friend, they also recognized friendship loss as natural. Friendship loss was a common experience for most participants, and they appeared to retrospectively accept this experience with relative ease. Participants identified that as they grew apart from one friend, they had more time and energy to invest in new friendships. As such, when one friendship diminished, participants were able to re-engage at the beginning of friendship development to make new friends, or they were able to invest more time and energy into other existing friendships to further develop their level of closeness. It was through this process that participants were able to cope with the loss of friendship. The following excerpt from my interview with Daniel helps to illustrate this process:

[Daniel]: “…he was kind of like drifting into the shady kids, like…He wasn’t actually one of the shady kids himself but he was just like hanging out with them during recess and it was kind of confusing…He didn’t really have anything in common with them at all…”

[Interviewer]: “Gotcha. Um so when he was kind of moving towards the shady kids, spending more time with them, um did you find that difficult?”
[Daniel]: “Um, not really ‘cuz at that time like there was a lot of new people that I was starting to be friends with so I feel like they kinda like took his spot up.”

Summary of Results

The results of this study reveal a core problem in which participants were required to overcome their inclinations towards *Withdrawing and Avoiding* due to barriers which interfered with their ability to feel understood and accepted in their friendships (*Being Able to be Myself*). I viewed this core problem as being situated within the context of *Socialized Intolerance*, or the rigid expectations of normative and socially appropriate behaviour held by participants and their peers due to the environments in which they had been socialized. Participants navigated this problem by engaging in a core process of *Building Familiarity*, which supported the development of friendships by enhancing participants’ sense of security, reducing the likelihood of negative experiences, and allowing participants to feel comfortable engaging in the interactions necessary to form progressively deeper levels of connection with their friends.

The model is made up of four categories of *Building Familiarity* associated with four stages of friendship development. Each category is comprised of three sub-processes which represent how participants established meaning at each stage of friendship development, the interactions that supported the construction of this meaning, and the actions that were driven by this meaning and supported further development and maintenance of friendships.

In summary, when discussing their friendship experiences, participants clearly expressed the desire and ability to achieve friendships that were meaningful to them and which satisfied what they sought to achieve through this type of a relationship. When participants struggled with the development of friendship (e.g., not being able to make initial contact with peers, not being able to experience that click that establishes a friendship, not being able to maintain the
friendship, and not being able to grow closer), they both implicitly and explicitly linked these challenges to feelings of discomfort and concerns about rejection. I interpreted that tacit meaning of these descriptions to be reflective of how overwhelming and intimidating social interaction and relationship formation can be for adolescents with ASD due to the barriers related to their diagnosis and limited acceptance of non-normative social behaviour by themselves and others. 

*Building Familiarity* helped to reduce the degree of risk and discomfort associated with social interaction; as participants constructed meanings in their friendships they became better able to predict and understand the behaviours and intentions of the people with whom they were developing friendships. This allowed them to overcome barriers and move towards establishing friendship in which they were able to be accepted as themselves.
Chapter 7

Discussion

In this study, I set out to examine individual and interactive processes by which adolescents with ASD establish and navigate meaningful friendships. My analysis of the findings revealed a core social problem of needing to overcome barriers that encourage *Withdrawing and Avoiding*, and which interfere with *Being Able to Be Myself*. In other words, the results of this study suggest that adolescents with ASD must find ways to persist through barriers related to the social impacts of their ASD diagnosis in order to develop relationships in which they feel they are understood and accepted for who they are. Participants described navigating this problem by *Building Familiarity*, suggesting that adolescents with ASD engage in a set of processes that allow them to build a more stable mutual understanding between themselves and their peers, subsequently reducing their risk of rejection, and allowing them to increase vulnerability with their friends over time. The resulting grounded theory provides insight to the internal processes and meaning change adolescents with ASD experience in their pursuit of friendship. More so, this grounded theory builds upon the current body of literature by extending our understanding of friendships among youth with ASD beyond descriptive accounts of friendship experiences and comparisons to typically developing youth. The findings have implications for interventions and strategies that may be used when supporting adolescents with ASD in pursuing their friendship goals.

**Intimacy, Acceptance, and Friendship Quality**

Literature pertaining to the friendship experiences of adolescents with ASD has raised questions about differences in friendship quality and motivation towards friendships among this population. Frequently, ASD friendships are reported to be of lower quality in comparison to
their typically developing peers (Petrina et al., 2014) and there have also been reports of reduced social motivation among youth with ASD (Chevallier et al., 2012). In contrast, there have more recently been increasing reports from the perspective of youth with ASD that they desire and are able to establish satisfying friendships (Cage et al., 2016; Calder et al., 2012; Petrina et al., 2014). Results from the current study support the notion that adolescents with ASD both desire and are able to achieve meaningful friendships.

In particular, increasing intimacy has been identified as an important marker of adolescent friendships (i.e., Berndt, 1982; Bigelow, 1977; Bigelow & la Gaipa, 1975; Bukowski et al., 1987; Erwin, 1993; Kuruzovic, 2015; Sullivan, 1953). The findings of this study indicate adolescents with ASD are often able to achieve intimacy within many of their friendships, and that intimacy is an important component of meaningful and satisfying friendships within this population. The participants of this study spoke primarily about the importance of being understood and being accepted (Being Able to Be Myself) as central to the meaning and satisfaction they derive from their friendships. These findings strongly echo developmental theories of friendship which emphasize the combined importance of intimacy and validation of self-worth within friendships during this stage of development. Most notably, Sullivan (1953) proposed that adolescent development is marked by identity formation, and that close and intimate friendships support the development of identity through validation and reassurance of self-worth. Further, he proposed that this growing validation and acceptance encourages pursuit of further intimacy and closeness within friendships, driving forward friendship development. Likewise, in the current study, participants described a process of feeling more accepted and validated as they developed closer friendships, and in turn this acceptance encouraged them to develop deeper trust and intimacy within their friendships. Participants who struggled to achieve
this level of acceptance in their friendships were those who struggled to be vulnerable and take more risk, which was related to ongoing uncertainty about how their friends perceived them, and about how they perceived themselves.

In addition to referencing intimacy as an important component of their most meaningful friendships, participants also frequently spoke about the importance of a variety of other friendship qualities. Their descriptions of the qualities that characterized their friendships were highly consistent with friendship qualities that have been commonly described in the literature, including play, conflict, help, security, and closeness (e.g., Bigelow & la Gaipa, 1975; Bukowski et al., 1994; Parker & Asher, 1993). The focus of the current study was not to compare the friendship experiences of adolescents with ASD to their neurotypical peers, and thus no comment can be made to that effect. However, the reports from this study confirm that such qualities, which are important to neurotypical friendships, are also part of the ASD friendship experience. The results of this study help us to interpret these qualities as important insofar as they are part of the process of an individual with ASD coming to feel as though they are accepted for who they are in their friendships.

Taking together the data pertaining to friendship qualities, the current grounded theory extends our understanding of the literature by suggesting the importance of feeling accepted and valued for who you are over and above the presence of any particular friendship quality, or any circumscribed definition of what a friendship quality should look like. This may help to explain how adolescents with ASD appreciate and find meaning in friendships that are qualitatively different than those of their neurotypical peers, as has been proposed in the literature (e.g., Brownlow et al., 2015). This result has implications for how we might support the friendship experiences of individuals with ASD, such as directing more intervention focus towards how
individual adolescents with ASD can be supported in achieving a feeling of acceptance. The grounded theory presented in this dissertation provides some insight to factors that contribute to the development of feeling accepted, first and foremost by identifying the barriers to achieving this experience.

**Barriers to Friendship and the Role of Disability**

There is a large body of theoretical and experimental work that points to the importance of social skills and social cognitive abilities for developing friendships within the neurotypical adolescent population. There is also a large body of literature pertaining to the different abilities of individuals with ASD in these social domains and the negative impact of such social differences on friendship. Consistent with the existing literature on these topics, the participants in the current study discussed many examples of how social differences related to their disability were barriers to friendship development. There were numerous references made by participants to challenges associated with core diagnostic traits of ASD including difficulties with social-emotional reciprocity, nonverbal communication, and understanding relationships, as well as repetitive and restricted behaviours (APA, 2013). These difficulties were linked to challenges with identifying appropriate social cues, accurately interpreting social cues, identifying appropriate social responses, and being able to carry out the required social response in a given situation. Reports of these types of social difficulties are consistent with the social information processing model put forth by Crick and Dodge (1994) which explains how difficulties with either social cognition or social skill can cause a breakdown in social-information processing and lead to unsuccessful social interactions.

Importantly, the findings of the current study not only echo and reinforce the knowledge that differences in social skill and social cognitive ability interfere with one’s success in social
interactions, but further, the proposed grounded theory deepens our understanding of the
processes by which factors related to the ASD diagnosis can interfere with friendship
development. Specifically, the study findings suggest that repeated experiences of unsuccessful
social interaction could negatively impact how study participants viewed themselves, especially
with respect to their social competency and social desirability. Subsequently, these self-views
diminished their comfort and willingness towards future social interaction attempts
*(Withdrawning and Avoiding)*. This finding is aligned with the research on friendships among
neurotypical youth. Dweck (1981) summarizes a body of literature which concludes that
psychological factors such as learned helplessness and self-perceptions of social competency
have a significant impact on social withdrawal and isolation above and beyond the impact of
social skill difficulties. In particular, Dweck (1981) highlights how some youth, regardless of
their social skill (but especially those who experience social rejection due to social skill
difficulties), come to view themselves as having poor social competency, do not believe they can
improve their social situation, and subsequently become isolated because they fear further social
rejection.

**Disability as a barrier.** In the current study, socialized intolerance is described to
exacerbate how adolescents with ASD experience barriers to pursuing friendship. It is important
to give consideration of how academic and medical conceptualizations of ASD as a disability
have impacted views of ASD within the social-cultural contexts in which individuals with ASD
live. The deficit framework characterizes the social behaviours and preferences of individuals
with ASD as abnormal (Finke et al., 2019). As such, these preferences and behaviours are
frequently treated with intolerance and viewed as something to be fixed, rather than being
approached with acceptance and accommodation. The reports collected from study participants
provided many examples of internalized shame. As participants spoke about being “weird” or “strange” and being hesitant to disclose diagnostic information to their peers, it was apparent this shame was associated with recognition of their social behaviour differences and with perceived experiences of social rejection. These experiences further contributed to Withdrawal and Avoidance. Furthermore, in their pursuit of Being Able to Be Myself, the study participants first had to take on the burden of finding their own ways to accommodate for social differences until they developed friendships in which they could be more vulnerable. There was a tacit experience expressed by participants that they did not expect to be automatically accepted by their peers, and that they did not often experience acceptance of their differences without careful selection of friends and hard work to build mutual understanding.

Similar to the current study, other qualitative research has also pointed to the impact of neurotypical social expectations and intolerance on the friendship experiences of individuals with ASD. Through interviews with adults with ASD, Crompton and colleagues (2020) illustrated how participants had awareness of their minority status within a neurotypical society and experienced feelings of inadequacy and shame when adapting to neurotypical ways of socializing. Further, Humphrey and Lewis (2008) found that adolescents with ASD were impacted by their neurotypical peers at school such that they viewed their differences from their peers negatively, and experienced negative self-image related to their desire to fit in.

Notably, the methodology and purpose of the current study were not rooted within a critical paradigm and as such this study did not aim to provide an in-depth examination of the power structures, such as neurotypical societal expectations, that shape the ASD experience of friendship. Rather, sensitizing concepts from critical disability theory and the neurodiversity
movement became relevant to the data analysis as themes emerged and they became helpful for providing context to the tension within the core problem of this grounded theory.

**Building Familiarity: A Taken-for-Granted Ability**

The results of this study identify *Building Familiarity* as the core process by which adolescents with ASD overcome the barriers discussed above so that they might develop friendships that are meaningful to them. Through this process of *Building Familiarity*, adolescents with ASD establish a foundational understanding of their peers which they then develop and refine as they spend more time together and acquire more information. This process provides adolescents with ASD with a reliable understanding of who their friends are, what their friends expect from them, and how their friends are likely to respond to them. This is knowledge that may not come easily or naturally to individuals with ASD and must be developed over time and through experience.

This core process of *Building Familiarity* echoes what is described among foundational theoretical work on friendship. Notably, Erwin (1993) proposes a model in which the interpersonal cognitive system serves as a guide to integrate information from social interactions and inform future interactions. During adolescence, this system becomes more organized and integrated, such that it can incorporate increasingly complex and discrepant information derived from social interactions, and apply this integrated information to future interactions. This process of information integration enhances one’s ability to make more reliable and multidimensional interpretations of their interactions, themselves and their friends, similar to how the process of *Building Familiarity* is described to support appraisals of social interaction, peers, and oneself in the current study.
The core process of *Building Familiarity* described in the current study, is consistent with what is described in the literature on neurotypical adolescent friendships and resonates with my own insights and reflections of the processes that might occur in neurotypical adolescent friendship. As such, the findings of the current study would suggest that in many ways the processes involved in developing friendship for adolescents with ASD do not especially diverge from the processes neurotypical adolescents engage in. From this perspective, the findings of this study are a helpful reminder that youth with ASD are navigating adolescence, just as their neurotypical peers are, and that we must not lose sight of the holistic picture of these complex experiences by becoming hyper-focused on their disability status.

However, also apparent in the study findings is the tacit understanding that engaging in these processes associated with *Building Familiarity* is laborious for youth with ASD and must be approached with purpose and intent. Examples of the challenges faced by the study participants when engaging in processes of *Building Familiarity* are apparent starting from early stages of friendship development when they describe the purposeful hypervigilance used when observing unfamiliar peers, and continuing to more advanced stages of friendship when they described pushing themselves out of their comfort zone to spend time with friends outside of school. In considering examples such as these, there is a recognition that adolescents with ASD continue to experience difficulty and discomfort engaging in the rules and behaviours of social interaction that are taken-for-granted and become natural for neurotypical youth. This notion of taken-for-granted abilities, especially within the realm of social competencies, is well documented in disability literature (O’Dell et al., 2016). Ryan and Raisanen (2008) posit that difficulties experienced by individuals with ASD in establishing taken-for-granted knowledge and abilities contribute to the concern with which they then navigate social interaction and life in
general. From this perspective, the current findings make an important contribution to the literature by drawing attention to the processes involved in developing and navigating friendship that are taken-for-granted from a neurotypical lens and that may be associated with significant effort and anxiety for adolescents with ASD.

**Supporting Factors: Methods of Interaction and External Facilitators**

The core process of *Building Familiarity* highlights the importance of building a base of knowledge that can be used to promote interpretation of social interaction and guide future interaction. The results of the current study draw attention to several factors, categorized as *Methods of Interaction* (i.e., fun activities and talking) and *External Facilitators* (i.e., time, location, and other people), which influence the sub-processes involved in *Building Familiarity*. Importantly, many of these factors have also been repeatedly referenced as having relevance to friendship development within the existing body of literature describing neurotypical and ASD friendships. The current study enhances our understanding of the function these factors serve within processes of friendship development, and it provides deeper understanding of how these factors can be harnessed to support adolescents with ASD in the development of their friendships.

**Meeting peers and Establishing Safety.** The results of the current study suggest that during initial stages of friendship development, when adolescents with ASD are first meeting their peers, they are primarily engaged in a process of *Establishing Safety*. The descriptions provided by study participants indicated that risk was perceived as high and the influence of barriers was strong at this stage. When *Establishing Safety* there is little active interaction outside of observing peers, and when interaction occurs it is primarily through very structured activity. Participants also described being highly reliant on external facilitators. The school environment,
and other people, such as mutual friends, parents, and teachers, played a critical role bringing participants together with their peers.

Similar descriptions of the initial meeting phase of friendship for adolescents with ASD are found throughout the literature. Difficulties initiating contact with peers has been identified as one of the most challenging aspects of friendship development and one of the greatest barriers to eventually being able to make friends (Daniel & Billingsley, 2010). O’Hagan and Hebron (2017) reported on semi-structured interviews with adolescents with ASD, their teachers, and their parents, which highlighted the importance of structured activities (such as computer game play), reliance on parent support, and the school environment, as important components to bringing adolescents with ASD together with their peers and providing structure that eased early interactions. Further, Ryan and colleagues (2020) conducted a focus group with adolescents with ASD, the result of which emphasized the high level of fear of judgement when first meeting new people which acted as a barrier to making friends. Their study also emphasized the school context as being critical in this early stage of friendship for creating repeated opportunities for coming into contact with peers. The results of the current study are consistent with the literature and enhance our understanding of the process by which these external facilitators support the initial meeting of friends.

**Becoming friends and Connecting over Mutual Understanding.** The results of the current study suggest that adolescents with ASD are engaged in a process of *Connecting over Mutual Understanding* when becoming friends. The reports provided by participants indicated a transition from a passive stance, in which they primarily observed their peers, to more active methods of interaction. Active interaction was a critical component of “clicking,” or recognizing mutual connection and thus becoming friends. Among a breadth of commonalities reported by
participants to have helped them establish mutual understanding, shared interests emerged as a particularly important aspect of interactions that drove this clicking experience. Participants reported that shared interests helped them to feel more comfortable interacting with their peers, and that these interests provided structure and common ground to guide play and conversation.

Shared interests, along with other commonalities, repeatedly emerge as an important component of adolescent friendships in the neurotypical literature (Berndt, 1982; Bigelow & la Gaipa, 1975). Among adolescents with ASD, Bauminger and Shulman (2003) conducted interviews with mothers about the friendships of their children and identified shared interests as being one of five core factors perceived to be critical to the formation of friendship. Interviews with adolescents themselves have identified shared interests as an important factor for helping adolescents with ASD relate to their peers (Kelly et al., 2018; Myles et al., 2019). Based on the abundance of reports highlighting the importance of shared interests to adolescent friendships, Finke (2016) has written about the importance of integrating shared interests into social interventions for youth with ASD as a critical component of supporting the generalization of social skills to real-life friendship-making abilities.

**Maintaining friends and Creating Stability.** The results of the current study suggest that once friendships have been established, adolescents with ASD become engaged in a process of Creating Stability as they work to maintain friendships over time. During the process of Creating Stability, location and time are two facilitating factors that play an especially important role in preventing disruption of the friendship and in continuing to build comfort and familiarity. The reports provided by study participants stressed the importance of regular contact and keeping in touch with their friends in order to preserve their knowledge of each other. They noted that the school environment was central to promoting consistent contact, but also that they might have to
make more effort to stay in regular contact with their friends, such as using social media and electronic communication. Additionally, participants commonly described their most secure friendships as the ones which had lasted the longest.

Similar themes to those identified in this study are also found within the broader literature when discussing the maintenance of ASD friendships. In particular, Creswell (2019) completed a review of the qualitative literature specific to adolescents with ASD. The results of this review indicated consistent findings that the school environment was reported by youth with ASD not only to be important for bringing them into contact with their peers, but also for maintaining friendships. School was seen as an environment in which they could be in consistent contact with their peers. The literature also acknowledges the importance of consistent contact beyond the school environment for maintaining friendship. For example, Ryan et al (2020) reported that adolescents with ASD identified consistent contact as an important component of maintaining friendships, and that school was a helpful context for this, but also that they experienced the dissolution of friendship stability due to difficulties using text-messaging as a method to stay in contact when not in school. In line with this report, Finke (2016) has emphasized the importance of non-traditional social skills, such as using forms of electronic communication, for supporting generalization of interventions to meaningful real-life friendship gains.

**Becoming closer and Building Trust and Intimacy.** In the final stage of friendship development in which friendships are becoming closer, the results of this study suggest adolescents with ASD are engaged in a process of *Building Trust and Intimacy*. This process is required to develop friendships in which adolescents feel understood and accepted for who they are. At this stage, security in the relationship is high, the impact of barriers has been substantially reduced, and participants are able to enact more agency in their friendships by engaging in
behaviours that would have previously felt much too uncomfortable and risky. Once again, location plays a central role in facilitating the progression of friendship development. In particular, participants spoke about expanding their interactions with friends outside of the school context (or other highly structured contexts), such as by going to each other’s homes or to the mall. By pushing themselves to engage with their friends in new environments, the participants reported having opportunities to learn new, more intimate details about their friends. This exposure also encouraged participants to share more with friends and to rely on friends for support.

This phenomenon of extending friendship interactions outside of the structured school environment is echoed in the literature on neurotypical friendship. For example, Hirsch and Dubois (1989) reported on friendship ecology and the importance of social interaction outside of school, and away from adult supervision, for adolescent friendship development. They reported that spending time together outside of school was a critical factor contributing to the development of closer and more intimate friendships. Importantly, difficulties with social participation outside of school are well-documented among disability populations, including for adolescents with ASD (Kuo et al., 2011; Orsmond et al., 2013; Taheri et al., 2016). The results of the current study provide support for the benefits that can be gleaned when adolescents with ASD become comfortable enough in their friendships to engage in interactions outside of school. Reducing barriers interfering with opportunities for contact outside of school may be an important target for support in situations where adolescents with ASD are struggling to develop more intimacy in their established friendships.
Implications of the Research

Transferability. As discussed above, the theory that has emerged from this study is consistent in many ways to what is discussed in the literature about neurotypical adolescent friendships. While the specific processes outlined in the theory may not be relevant to all adolescents, some ideas and elements of this theory are likely to be transferable to other groups of adolescents. For example, the process I have proposed by which barriers interfere in the development of friendships – that is the process of withdrawing from and avoiding social interaction - is likely to at least be somewhat transferable to other adolescents who also experience similar barriers, including differences in social skills, social cognition, and the ability to regulate behaviours. In particular, this theory may be relevant to adolescents with other neurodevelopmental diagnoses that impact social abilities, such as intellectual disability or non-verbal learning disorder. This may especially be true when considering that this grounded theory is situated within the context of socialized intolerance towards non-neurotypical social behaviour. On the other hand, it is important not to assume this theory will be transferable to all neurodiverse populations, nor to all people with ASD, such as those of different ages or those who may experience a higher level of symptomatology and subsequently may be more significantly impacted by their diagnosis.

Additionally, the current grounded theory may be transferable to other clinical populations. Notably, the core process of Building Familiarity is similar in nature to the concept of increasing predictability in social situations. Further, the sequential engagement in subprocesses that gradually increase comfort with taking greater social risks described in the current study is similar to what might occur in gradual exposures for facing social anxiety. As such, I propose that the concepts presented in this grounded theory may be partly transferable to
adolescents diagnosed with social anxiety, who have also been reported to struggle to develop friendships as a result of perceived risk of rejection and subsequent social avoidance (Vernberg et al., 1992).

**Implications for clinical practice.** The findings of the current study have important implications with respect to clinical intervention for supporting friendship development, including implication for the targets of social interventions, the modalities of intervention, and the structure of interventions. Largely, empirically-tested social interventions for adolescents with ASD have been in the format of psychoeducational groups focused on building knowledge of social skills, and sometimes also social cognitive abilities required for meeting peers, reducing peer rejection, and making or maintaining friendships (Gates et al., 2017; Laugeson et al., 2012). These types of social skill interventions likely have an important place in supporting youth with ASD in friendship development; they have been shown to be effective in building knowledge of discrete social skills, without which the development of friendship would be very difficult. However, it is also important to note evidence indicating that existing social skill interventions have not reliably resulted in benefits to establishing and maintaining friendships among youth with ASD (Finke, 2016; Gates et al., 2017). Notably, traditional social skills interventions may aid in the development of skills to promote peer acceptance or meeting potential friends, but they may not extend to the skills required to establish and maintain friendships. As Asher and his colleagues (1996) have pointed out, there are important distinctions between friendship making and friendship keeping, as well as between promoting peer acceptance and promoting friendship development, which likely have relevance to the success of interventions.

The results of the current study provide support for this view by highlighting that different stages of friendship development are characterized by distinct processes that drive
forward the development of friendship. As such, the current study helps us to consider different
targets for social intervention that contribute specifically to friendship development. Further, the
current study points to the importance of individualized social interventions that can target
specific areas of challenge an individual with ASD might be facing. For example, the current
study suggests that adolescents with ASD who are experiencing particular difficulty with
meeting peers are likely going to require support from external factors that can help them
overcome the strong drive toward withdrawing and encourage them into contact with their peers.
Alternately, adolescents with ASD who have friends, but are struggling to achieve greater
intimacy in their friendships, may need support building skills for and engaging in behaviours
that promote connecting with their peers outside of the school environment. The need for this
type of targeted and individualized social intervention has been echoed by many others (e.g.,
Bagwell & Schmidt, 2011; Finke, 2016).

The current study also lends itself to considering alternative modalities of intervention for
supporting the development of friendships. A range of social skill modalities have been
developed and empirically tested for youth with ASD (Bellini & Peters, 2008); however, one
modality that is less frequently discussed in the literature is the use of traditional psychotherapy
approaches for supporting friendship development in this population. The current theory
highlights the importance of many psychologically-based factors to the process of friendship
development, such as fear of rejection, self-perceptions of social competency and social
desirability, and desire to be accepted. As such, the findings of this study would suggest that
there might be a larger role for psychotherapy, such as Cognitive Behaviour Therapy (CBT) or
Acceptance and Commitment Therapy (ACT) modalities, as a supplement to traditional social
skill interventions. This modality of intervention could have a place in supporting youth with
ASD to overcome fears, challenge unhelpful thinking patterns, develop confidence, and reinforce motivation towards important values, such as developing meaningful friendships. Notably, there is support from literature with neurotypical youth for this type of intervention in supporting the development of intimacy in friendships (Shechtman et al., 2002).

Finally, the current study also has implications for the structure of social interventions for youth with ASD. Notably, the current theory highlights the importance of time and location to friendship development. Specifically, the findings explicate the role of these factors in providing opportunities for consistent and ongoing contact with peers and friends, which subsequently drives forward the building of familiarity. As such, it is likely to be important to incorporate methods for encouraging consistent contact into social interventions addressing friendship development. Furthermore, the current theory, which is situated within the context of socialized intolerance, helps to explain how difficulties with meeting neurotypical expectations of social behaviour exacerbate the experience of barriers to friendship development, drive feelings of rejection, and perpetuate negative self-views of social competency and desirability. As such, the current research suggests that it would be worthwhile to consider strategies for reducing the impact of this context when developing and implementing social interventions. In other words, the structure of social interventions should create an environment in which the social differences of adolescents with ASD are accepted and accommodated, and in which there is reduced pressure to behave in ways that are uncomfortable and burdensome. Similarly, Finke (2016) has made an argument for the need to develop interventions that create equal status among social partners, that bring social partners together frequently, that allow for authentic interaction, and that are more naturalistic in setting. Such a structure to intervention might include more emphasis on social groups, rather than social skills groups, in which youth with ASD are
supported by group facilitators to engage in natural social activities and provided with opportunities to debrief and learn from their interactions.

**Summary of clinical implications.** Taking together the recommendations for clinical practice derived from the current research and supported by the existing literature as discussed above, it is possible to propose a tentative framework for a social intervention group that would support friendship development in youth with ASD. Such a framework can provide guidance for how social groups might take into account general support needs for building familiarity (e.g., accounting for different methods of interaction and external facilitators), and specific support needs at each stage of friendship development, as well as the value youth with ASD place on intimacy and acceptance, and the role of disability as a barrier to friendship.

First and foremost, such an intervention would best be run as a large (e.g., 15 participants) group intervention to allow for in-session interaction opportunities that might encourage friendship development among participating group members. The aim of such a group would be designed not as a social skills intervention group, but rather as a social group where youth with ASD have the opportunity to practice social interaction and build friendships in a safe, inclusive, consistent, and somewhat structured setting. Such a context might promote transferability of skills or the willingness to attempt more social interactions outside the group.

The current theory proposes building familiarity as a core process by which participants develop friendship, which is supported by certain external facilitators and methods of interaction. Any social group should consider such factors to promote engagement in the process of building familiarity. Specifically, to facilitate ongoing, continuous relationships between group members, I would propose that such a social group should be run for a longer duration than typical intervention groups (e.g., through the entire school year), and that group members be allowed to
re-register each year. Furthermore, initially holding group sessions in one central and familiar location would promote regular contact with peers in a predictable environment. Eventually, group sessions could integrate trips into the community to promote more flexible and naturalistic opportunities for interaction and to allow group members to practice extending social experiences outside of contrived contexts, which is critical for maintaining friendships and growing closer in relationships. To further support building familiarity and promote processes of meaning making, the role of clinical facilitators may be less focused on direct skill teaching, and instead aimed at providing clear structure and direction during group activities to enhance predictability and promote interaction. Further, clinical facilitators might use prompts or direct one-on-one conversation to identify and address barriers to interaction in order to encourage withdrawn group members to attempt interaction. Clinical facilitators may also provide positive reinforcements for social interaction attempts to enhance group member confidence for social interaction. Finally, clinical facilitators could model social behaviour and provide guidance for how and when to take “next steps” in social interaction (e.g., through observing group interactions, clinical facilitators might identify common interests that could help group members connect, or they might identify when group members might benefit from exchanging phone numbers and they could guide this process). The role of clinical facilitators would ideally be more active in early sessions, and it would become more passive over time as group members become more familiar with each other.

The current grounded theory also provides support for integrating many different methods of interaction into social interventions as another strategy for promoting the building of familiarity. Specifically, it would be important to consider how social groups could integrate structured group activity, as well as unstructured free time, including both play-based activities.
and talk-focused activities. For example, a two-hour session might start with a structured activity
to encourage interaction and knowledge building between group members. Meanwhile, the
second half of sessions might offer a range of activities (e.g., interactive videogames, board
games, art station, baking station, sports station) from which participants could freely select to
participate in based on their interests. Such a structure would allow group members to gravitate
towards natural activities of interest and engage in these activities with others who also share that
interest. Participants might also be encouraged to propose activities they would like to
incorporate into free time so to include unique or specific interests.

To support progression of meaning making as familiarity and comfort grows between
group members, group sessions might address different targets throughout the course of the
group. Early sessions might focus on establishing a group culture, such as developing group
values, goals, and rules through conversation and activities. The aim of such sessions would be
to diminish barriers related to disability and create a culture of acceptance and equality among
group members. Other structured activities during early sessions may be directed towards
building foundational knowledge of each other and connecting over common interests. Later
sessions might include activities that are more strongly talk-based, as participants become more
comfortable with each other and ready for more personal sharing. Such activities might
encourage reflecting on friendship experiences, self-perceptions, building confidence, and
addressing unhelpful thinking patterns as they relate to friendship. Exploration of such topics
using a CBT or ACT orientation would not only provide opportunity for youth with ASD to
address cognitive-emotional barriers in their friendship experiences, but also it would provide an
opportunity for vulnerable sharing among group members that would promote growing closer
within the group.
Of course, the proposal of this intervention framework is speculative. While informed by the findings of the current study, and supported by my own clinical experiences with social groups offered across different settings, such a framework requires further development and empirical validation. Nonetheless, such a proposal provides an illustration of the type of intervention that might be developed using the knowledge generated from the grounded theory presented in this work.

**Implications for education.** The current study emphasizes the role of school in friendship development. School was identified as the primary environment that brought adolescents with ASD together with their peers, school was identified to support consistent contact between peers, and school was identified to provide structure to peer interactions. In recognizing that the primary setting of friendships for adolescents with ASD is the school environment, it is important to consider the implications of this research for schools and educators.

By identifying the impact of intolerance on friendship development, and by explicating *Building Familiarity* as the core process driving friendship development, the current study provides helpful insights about how friendship development may be supported in school. Notably, as discussed above, the current study highlights the role of socialized intolerance in exacerbating the experience of barriers to friendship development; when youth with ASD experience rejection due to difficulties meeting neurotypical expectations of social behaviour, this rejection contributes to further perceived social incompetency and withdrawal from social interaction. Additionally, intolerance of the social differences associated with the ASD diagnosis can contribute to a power imbalance between youth with ASD and their neurotypical peers. Such a power imbalance can be disruptive to friendship, which tends to be an egalitarian relationship.
by nature. Furthermore, the core process of *Building Familiarity*, not only points to the importa
importance of adolescents with ASD developing a knowledge of their peers to help them interpret behaviour and interact, but also the importance of peers developing knowledge of the adolescent with ASD so to enhance their ability to understand and interpret the behaviour of their friend with ASD.

In light of these findings, it may be argued that schools can play an important role in reducing experiences of intolerance and increasing mutual understanding between adolescents with ASD and their peers. There is evidence in the literature that increasing contact between individuals with disability (such as ASD) and individuals without disability improves attitudes towards people with disability and decreases misconceptions of behaviour (Barr & Bracchitta, 2015). Carefully-designed opportunities within school settings that educate students about ASD and bring together students with and without a diagnosis of ASD may be used to build mutual respect and understanding. Combining educational experiences with concerted efforts to create repeated opportunities for structured and facilitated contact between students with ASD and their peers may have an important impact on friendship development for adolescents with ASD. In particular, school staff might consider the use of clubs and social groups in school to encourage such interaction. In offering this type of interactive opportunity, specific considerations might need to be taken to facilitate engagement from students with ASD, such as (a) structuring groups around topics that might be especially successful at garnering interest from both ASD and neurotypical students (e.g., videogame club, robotics club, anime club), (b) encouraging educators to take a stronger lead in initiating and coordinating groups rather than relying on the initiative of students with ASD, and (c) considering how school staff might actively encourage students to participate and reduce barriers to participation.
Limitations

It is important to recognize that the research I have presented in this dissertation is not without limitations. Firstly, I designed the present study with the aim of using a psychological perspective to examine individual and interactive processes contributing to friendship development. In doing so, it was important to capture the perspective of adolescents with ASD about their own experiences. As such, throughout the progression of the research, I made a conscious decision only to include the perspectives of adolescents with ASD and not to conduct interviews with other informants, such as parents. While this decision is defensible with respect to its methodological coherence with the aims of the study, this limited the amount of insight obtained about external factors impacting friendship, such as parent support. External factors likely have a substantial impact on the development of friendships for youth with ASD, as has been suggested in the literature; however, adolescents with ASD may not be so consciously aware of the full extent of how these factors influence their friendship experiences.

Another methodological limitation of the current study is related to researcher bias. Given that this research was completed as my doctoral dissertation, I was the sole researcher and I completed the data collection, analysis, and interpretation largely independently. Of course, as outlined in Chapter 5 on rigor and reflexivity, I employed a range of strategies to both acknowledge and limit the impact of my bias on the theory development and to ensure transparency of my approach. In particular, I engaged in consultation with my supervisor, committee members, and other professionals with relevant experience to obtain outsider insights about the data. Further, in constructivist grounded theory, the researcher (and their past experience) is viewed as an interactive component of the knowledge construction (Charmaz, 2014). As such, it is permissible within this methodology that the perspectives of the researchers
become part of the theory development. Regardless, there is an argument for the benefits of completing grounded theory in collaboration with other researchers in order to account for a diversity of background experiences and perspective and lead to deeper insights about the data. In particular, it would have been preferable to conduct this research using a participatory action approach, in which individuals with ASD could have been involved in the research design, data collection and analysis, and completion of the final written work.

There are also two limitations of the current study specifically related to sampling. Firstly, the sample from which data was collected and upon which this theory was developed is notably limited in its ethnic and socioeconomic diversity. This is largely a direct result of the limited diversity within the communities from which participants were recruited. As such, the current findings may be limited in their ability to fully describe the friendship experiences where there is intersectionality between ASD and race, sexuality, cultural background, or socioeconomic status. This bias within the sample may limit transferability to more diverse ASD communities.

A second sampling limitation within the current study pertains to selection bias. When recruiting participants for this study, I made participants aware that this study would focus on friendship and would involve interviews about friendship experiences. Overall, the participants who agreed to participate in this study were largely cooperative and forthcoming in interviews, even when discussing friendship difficulties. While the participants in this study regularly spoke about the difficulties they had experienced with friendship, it is possible that their overall friendship experiences may be more positive than the general ASD experience. Individuals with ASD who, despite having meaningful friendships, have had more tumultuous and painful experiences in the development of their friendships may have self-selected out of this study in an
attempt to avoid discussing such a difficult topic. Alternately, it is also possible that parents of participants who have had particularly difficult friendship experiences may have protected them from participation in this study. Furthermore, this strategy might have failed to include adolescents who have limited interest in friendship, resulting in a sample of participants who might be more greatly socially motivated than the general ASD population.

**Future Directions in Research**

The findings from this study and their implications point to a number of important directions for further research with respect to the friendship experiences of adolescents with ASD. First and foremost, the substantive theory presented in this research was developed through the inductive approach of collecting individual participant data and integrating that data into a transferable theory of a social process. The resulting theory now lends itself to the development of hypotheses that can be tested through a deductive approach. In particular, the results of the current study suggest that concepts related to self-perceptions may play an important role in the friendship experiences of youth with ASD above and beyond the impact of differences in social skill and social cognitive abilities. While the relation between friendship and self-perception (and related concepts) has been studied among neurotypical friendships (e.g., Dweck, 1981, Gifford-Smith & Brownell, 2013), it has been largely unstudied among youth with ASD (McCuailey et al., 2019). More research exploring different mediators (such as self-perceptions of social abilities) of the relation between friendship and social skills or social cognition would lend itself to better understanding potential targets for intervention.

Another research barrier to our understanding of friendship experiences of individuals with ASD is the lack of measures or methods that are designed for use specifically with this population. Currently, most research exploring the friendship experiences of individuals with
ASD rely on measures and methods that have been designed from what we know about neurotypical behaviour. For example, measures of friendship quality are developed from neurotypical descriptions of what constitutes a high-quality friendship, and they make use of neurotypical definitions of what behaviours constitute a specific friendship quality. Further, observational methods typically focus on the presence or absence of specific behaviours that are considered to be demonstrations of good quality social behaviour from a neurotypical lens. This type of method may fail to recognize or appreciate the meaning of behaviours performed by individuals with ASD that are intended to convey social information, but which do not abide by neurotypical expectation. While the current tools for studying friendship have been useful in providing insight into how individuals with ASD differ from neurotypical expectations, they have also biased the body of literature in such a way that neurotypical perspectives and values are prioritized above the perspectives and values of individuals with ASD. There is a need for generating knowledge about ASD from methods that are reflective of their perspectives.

The current study may provide some direction regarding the development of methods that are grounded in ASD experiences. In particular, the category Being Able to be Myself is presented in the current study as a conceptualization of how adolescents with ASD described friendships that are meaningful and satisfying to them. Being Able to be Myself was described to include experiences of feeling comfortable in friendships, feeling understood, and feeling as though friends are respectful, non-judgmental, and accepting. Future research could further explore this concept and related constructs of comfort/discomfort, understanding, respect, judgement, and acceptance in relation to friendship satisfaction among adolescents with ASD. These concepts may be useful in developing a measure that could more accurately describe the
experience of high-quality friendships among adolescents with ASD and to capture more meaningful outcomes within intervention research.

Further, the substantive theory presented in this dissertation proposes a framework of processes that are important to driving forward the development and navigation of friendships among adolescents with ASD. The proposed set of processes may lend themselves to developing an evaluative model or questionnaire that can aid in assessing and identifying the areas of the friendship building process in which an adolescent with ASD might be having trouble. Developing assessment tools based on the processes of friendship development, rather than the qualities of friendship, may be particularly helpful in identifying appropriate targets for support, as has been proposed in the literature (Bagwell & Schmidt, 2011).

Finally, it is important to reiterate that the current study was designed to focus on the individual and interactive processes involved in developing and navigating friendships from the perspectives of adolescents with ASD. That said, there are other factors that also have an influence on the ability of youth with ASD to establish, maintain, and deepen their friendships. The current study has recognized some of these other factors, such as the impact of friendship ecology, parent support, and power dynamics. Future studies might consider employing different methodologies to explore how these factors influence friendship development and how they might be considered when developing interventions. For example, critical inquiry could be used to more thoroughly explore the power structures that impact friendship experiences of adolescents with ASD. Alternatively, an ethnographic approach could be used to further explore micro- or macro-level environmental and cultural factors impacting the friendship experiences of youth with ASD. This type of approach may be especially important for exploring the culture of friendship within the school environment.
Conclusion

Individuals with ASD experience substantial difficulties developing and navigating social relationships as a result of the impact of their diagnosis on social skills, social cognition, and engagement in repetitive and restricted behaviours or interests (Bauminger et al., 2003, 2008). The impact of these social difficulties on friendship may be especially important during adolescence when friendships become more complex and the demands on social skills increase (Berndt, 1982). Predictably, adolescents with ASD are reported to have fewer friends, to have poorer friendship quality, and to have increased loneliness in comparison to their neurotypical peers (Petrina et al., 2014). Notably, despite these reports, individuals with ASD report experiencing satisfaction in their friendships (Cage et al., 2016; Calder et al., 2012; Petrina et al., 2014). This discrepancy between indicators of poor friendship quality and high friendship satisfaction contributes to a growing recognition of the need to include the perspectives of individuals with ASD in the body of knowledge we generate about their experience. This is especially true for understanding subjective experiences, such as friendship development, as well as for developing and implementing interventions that will be effective and meaningful.

The current study presents a substantive theory of the individual and interactive processes by which adolescents with ASD navigate and develop friendships that are meaningful to them. The findings suggest that, in the pursuit of friendship, adolescents with ASD must shift away from tendencies to withdraw from or avoid social interaction and take steps towards becoming increasingly vulnerable with their friends. They do so by Building Familiarity, or by engaging in a set of processes that allow them to develop mutual understanding with their friends and drive forward social interaction. This theory helps to provide clarity about how adolescents with ASD establish meaning in their friendships; engaging in processes of building familiarity allow
adolescents to engage in intimacy and vulnerability within their friendships that result in experiences of being accepted for who they are. This study also helps to highlight how barriers related to their diagnosis and exacerbated by a culture of socialized intolerance impact negative self-views of adolescents with ASD and contribute to avoidance of social action. Further, these findings extend our understanding of factors important to the friendship experiences among adolescents with ASD, such as time, location, and methods of interaction, by explicating the process by which these factors support friendship development.

The findings of this study have important clinical implications with respect to identifying various targets for intervention, indicating different modalities of intervention that may be used to support social skills training, and suggesting alternative methods of structuring intervention. Further, the study findings have implications for educational settings by identifying school as the primary setting in which adolescents with ASD establish friendships and by providing insight to how schools can support adolescents with ASD in their pursuit of friendship. Finally, the grounded theory presented in this study provides direction for new lines of inquiry. This research has generated hypotheses about factors that mediate the relation of social skills and social cognition with friendship outcomes, and this research has provided direction for the development of new methods and measures for evaluating friendship outcomes and identifying individualized intervention needs. The current research, as well as ongoing research about the friendship experiences of adolescents with ASD, is important in light of the expressed desire of youth with ASD to achieve meaningful friendships in spite of the social barriers they face, and in light of the large body of research indicating the benefits that friendship presents to development and wellbeing.
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Appendix A
Research Ethics Board Clearance

QUEEN’S UNIVERSITY HEALTH SCIENCES & AFFILIATED TEACHING HOSPITALS
RESEARCH ETHICS BOARD (HSREB)

HSREB Initial Ethics Clearance

September 19, 2016

Ms. Layla Hall
Department of Psychology
Queens University

ROMEO/TRAQ: #6019105
Department Code: PNYC-185-16
Study Title: This is what Friendship is to Me: A Grounded Theory of How Adolescents with
Autism Spectrum Disorder Experience and Develop Friendships
Co-Investigators: Dr. E. Kelley
Review Type: Delegated
Date Ethics Clearance Issued: September 19, 2016
Ethics Clearance Expiry Date: September 19, 2017

Dear Ms. Hall,

The Queen’s University Health Sciences & Affiliated Teaching Hospitals Research Ethics Board
(HSREB) has reviewed the application and granted ethics clearance for the documents listed below.
Ethics clearance is granted until the expiration date noted above.

- Protocol – August 2016
- Interview Protocol – v. 2016 August 02
- Recruitment Email – v. 2016 Sept. 14
- Recruitment Calling Script – v. 2016 August 02
- Recruitment Poster
- History and Demographics Questionnaire – 2016September14
- Debriefing Form – 2016September14
- Assent Form - v.2016Sept14
- Extended Assent Form – v.2016September 14
- Consent to Share Information - v.2016September14

Documents Acknowledged:

- Letter re: PhD Thesis Committee Review/Approval
- CORE Certificate – L. Hall

Amendments: No deviations from, or changes to the protocol should be initiated without prior written
clearance of an appropriate amendment from the HSREB, except when necessary to eliminate immediate hazard(s) to study participants or when the change(s) involves only administrative or logistical aspects of the trial.

Renewals: Prior to the expiration of your ethics clearance you will be reminded to submit your renewal report through ROMEO. Any lapses in ethical clearance will be documented on the renewal form.

Completion/Termination: The HSREB must be notified of the completion or termination of this study through the completion of a renewal report in ROMEO.

Reporting of Serious Adverse Events: Any unexpected serious adverse event occurring locally must be reported within 2 working days or earlier if required by the study sponsor. All other serious adverse events must be reported within 15 days after becoming aware of the information.

Reporting of Complaints: Any complaints made by participants or persons acting on behalf of participants must be reported to the Research Ethics Board within 7 days of becoming aware of the complaint. Note: All documents supplied to participants must have the contact information for the Research Ethics Board.

Investigators please note that if your trial is registered by the sponsor, you must take responsibility to ensure that the registration information is accurate and complete.

Yours sincerely,

A. J. Clark.
Chair, Health Sciences Research Ethics Board

The HSREB operates in compliance with, and is constituted in accordance with, the requirements of the TriCouncil Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonisation Good Clinical Practice Consolidated Guideline (ICH GCP); Part C, Division 3 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 3 of the Medical Devices Regulations; Canadian General Standards Board, and the provisions of the Ontario Personal Health Information Protection Act (PHIPA 2004) and its applicable regulations. The HSREB is qualified through the CTO REB Qualification Program and is registered with the U.S. Department of Health and Human Services (DHHS) Office for Human Research Protection (OHRP).

Federalwide Assurance Number: FWA#: 00004184, IRB#: 00001173

HSREB members involved in the research project do not participate in the review, discussion or decision.
Appendix B

Research Ethics Board Amendment Approval

QUEEN'S UNIVERSITY HEALTH SCIENCES & AFFILIATED TEACHING HOSPITALS
RESEARCH ETHICS BOARD (HSREB)

HSREB Amendment Acknowledgment Ethics Clearance

December 08, 2016

Ms. Layla Hall
Department of Psychology
Queen's University

ROMEO/TRAQ: #6019105
Department Code: FSYC-185-16
Study Title: This is what Friendship is to Me: A Grounded Theory of How Adolescents with Autism Spectrum Disorder Experience and Develop Friendship
Review Type: Delegated
Date Ethics Clearance Issued: December 08, 2016

Dear Ms. Hall,

The Queen's University Health Sciences & Affiliated Teaching Hospitals Research Ethics Board (HSREB) has reviewed the amendment application and granted ethics approval/acknowledgement for the documents listed below.

- Recruitment Email – v. 2016Nov22
- Kijiji Recruitment Advertisement – v. 2016Nov22
- Newspaper Recruitment Advertisement

Yours sincerely,

[Signature]
Chair, Health Sciences Research Ethics Board

The HSREB operates in compliance with, and is constituted in accordance with, the requirements of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2); the International Conference on Harmonization Good Clinical Practice Consolidated Guidelines (ICH GCP), Part C, Division 5 of the Food and Drug Regulations; Part 4 of the Natural Health Products Regulations; Part 5 of the Medical Devices Regulations; Canadian General Standards Board, and the provisions of the Ontario Personal Health Information Protection Act (PHIPA) 2004 and its applicable regulations. The HSREB is qualified through the CTO REB Qualification Program and is registered with the U.S. Department of Health and Human Services (DHHS) Office for Human Research Protection (OHRP). Federalwide Assurance Number: FWA# 00004184, IRB# 00001173

HSREB members involved in the research project do not participate in the review, discussion or decision.
Appendix C
Research Ethics Board Approval Renewal

QUEEN'S UNIVERSITY HEALTH SCIENCES & AFFILIATED TEACHING HOSPITALS
RESEARCH ETHICS BOARD (HSREB)

HSREB Renewal of Ethics Clearance

September 20, 2017

Ms. Layla Hall
Department of Psychology
Queen's University

ROMEOTRAQ #: 6#9189
Department Code: PSYC-1891

Study Title: This is what Friendship is to Me: A Grounded Theory of How Adolescents with Autism Spectrum Disorder Experience and Develop Friendships

Review Type: Delegated

Date Ethics Clearance Effective: September 19, 2017
Ethics Clearance Expiry Date: September 19, 2018

Dear Ms. Hall,

The Queen's University Health Sciences & Affiliated Teaching Hospitals Research Ethics Board (HSREB) has reviewed the application. This study, including all currently approved documentation, has been granted ethical clearance until the expiry date noted above.

Prior to the expiration of your ethics clearance, you will be reminded to submit your renewal report through ROMEO. Any lapses in ethical clearance will be documented below.

Yours sincerely,

[Signature]

Chair, Health Sciences Research Ethics Board

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HSREB members involved in the research project do not participate in the review, discussion, or decision.
Appendix D
Interview Protocol

I would like to ask you some questions about what you think about friendship, your own friends, and the things you do with friends. If I ask you a question that you do not understand please let me know. Also, if I ask you a question that you do not want to answer you can tell me and I will not be upset. If you decide that you do not want to answer any more questions and would like to end the study, please let me know and I will not be upset. Do you have any questions?

IF YES: Answer questions.

IF NO: Ok, let’s begin. [proceed to ask questions from the list below, or variations on questions from the list below, in an order that is most natural for the conversation. Not all questions must be asked]

Building rapport and introducing concepts
- Tell me about some of the things you enjoy doing (in your spare time)?
  - Tell me about these things.
  - What do you like about these things?
  - What do you not like about these things?
- Are there people you do these things with?
  - What do you enjoy about doing these things with other people?
    - What do you enjoy about these people?
  - What do you not enjoy about doing these things with other people?
    - What do you not enjoy about these people?
  - How do you know these people?
  - Would you call these people your friends? Tell me more about that.
- Are there people that you like spending time with? What about people you like talking to?
  - Would you call these people your friends? Tell me more about that.

Discussing friendship
- Tell me about a time you experienced friendship?
- Who are some of your friends? Tell me about them.
  - How does [name of friend] make you feel?
  - How long have you known [name of friend]?
  - Where do you know [name of friend] from?
    - Where did you meet?
    - Where do you interact with them? (for example, at school, at home, at the mall, online)
How often do you talk to/see/hang out with [name of friend]?
- What makes them a friend?
- Is one of these people your best friend?
  - What makes someone your best friend/a better friend than someone else?
- What types of things do you do with your friends?
- What do you like about [name of friend]?
- What do you not like about [name of friend]?
- Who are some people you know, but who are not your friends?
  - What makes these people different from your friends?
  - What about your friends do you like more than these people?
- How do you know when someone has become your friend?
  - What does being a friend mean to you?
- What do you like about having friends?
- What do you not like about having friends?
- What about friendship is easy for you?
  - What about friendship do you like?
- What about friendship is hard for you?
  - What about friendship do you not like?

**Making friends**

- Tell me about your friendship with [name of friend]?
  - How did you first meet [name of friend]?
    - What was that like?
    - Where did you meet?
    - When did you meet?
    - How long have you known [name of friend]?
    - Did anyone introduce you? Tell me about that.
  - How did you become friends?
    - Could you tell me about how you had your first interaction?
    - What did you first do together?
    - Did someone help you organize this? Tell me about that.
    - Was it easy or hard to become friends? How so?
  - When you first met [name of friend], what made you think you would like to be friends with them?
    - What things did you like about them?
    - What things did you not like about them?

- Have there been people you have seen or met that you thought you would like to become friends with, but you did not become friends with them?
  - Tell me about that.
  - What do you think stopped you from becoming friends?
    - Was it something about them?
    - Was it something about you?
- What are the easiest parts about making friends?
- What are the hardest parts about making friends?
**Maintaining Friendship**

- You have been friends with [name of friend] for a long time. How have you been able to stay friends for so long?
- What makes it difficult to stay friends with someone?
- Have you ever had fights with [name of friend]?
  - Tell me about that.
  - What do you fight about?
  - What happens when you fight with [name of friend]?
  - What happens after you fight?
- Have you ever stopped being friends with someone?
  - What happened?
    - Did you have a fight?
    - Did you become different?
    - Did someone move (Schools or homes)?
  - How did you feel about this?
- Has someone ever stopped being friends with you?
  - What happened?
    - Did you have a fight?
    - Did you become different?
    - Did someone move (Schools or homes)?
  - How did you feel about this?

**Growing Closer**

- Do you think your friendship with [name of friend] has changed over time?
  - How so?
  - Have you become closer?
  - What does that mean to you?
  - Is it important to be close with your friends?
    - What makes you feel that way?
  - How do you think you became closer?
    - Did you spend a lot of time together?
    - Did you talk a lot with each other?
    - Did you make memories together?

**Closing**

- Is there anything else you would like to share with me about friendship?

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