THE EXPERIENCES OF STUDENTS WITH HIGH-FUNCTIONING AUTISM/ASPERGER’S DISORDER ATTENDING COLLEGE OR UNIVERSITY

by

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Abstract

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by clinically significant impairments in social interaction and communication and repetitive, restricted behaviours. According to the Centre for Disease Control and Prevention (2014), the prevalence of ASD in children has increased to 1 in 68, with more children being identified without significant cognitive impairment (i.e., high-functioning autism [HFA]). With the increase in the number of children diagnosed with HFA, there is likely to be an increase of young adults with HFA attending college or university, as they are generally capable of meeting the academic demands of postsecondary education.

Unfortunately, studies have demonstrated poor postsecondary educational outcomes for students with HFA (e.g., Shattuck et al., 2012). Despite having the neurocognitive and academic ability to attend college or university, there are many students with HFA who do not enroll in postsecondary education or drop out soon after entry (Shattuck et al., 2012). There is a critical need to better understand the experiences of students with HFA in postsecondary education to help foster their postsecondary success. To that end, this study investigated the meaning of the lived experiences of students with HFA currently attending college or university.

Using Interpretive Phenomenological Analysis as the method of inquiry, 12 postsecondary students (9 males and 3 females) diagnosed with either HFA or Asperger’s Disorder engaged in detailed, in-depth interviews with the researcher. Eight broad themes and corresponding subthemes emerged from the data analysis that depicts the phenomenon of attending college or university as students with HFA. The themes are 1) Managing Academic Expectations; 2) Experiencing Support; 3) Managing Autism Spectrum Disorder and Related Symptoms; 4) Reference to or Influence of Past Experiences; 5) Having a Sense of Appreciation; 6) Understanding Autism Spectrum Disorder by Others and Self; 7) Managing the Transition;
and 8) Entering a New Social World. Validity strategies were used to ensure scientific rigour and credibility of the research findings. The findings, including significant contributions of the study, are discussed in relation to the extant literature. Strengths and limitations of the study as well as implications for psychologists, educators, and policy development are addressed.
Preface

This dissertation is original, unpublished, independent, and intellectual work of the author, R. Nirmal, with advisement from her research supervisor. The research study involved the use of human participants, and therefore, was reviewed and approved by The University of British Columbia’s Behavioural Research Ethics Board (BREB). The original UBC BREB Certificate of Approval number pertaining to this study is: H13-00312.
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CHAPTER ONE: Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental disorder that is receiving great public and research attention, globally. ASD is characterized by a dyad of impairments, including marked deficits in social interaction and communication and restricted and repetitive patterns of behaviour that cause clinically significant impairment in social, vocational, and other areas of daily function (American Psychiatric Association [APA], 2013). Symptoms of ASD are typically present in early childhood and research has shown that symptoms persist into adulthood (e.g., Howlin, Goode, Hutton, & Rutter, 2004). According to the Center for Disease Control and Prevention’s (CDC) Autism and Developmental Disabilities Monitoring (ADDM) Network, ASD currently affects approximately 1 in 68 children in the United States (CDC, 2014).

In the fourth edition of the Diagnostic and Statistical Manual for Mental Disorders (DSM; APA, 2000), Asperger’s Disorder was listed as one of five pervasive developmental disorders, characterized by significant impairment in social interaction and the presentation of restricted, repetitive, and stereotyped behaviours, with “no clinically significant delay in language or cognitive development” (p. 84). However, Asperger’s Disorder was not included in the fifth (and current) edition of the DSM as a distinct disorder, based on a body of research indicating that the discriminant validity between autism and Asperger’s Disorder is not adequate (e.g., Howlin, 2003; Mayes, Calhoun, & Crites, 2001). To further complicate matters, although not included as a distinct disorder in either the previous or current versions of the DSM (APA, 2000, 2013), “high-functioning autism” is a term that is often used to describe individuals with ASD who have average to above average cognitive ability despite the presence of a language delay in early childhood (MacIntosh & Dissanayake, 2004). Typically, individuals with HFA
have difficulty in the areas of socialization and communication as well as in some areas of adaptive behaviour even as adolescents and adults (e.g., Honda, Shimizu, Imai, & Nitto, 2005). Regardless of their “official” diagnosis, recent research suggests that the number of individuals with ASD without significant cognitive impairment is increasing (CDC, 2014; VanBergeijk & Shtayermann, 2005).

As noted previously, a body of research has shown that the discriminant validity between autistic disorder and Asperger’s Disorder is inadequate; thus, it is unclear whether there is a real distinction between HFA and Asperger’s Disorder or if they are the same and just vary with regard to early language history and symptom severity (MacIntosh & Dissanayake, 2004; Sansosti, Powell-Smith, & Cowan, 2010, Volkmar & Klin, 2001). For example, Howlin (2003) compared 34 adults with autism with early language delays and no cognitive delays (i.e., HFA) to 42 adults with autism with neither language or cognitive delays (i.e., Asperger’s Disorder). Results showed no significant differences between total and individual scores in the areas of language/communication; reciprocal social interaction; or restricted, repetitive behaviours and interests on the Autism Diagnostic Interview- Revised (ADI-R), based on previous functioning. Results also failed to differentiate between the two groups on current functioning, based on ADI-R scores as well as expressive and receptive vocabulary tests. Howlin concluded that the results “do not support the view that HFA and Asperger’s Disorder are distinct conditions” (p. 11). Further, in a thorough review of the empirical evidence in this area, MacIntosh and Dissanayake (2004) found very few qualitative differences between autistic disorder and Asperger’s Disorder, and suggested that both disorders “belong on an autism spectrum,” as their symptoms and features are shared and overlap to a degree (p. 421).
Despite the elimination of Asperger’s Disorder as a distinct entity in the *DSM-5*, many individuals who were previously diagnosed with this disorder continue to self-identify as such, and often refer to themselves as “Aspies” (e.g., King, 2008). Thus, for this study, the researcher recruited individuals who were diagnosed with either Asperger’s Disorder or HFA, as both diagnoses appear to represent a homogenous sample of individuals with very similar autistic phenotypes. For the purpose of brevity, the term HFA is used throughout this dissertation to describe participants with either HFA or Asperger’s Disorder.

**Description of the Problem**

Given the increase in prevalence of HFA, postsecondary educators and related professionals will likely see an increase in enrollment of students with HFA in college or university, as they are often capable of meeting the academic demands of a postsecondary educational program given their average to superior intellectual abilities (Barnhill, Hagiwara, Myles, & Simpson, 2000; Hurewitz & Berger, 2008; Nevill & White, 2011; VanBergeijk, Klin, & Volkmar, 2008). In fact, Fombonne (2005) estimated that, in 2002 in the United States, between 284,000 and 486,000 students under the age of 20, with what is now referred to as ASD, were attending college. Based on these rates, one could easily project higher numbers of students with HFA currently enrolled in college or university. Research has also shown that adolescents with HFA do indeed have aspirations of attending college or university (Camarena & Sarigiani, 2009).

Although we are likely to see an increase in the enrollment rates of students with HFA in postsecondary education (Barnhill, Hagiwara, Myles, & Simpson, 2000; Hurewitz & Berger, 2008; Nevill & White, 2011; VanBergeijk et al., 2008), there are many students with HFA who do not enroll or drop out soon after entry (Shattuck et al., 2012), despite having the
neurocognitive and academic ability to be successful in college or university. Further, research has shown that students with HFA have the lowest participation rate in postsecondary education compared to students with learning disabilities or speech and language impairments (Shattuck et al., 2012). It has been proposed that students with HFA may experience a constellation of challenges in postsecondary education based on their symptomology, which may contribute to poor educational outcomes, including difficulty with socialization and communicating effectively with others, independent living, demonstrating self-determination skills such as advocating for their learning needs, and issues related to their academic functioning (e.g., Adreon & Durocher, 2007; Camarena & Sarigiani, 2009; Prince-Hughes, 2002; VanBergeijk et al.). At the present time, however, these are primarily theoretical challenges. Unfortunately, there is little empirical evidence to confirm or substantiate the existence of these challenges in the extant literature. The poor postsecondary educational outcomes for students with HFA highlight the critical need for research to be conducted in the area of HFA and postsecondary education.

**Purpose and Rationale of the Study**

Attending postsecondary education is a time of personal growth, growth that can present successes and challenges for any student as they attempt to navigate college or university life (e.g., Camarena & Sarigiani, 2009; Geller & Greenberg, 2010). However, the challenges for students with disabilities may supersede those encountered by students without disabilities. Unfortunately, there is a lack of research that has focused on the experiences of students with HFA attending postsecondary education and their needs have not been studied in any depth compared to research on postsecondary students with other disabilities such as learning disorders, physical disabilities, and attention-deficit/hyperactivity disorder (Adreon & Durocher, 2007; Camarena & Sarigiani, 2009; Hurewitz & Berger, 2008; Welkowitz & Baker, 2005). This
may be due, in part, to HFA being less of a visible disability, as the needs of such students are
easily masked by their intellectual ability, and consequently, are not as apparent to postsecondary
educators (Camarena & Sarigiani, 2009).

The increasing rate of ASD highlights the importance of understanding the needs of this
population across the lifespan, including the experiences of students with HFA as they attend
college or university (Camarena & Sarigiani, 2009). The majority of research in the extant
literature has focused on the needs of school-aged children with HFA as opposed to adults with
HFA. Camarena and Sarigiani (2009) suggested that in order to best facilitate the college or
university aspirations of high school students with HFA, it would be helpful to examine the
experiences of students with HFA who have “already navigated the postsecondary educational
world” (p. 116), as they may provide critical insight into the successes and challenges of
attending college or university.

Unfortunately, the voices of students with disabilities are often overlooked, minimized, or
misunderstood (Scuito, Richwine, Mentrikoski, & Niedzwiecki, 2012). Understanding the
experiences of students with HFA while they attend college or university, through their own
voices, may provide much needed insight to researchers, practitioners, and educators into various
aspects of this phenomenon. For example, better understanding their experiences may (a) provide
insight into the successes and challenges they experience in postsecondary education; (b)
illuminate the need for specific types of supports from postsecondary disability services for
students with HFA (Camarena & Sarigiandi, 2009; Gelbar, Smith, & Reichow, 2014); (c) help to
inform or develop transition supports and programs specifically designed for these students while
in high school; and (d) assist in developing and implementing specific programs or interventions
while students with HFA are enrolled in college or university.
Research Question

Conducting a study examining the experiences of students with HFA through their own voice is paramount to understanding the experiences for this particular population while they attend postsecondary education, which currently characterizes a significant gap in the literature. To that end, using Smith, Flower, and Larkin’s (2009) approach to interpretive phenomenological analysis as the method of inquiry, this study aimed to understand the meaning of the lived experiences of attending college or university for students with HFA, the phenomenon in question, as well as to discover common aspects of their experiences of attending postsecondary education. The research question was:

What is the meaning of the lived experiences for students with high-functioning autism attending college or university?

Definition of Key Terms

Student. In this study, a “student” refers to an individual who is enrolled in a two or four-year degree program at a postsecondary educational institution, including a college or university.

Autism Spectrum Disorder (ASD). According to the DSM-5 criteria, ASD is a neurodevelopmental disorder characterized by deficits in social interaction and communication as well as restricted and repetitive patterns of behaviours, which cause clinically significant impairment in social, vocational, and areas of daily living (APA, 2013). According to the DSM-5, ASD “encompasses disorders previously referred to as early infantile autism, childhood autism, Kanner’s autism, high-functioning autism, atypical autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder” (p. 53).
High-Functioning Autism (HFA). High-functioning autism refers to individuals who meet *DSM-5* criteria for ASD but have no evidence of an intellectual disability (i.e., a full-scale IQ > 70; Honda et al., 2005). As discussed previously, the term HFA is not a distinct disorder that is classified in the *DSM-5*, although is a term used to describe students who have ASD and are higher functioning.

Asperger’s Disorder. The *DSM-IV* defined Asperger’s Disorder as a pervasive developmental disorder characterized by significant impairment in social interaction and the presentation of restricted, repetitive, and stereotyped behaviours, with “no clinically significant delay in language or cognitive development” (APA, 2000, p. 84). As discussed, a diagnosis of Asperger’s Disorder was not included in the *DSM-5* as a distinct disorder due to a body of research indicating that the discriminant validity between autism and Asperger’s Disorder is not adequate (e.g., Howlin, 2003; Mayes et al., 2001).

Postsecondary Education. In this study, postsecondary education refers to attending a postsecondary educational institution, including a college or university.

College. According to the British Columbia Ministry of Advanced Education (2014), “college” refers to an institution that provides “developmental programs that prepare adult learners for postsecondary studies, as well as courses and programs in trades, vocational, career technical and academic studies leading to certificates, diplomas, associate degrees, and applied degrees.” In Canada, a “college” is typically smaller than a university and the term “college” is not synonymous with “university.”

University. The BC Ministry of Advanced Education (2014) defines “university” as an institution that provides “undergraduate degree programs and a range of programs at the graduate level. Some [universities] also offer courses and programs in trades, vocational, and career
technical studies leading to certificates and diplomas, as well as developmental programs that prepare adult learners for postsecondary studies.” In Canada, a “university” is typically larger than a college and the term “university” is not synonymous with “college.”

**Disability Services.** In this study, “disability services” refers to a centre or office on a college or university campus that provides access to supports for students with disabilities, including the provision of services and educational accommodations. Although there are several names that describe such a place (e.g., Centre for Students with Disabilities, Access for Students with Disabilities), the term “disability services” is used in this study.

**Educational Accommodations.** Elliott, Kratochwill, McKeivitt, and Malecki (2009) define “educational accommodations” as alterations to a testing condition so that a student can demonstrate his or her “true ability” with minimal interference of their disability. Providing educational accommodations is often referred to as “leveling the playing field” for students with disabilities (p. 225). Examples of educational accommodations include extra time on examinations, assistive technology, and a change in setting for examinations (e.g., a separate room with minimal distractions). Educational accommodations also include non-testing accommodations in the teaching and learning environment such as a note taker, a laptop, technology devices such as a Smart Pen and Dragon NaturallySpeaking, and textbooks in a portable document format (PDF), as examples.

This dissertation is organized into five chapters. Chapter 1, the Introduction, provided the reader with the purpose and significance of the study, and defined key terms that are used throughout this dissertation. Chapter 2 is a review of the extant literature related to students with HFA and postsecondary education. Chapter 3 provides a detailed description of the research method, including the epistemological underpinnings of the research, and research procedures
including participant recruitment, data collection, data analysis, and methods used to ensure credibility and scientific rigour in the research findings. Chapter 4 is a detailed account of the research findings, including extracts from the participants’ interviews to support the broad themes and subthemes that emerged from data analysis. Chapter 5 is a discussion of the research findings, including implications of this research study. The appendices include supporting documents and information relevant and germane to the conduct of this research study.
CHAPTER TWO: Review of the Literature

Autism Spectrum Disorder is a neurodevelopmental disorder characterized by qualitative deficits in social interaction and communication as well as restricted and repetitive patterns of behaviour (APA, 2013; Sansosti et al., 2010). Individuals who meet diagnostic criteria for ASD who do not have an intellectual disability are generally described as having high-functioning autism (e.g., Honda et al., 2005). Typically, students with HFA have average to above average cognitive ability (APA; White, Ollendick, & Bray, 2011), and in many cases, are in the gifted range (Barnhill, Hagiwara, Myles, & Simpson, 2000).

Students with HFA have difficulties with social interaction and communication, such as making and keeping friends and engaging in reciprocal conversation (Laugeson, Frankel, Gantman, Dillon, & Mogil, 2011). Their level of expressive, receptive, and structural language (e.g., syntax, semantics, phonology) is generally intact; however, students with HFA often have challenges with pragmatic language such as conversational speech, displaying unique or idiosyncratic language (APA, 2013; Fombonne, 2012; Sansosti et al., 2010; VanBergeijk et al., 2008).

Students with HFA also present with restricted and repetitive patterns of behaviour, such as having intense and fixated interests (e.g., subjects, topics) and insisting on routines and sameness (APA, 2013). Further complicating the constellation of autism symptoms is the presentation of sensory dysregulation, including hyper- and hyposensitivity to an array of sensory stimuli (Crane, Goddard, & Pring, 2009; Smith & Sharp, 2013). Although deficits in social interaction and communication, and restricted, repetitive behaviours comprise the general phenotype of HFA, it is important to note that the severity of symptomology and developmental trajectory varies considerably for each individual with HFA despite being considered “high functioning” (Eaves & Ho, 2008).
The overall prevalence of ASD in children is around 1% (APA, 2013) and evidence from a recent epidemiological study indicates that the prevalence rate is about 1% for young adults as well (Brugha et al., 2011). However, recent evidence suggests an increase in prevalence. According to the Centre for Disease Control and Prevention (CDC; 2014), the prevalence of ASD in children in the United States has increased to 1 in 68. Similarly, the most recent CDC report also indicates that more children are being identified with ASD without significant cognitive impairment (i.e., HFA).

With the increasing prevalence rate of ASD and increase in the number of students with HFA, it has been argued that we are likely to see more students with HFA transitioning to college or university, as they are generally capable of meeting the academic demands of a college or university program (e.g., Adreon & Durocher, 2007; Barnhill et al., 2000; Hurewitz & Berger, 2008; Nevill & White, 2011; VanBergeijk et al., 2008). In a study investigating the postsecondary aspirations of 21 adolescents formally diagnosed with HFA (ages 12-18; 1 female, 20 males) and their parents, the results showed, through semi-structured interviews, that adolescents with HFA and their parents all viewed attending college as an “important aspiration” and were confident that they would attend college, with 57% of the adolescents expressing they wanted to complete a 4-year degree (Camarena & Sarigiani, 2009, p. 121). It is important to note that the sample mainly consisted of “professional and middle to upper class families” with parents with previous college experience, which may influence the educational aspirations of their adolescents (Camarena & Sarigiani, 2009, p. 117).

Further, White and colleagues (2011) conducted a study to determine a preliminary estimate of the prevalence of students who present with clinically significant autism symptoms at a large university (n = 667). Participants were administered the Autism Spectrum Quotient (AQ),
Social Responsiveness Scale - Brief Format Adult Self-Report Form (SRS-BA-SR), Buss and Perry Aggression Questionnaire (BPAQ), Social Phobia and Anxiety Inventory- 23 (SPAI-23), and Patient Health Questionnaire-9 (PHQ-9) online as Phase 1 of the study. Participants who scored above the threshold cutoff on the AQ (n = 13) were invited to participate in Phase 2 of the study to determine the presence of ASD. Eight participants consented to participate and were administered the Early Development Questionnaire (EDQ) and the Autism Diagnostic Observation Schedule (ADOS; Module 4). Of the 8 participants, 5 met DSM-IV-TR criteria for ASD and had no previous diagnosis of ASD. Using the ascertainment method, results showed that the estimated prevalence of university students who are likely to have HFA ranged from 0.7 – 1.9%, indicating that 1 in 53 to 1 in 130 postsecondary students “likely meet criteria” for HFA (White et al., 2011, p. 12). The results of these studies illustrate that students with HFA have aspirations of, and are indeed attending postsecondary education, though not all students are being diagnosed prior to entry (Camerena & Sarigiani, 2009; White et al., 2011).

Unfortunately, despite having the ability and aspirations of attending postsecondary education, there are many students with HFA who do not enroll in college or university, or drop out soon after entry (Glennon, 2001; Shattuck et al., 2012; VanBergeijk et al., 2008) due to a host of issues including difficulties with socialization, adapting to a new environment, and receiving minimal guidance while attending college or university, as examples (Howlin et al., 2004). Research has shown that adolescents with ASD have poor postsecondary educational outcomes including no participation in postsecondary education (Shattuck et al., 2012). Shattuck and colleagues (2012), using data from the US Department of Education National Longitudinal Transition Study-2 (NLTS2), found that 34.7% of youth with ASD had attended college, and this rate was the lowest participation rate compared to youth with a learning disability or a
speech/language impairment, but higher than youth with mental retardation (now referred to as “intellectual disability”). The poor educational outcomes for students with ASD highlights the critical need to better understand the experiences of these students currently attending college or university. As Gelbar and colleagues (2014) stated, “more research is needed to support effective transition and postsecondary programming…potential avenues for this research include interviewing college students with ASD to understand their experiences in postsecondary education…” (p. 2599).

Although the educational outcomes for students with ASD are poor (e.g., Shattuck et al., 2012), it is argued that students with HFA have the intellectual ability to attend and do well in postsecondary education (e.g., Hurewitz & Berger, 2008; Nevill & White, 2011; VanBergeijk et al., 2008). However, despite having the academic ability to engage in a college or university program, there are cardinal features of HFA that are likely to impede one’s functioning while attending postsecondary education (Hewitt, 2011; Zager & Alpern, 2010), although these are theoretical challenges, and not challenges that have been supported empirically in the literature in any great length. The cardinal features include difficulties with social interaction and communication, restricted and repetitive behaviours, daily living skills and independent living, academic and executive functioning, self-advocacy, and psychiatric comorbidity (e.g., Adreon & Durocher; Camarena & Sarigiani, 2009; VanBergeijk et al., 2008). To that end, these characteristics of young adults with HFA are discussed in the following sections within the context of how the characteristics or features may affect functioning in postsecondary education.

**Social Interaction and Communication**

A hallmark characteristic of HFA is deficits in social interaction and communication (Fritschie, 2010) including impaired theory of mind (Kapp, Gantman, & Laugeson, 2011).
Theory of mind is “inferring the mental states of others” (Rutherford, Baron-Cohen, & Wheelwright, 2002, p. 189) or understanding the perspectives of others, making social inferences, and understanding emotions of others (Baron-Cohen & Wheelwright, 2004). Research has shown that social difficulties continue to impair adults with HFA, including having a lack of friends and intimate relationships (Howlin, Moss, Savage, & Rutter, 2013). Howlin and colleagues (2013) conducted a 37-year longitudinal social outcome study involving 60 adults with autism without significant cognitive delay (mean age of 44). Results from diagnostic and cognitive measures and social questionnaires showed that the overall social composite outcome rating, representing independent living, employment, and friendships and relationships, was “poor.” With regard to friendships and relationships in particular, most participants “never had a friend or any close reciprocal relationships,” four participants had intimate relationships, and of these, participants were not currently married or in a long-term relationship and only one had a child, who also had autism (p. 575). It has been purported by others that the deficits in social interaction, theory of mind, and communication among young adults with HFA can present social challenges in college and university, particularly with respect to building meaningful social relationships (Adreon & Durocher, 2007; Carneiro, 2010; Nevill & White, 2011).

Postsecondary education is a time where students build friendships, relationships, and support networks outside their immediate family members (Glennon, 2001; Nevill & White, 2011). Also, opinions of others are formed largely based on first impressions in college or university. Students with HFA often have difficulty initiating, entering, and exiting conversations and demonstrating appropriate nonverbal behaviour such as standing within appropriate proximity to the other person, regulating eye gaze, and reading social cues (Laugeson et al., 2011; Wing, 1981, 1992). As well, research has shown that adults with HFA, compared to
controls, have impairments in recognizing emotional cues and facial expressions, as well as expressing emotional cues (Macdonald et al., 1989; Wallace, Coleman, & Bailey, 2006). In a study conducted by Wallace and colleagues (2006) investigating basic facial recognition among young adults and adults with autism and Asperger’s Disorder (n = 56 [28 clinical; 28 control]), participants were presented with a series of facial pictures presented upright and inverted.

Participants with autism and Asperger’s Disorder, compared to the control group, were significantly less accurate at recognizing fear, disgust, and sadness when presented with upright facial expressions, demonstrated impaired recognition of facial expressions when presented with inverted pictures, and misidentified fear as anger. Given difficulties in initiating social interactions and recognizing emotional cues and processing facial expressions of others, first impressions among adults with HFA may be perceived as awkward or odd, and sometimes rude and inappropriate.

Research has shown that young adults with ASD are significantly less likely to have friends and be invited to social activities, and also more frequently experience social isolation in comparison to young adults with intellectual disability, emotional/behavioural disability, or a learning disability (Orsmond, Shattuck, Cooper, Sterzing, & Anderson, 2013). Orsmond and colleagues (2013), using data from the NLTS2, investigated social participation among 620 young adults with ASD. By administering three social activity and participation measures assessing social participation in the past 12 months to parents of young adults with ASD, results showed that young adults with ASD were “significantly more likely to never see friends, never get called by friends, and never be invited to activities” compared to participants with intellectual disability, emotional/behavioural disability, or a learning disability (p. 2715). Furthermore, the rate of being socially isolated (i.e., no participation in the 3 areas described above) was
significantly higher (3-14 times higher) for participants with ASD than participants in the other disability categories. Although the sample included participants with ASD (which included autistic disorder, Asperger’s Disorder, Pervasive Developmental Disorder- Not Otherwise Specified in their study) and not HFA or Asperger’s Disorder exclusively, the findings indeed illuminate the social challenges and poor social outcomes young adults with ASD face.

Related to the social problems, students with HFA often have difficulty finding common interests with other peers and understanding the perspectives of others (Laugeson et al., 2011). Consequently, it may be more difficult for students with HFA to form and maintain friendships, as friendships are typically formed based on shared or common interests (Laugeson et al., 2011). Finding shared or common interests for the purpose of befriending others in a college or university environment may present greater difficulty for students with HFA, as socialization is not structured or facilitated by parents or other adults as is often done in high school.

The social difficulties that students with HFA experience may place them at greater risk for social isolation, rejection, and loneliness in college or university (see Chamberlain, Kasari, & Rotheram-Fuller, 2007; Humphrey & Symes, 2010; Koegel, Ashbaugh, Koegel, & Detar, 2013; Montes & Halterman, 2007; Muller, Schuler, & Yates, 2008). In a sample of non-clinical undergraduate students from a large university (n = 97; mean age of 19) with a strong ASD phenotype as measured by the *Autism Spectrum Quotient (AQ)*, the *UCLA Loneliness Scale*, an adapted version of the *Striving Assessment Scale*, and a dating and friendship history questionnaire, Jobe and White (2007) found that students with a “stronger ASD phenotype” (based on AQ scores in the clinical range) reported significant loneliness and fewer friendships that are shorter in nature (p. 1484). Findings also revealed that the college students experienced loneliness due to limitations in their social understanding and lack of social skills, rather than a
preference for aloneness. Although the findings of this study provide valuable insight into the social experience of students with ASD phenotype, it is important to note that the participants were screened for ASD using one measure, and furthermore, the study did not include a control group of students who did not present with ASD symptoms. A study conducted by Muller and colleagues (2008) yielded similar results. In their qualitative study investigating the social challenges and supports from the perspectives of 18 adults (ages 18-62) with HFA, a common experience (among others) included a “sense of isolation,” with the “pain” of social isolation increasing as they got older, as the participants reported they were more aware of their differences, including feeling “out of place” (p.179). This particular study included participants with postsecondary educational experience, although was not specific to social challenges and supports within a college or university context.

Furthermore, results of an outcome study on adults with autism (n = 68; 61 males, 7 females) showed that the majority of the research sample, at follow-up (mean age of 29), had no friends or acquaintances (56% of the sample) and 46% of the sample had an overall social outcome rating (i.e., friendships, employment placement, independent living) of “poor” (Howlin, Goode, Hutton, and Rutter, 2004). Results were based on scores from the social, communication, and behavioural factors on the *Autism Diagnostic Interview*. This study included adults with autism with performance IQ scores greater than 50 (mean score of 80; range 51-137), and as such, illuminate the poor social outcomes for individuals with autism who are both lower functioning and high functioning.

Research has shown that communication and language difficulties continue to impair students with autism into adulthood, though some improvements have been shown (Howlin, Mawhood, & Rutter, 2000; Howlin, Savage, Moss, Tempier, & Rutter, 2014). Given that
language functioning is related to building friendships (Alpern & Zager, 2007) and is a predictor of social interactions in young adults (Howlin et al., 2000), students with HFA may be socially isolated on campus due to their failed attempts to establish meaningful reciprocal conversation with other students (Koegel et al., 2013).

Pragmatic language, in particular, is an area that continues to impair young adults with HFA, such as talking in a pedantic, formal manner with a monotonous tone (Adams, Green, Gilchrist, & Cox, 2002; Adreon & Durocher, 2007). Unique speech prosody can be present in students with HFA, including difficulties modulating voice volume and pitch, and intonation and inflection. Students with HFA may use stereotyped utterances, ask questions that may be perceived as inappropriate, and perseverate on the same topic of their choice without entertaining the listener’s perspective (Seltzer et al., 2003; Zager & Alpern, 2010). Students with HFA may not respond appropriately to social overtures made by others, or respond in an odd or awkward manner. Further, students with HFA may have difficulty understanding sarcasm and jokes due to their difficulties with processing nonliteral information and figurative speech (Zager & Alpern, 2010). These behaviours may be perceived as disinterest and rudeness, limiting the potential for future conversations or interactions with others in college or university (Adreon & Durocher, 2007).

Despite having deficits in social skills, many students with HFA show an interest and desire to seek out and develop peer relationships (Carrington, Templeton, & Papinczak, 2003; Klin, McPartland, & Volkmar, 2005; Laugeson et al., 2011), though their difficulties with social interaction often render their attempts at social engagement as unsuccessful. As such, it has been shown that students with HFA avoid initiating social interaction with others or wait passively for others to initiate communication with them in order to avoid social rejection (Daniel &
Billingsley, 2010), thus limiting social opportunity (Shatyermann, 2007). Many young adults with HFA, consequently, have few to no friends, and seldom participate in social gatherings or activities (e.g., talking on the phone, having get togethers; Liptak, Kennedy, & Dosa, 2011).

Although there is a paucity of research examining the effectiveness of social skills programs for young adults with HFA (e.g., Bishop-Fitzpatrick, Minshew, & Eack, 2013; Howlin & Yates, 1999), the results from the limited research available have shown improvements in the social skills of young adults who have received treatment or intervention (e.g., Gantman, Kapp, Orenski, & Laugeson, 2012; Mason, Rispoli, Ganz, Boles, & Orr, 2012; Nordin & Gillberg, 1998; Turner-Brown, Perry, Dichter, Bodfish, & Penn, 2008). Gantman and colleagues (2012) conducted a randomized controlled trial investigating the effectiveness of a social skills treatment program for young adults with HFA (ages 18-23; UCLA PEERS for Young Adults program). Results, compared to the waitlist control group, showed significantly reduced loneliness and an increase in social skills knowledge as reported by participants, and significant improvements in “overall social skills, social responsiveness, empathy, and frequency of get-togethers” as reported by caregivers on the Social Responsiveness Scale, Social Skills Rating System, Social and Emotional Loneliness Scale for Adults, Empathy Quotient, Quality of Socialization Questionnaire, Social Skills Inventory, and the Test of Young Adult Social Skills Knowledge (p.1094). Despite research showing positive gains in social skills with intervention, students with HFA will likely continue to have difficulties with social functioning into adulthood (Eaves & Ho, 2008; Howlin & Moss, 2012), and even more so if they do not receive appropriate social skills intervention.

**Romantic Relationships.** Many young adults seek romantic relationships prior to or while attending college or university, and the desire for students with HFA to seek such
relationships is no exception (Muller et al., 2008; Stokes, Newton, & Kaur, 2007). However, for students with HFA, their difficulties with communication and socialization can present challenges in developing romantic relationships (Nevill & White, 2011; Kapp et al., 2011, Stokes et al.), as their deficits in social skills limits pursuing and engaging in such relationships (Hellemans, Colson, Verbraeken, Vermeiren, Deboutte, 2007). In a qualitative study investigating the perceptions of social challenges of 18 adults (17 males, 1 female; age range of 22-49) using focus group interviewing and subsequent content analysis, an emergent theme was “appropriate behaviour around members of the opposite sex” (Sperry & Mesibov, 2005, p. 370). In particular, participants reported difficulty showing age-appropriate behaviours with others of the opposite sex, including using excessively overt social overtures (e.g., unwanted contact-touching or looking). This study included participants who had postsecondary educational experience, although the study was not specific to the social challenges experienced within a college or university context.

Furthermore, Stokes and colleagues (2007) found that adolescents and adults with HFA (n = 25; age range 13-36) engaged in significantly more inappropriate courtship behaviours compared to typically developing peers, including making inappropriate comments, inappropriate touching of the person of interest, and showing “obsessional” interest, which could be perceived as “stalking” behaviour, as reported by their parents (p. 1979). Difficulty forming romantic relationships and the absence of emotional intimacy can contribute to social isolation while attending college or university for students with HFA.

VanBergeijk and colleagues (2008) discussed that colleges and universities have success in providing academic accommodations and supports, but are not as experienced in providing non-academic accommodations such as social support and programming for students with
disabilities. Research has shown that adolescents with HFA and their parents have concern regarding the readiness of postsecondary educational institutions in meeting the unique needs of students with HFA, particularly with respect to social challenges (Camarena & Sarigiani, 2009). In a sample of 20 adolescents with HFA (age range 12-18) and their parents (20 mothers, 13 fathers), results from semi-structured interviews and subsequent content analysis showed that both parents and adolescents reported difficulty with social skills as a “perceived obstacle to college success” (Camarena & Sarigiani, 2009, p. 123). Parents also reported the need for peer support such as mentoring programs, counseling, and for their teens to be introduced to “similar children” (Camarena & Sarigiani, 2009, p. 123). Given that HFA is considered a disorder of social functioning, it is critical that postsecondary providers and educators have the knowledge and capacity to best address the unique needs of students with HFA.

**Restricted and Repetitive Behaviours**

A cardinal feature of HFA is the heterogeneous presentation of restricted and repetitive patterns of behaviour (RRBs; APA, 2013; Esbesen, Seltzer, Lam, & Bodfish, 2009). RRBs include intense, fixated interests on particular subjects or topics while having disregard for, or excluding topics or activities that may not be of great personal interest to the person with HFA (Adreon & Durocher, 2007); stereotyped, repetitive motor movements such as feet shuffling or finger tapping; and sensory dysregulation, including hypo- or hypersensitivity to sensory stimuli (APA, 2013; Esbensen et al., 2009). Research has shown that RRBs in adults are less frequent and intense than in childhood and adolescent years, though the behaviours are still present in adulthood despite improvements (Chowdhury, Benson, & Hillier, 2010; Esbensen et al., 2009; Seltzer et al., 2003; Shattuck et al., 2007). Chowdbery and colleagues (2010) investigated age-related changes in RRBs in 34 adults (33 males, 1 female; age range 19-28 years) with HFA.
from their current age and retrospectively around age 4-5 years using results from the *Autism Diagnostic Interview-Revised* (ADI-R) and the *Repetitive Behavior Scale-Revised* (RBS-R) completed by the participants’ parents. Findings revealed significant abatement in all RRBs over time (average reduction was 25.4%) with the greatest reduction in repetitive use of objects (46.2%). Unusual preoccupations and sensory interests were more persistent over time, with “fewer than 20% of participants becoming asymptomatic at current functioning” (p. 214). These results highlight that although RRBs may decrease in adulthood, some symptoms continue to persist though to a lesser extent.

It has been purported that RRBs could present challenges or interference for students with HFA in postsecondary education, particularly with respect to socialization (Adreon & Durocher, 2007) and adapting to a postsecondary educational environment given potential sensory difficulties (VanBergeijk et al., 2008). The presence of RRBs in students with HFA can result in social difficulty in college or university, as students with HFA may talk at length about their preferred interests without providing any background information to the listener, fail to elicit contributions from the listener regarding their interests, or completely disregard individuals who do not share the same interests (Adreon & Durocher, 2007). Further, the RRBs of students with HFA may also be perceived as odd and eccentric, which may place them at-risk for being ostracized by college or university peers.

Students with HFA are likely to have a preference for routines and sameness, and may experience distress if there is an unexpected change in routine (APA, 2013), for example, pop quizzes, lack of seat assignment in lecture halls, or cancelled classes (Adreon & Durocher, 2007). Students with HFA are often described as “rule bound,” becoming agitated and having little to no tolerance for individuals who break rules, for example, in games or sports, “cheating”
on an assignment or test, or breaking campus residence rules (e.g., no drinking in the hallways; Adreon & Durocher, 2007). As a result, the tendency to enforce rules may cause difficulty in social conversations or activities in college or university, as other students may question or dismiss the student with HFA who is enforcing the rules (Adreon & Durocher, 2007).

**Sensory Dysregulation.** Hypo- or hypersensitivity to sensory stimuli is an area of impairment that is subsumed under the diagnostic criterion of restricted, repetitive behaviours in the *DSM-5* diagnostic criteria for ASD (APA, 2013). Sensory dysregulation refers to an individual’s “inability to correctly process sensory input” (VanBergeijk et al., 2008, p. 1365) such as tactile, gustatory, olfactory, vestibular, proprioceptive, auditory, and visual stimuli. Although the majority of research on sensory dysregulation in ASD has focused on children, the limited research available on adults with ASD has shown that sensory dysregulation is also present in adults with ASD (Crane, Goddard, & Pring, 2009; Tavassoli, Miller, Schoen, Nielsen, & Baron-Cohen, 2014). In a study conducted by Crane and colleagues (2009) investigating sensory processing in 18 adults with either Asperger’s Disorder or HFA (10 males, 8 females; age range 18-65), it was found that the autism group scored significantly higher on the low registration, sensory sensitivity, and sensory avoidance indices compared to the comparison group (n = 18). Further, 94.4% of the autism group experienced “extreme levels of sensory processing” in at least one sensory index (e.g., sensitivity to sensory stimulation, avoiding sensory input) compared to the comparison group, as measured by the *Adult/Adolescent Sensory Profile*, a 60-item self-report questionnaire assessing sensory processing in various sensory domains (p. 215).

Sensory dysregulation may have implications for the functioning of a college or university student with HFA in their postsecondary environment (Adreon & Durocher, 2007;
VanBergeijk et al., 2008), such as affecting academic and social functioning (Kapp et al., 2011; Smith & Sharp, 2013). For example, filtering out noises in the classroom (e.g., chatter), subtle humming noise from fluorescent lights, or particular smells of other students, classrooms, or auditoriums may be difficult for a student with HFA who has sensory dysregulation (VanBergeijk et al., 2008; Adreon & Durocher, 2007). In a similar vein, sensory dysregulation could have implications for a student with HFA living on campus residence, particularly with respect to noise, smell from roommates cooking or from the cafeteria, and tactile sensitivity to furniture (e.g., bed, desk chair) provided by campus housing, as examples.

Sensory dysregulation may also affect social functioning and, in particular, lead to social isolation. In a grounded theory study exploring the sensory experiences of 9 adults with Asperger’s Disorder (age range was unfortunately not provided), participants reported, through semi-structured interviews, “sensory stress” and “social isolation” due to their “fear” or “anger” associated with their “strong compulsion” to escape or avoid heightened sensory environments (Smith & Sharp, 2013, p. 896). Although some students with HFA may develop strategies to cope with their sensory dysregulation with age (Crane et al., 2009; Smith & Sharp, 2013), current evidence suggests that special attention in planning or accommodations in college or university may be necessary to reduce or avoid sensory dysregulation and associated agitation or distress (Smith & Sharp, 2013).

Adaptive Behaviour in High-Functioning Autism

Research has shown that young adults with HFA have difficulty living independently despite having average and above cognitive ability; their adaptive behaviour is often not commensurate with their cognitive ability (e.g., Howlin et al., 2004; Klin et al., 2006; Rumsey, Rapoport, & Sceery, 1985; Szatmari, Bartolucci, Bremner, Bond, & Rich, 1989). Many young
adults with HFA continue to live with their parents or in supervised home settings well into adulthood (e.g., Rumsey et al.; 1985; Szatmari et al., 1989), often relying on their primary support system to structure aspects of their daily living including scheduling and attending appointments, transportation, and more basic tasks such as cleaning, preparing meals, and general hygiene. Howlin and colleagues (2013) conducted a longitudinal outcome study involving 60 adults with autism with a nonverbal IQ ≥ 70 (age range 29-64 years) who were diagnosed, on average, 37 years prior. Results from diagnostic and cognitive assessments and social functioning questionnaires showed that 13% of participants were living independently, 13% were living in semi-sheltered accommodations or with parents “with a high degree of autonomy,” 17% were living at home with “limited autonomy,” 20% were living in a residential home with “limited autonomy,” 33% were in a “specialist autistic placement with little to no autonomy,” and 3% were in hospital care, with most participants being “very reliant on others for support in their daily lives” (p. 575).

Students with HFA may experience challenges with independent functioning while attending college or university due, in part, to their primary support systems (e.g., parents, caregivers, teachers) no longer structuring their day-to-day activities at school, a more common feature of an elementary and secondary school environment (Kapp et al., 2011). There are many responsibilities of a postsecondary student that a student with HFA may have difficulty completing independently, including following a cafeteria meal plan, shopping, general grooming and hygiene, waking up to an alarm clock, using public transit, arriving to class on time, navigating the campus, living in residence, and finding public washrooms, as examples (Adreon & Durocher, 2007; VanBergeijk et al., 2008).
It has been contended that postsecondary students with HFA would likely benefit from support and guidance with respect to independent, daily living skills including specific guidance and monitoring of their functioning (Jobe & White, 2007). This may come as a surprise to many postsecondary educators or create confusion given the high cognitive ability and commensurate academic functioning of students with HFA (Hewitt, 2011; VanBergeijk & Shtayermman, 2005). Hewitt (2011) asserts that there is “extreme urgency” to help students with HFA develop independent and adaptive skills, but students with HFA may face considerable difficulty in obtaining such support (p. 274). Unfortunately, postsecondary institutions are not as experienced in providing non-academic accommodations compared to educational accommodations (Adreon & Durocher, 2007; VanBergeijk et al., 2008), such as building life skills including budgeting, cleaning, laundry, paying bills, and making and attending appointments.

**Academic and Executive Functioning**

Students with HFA typically do well academically in high school, which can facilitate their enrollment in postsecondary education. In a recent study examining the enrollment rates of students with HFA in various postsecondary majors using data from the NLTS2, findings showed that young adults with HFA (n = 660) have higher rates of enrollment in science, technology, engineering, and mathematics (STEM) programs compared to students in the general population as well as students with other disabilities, as measured through telephone interviews and self-report questionnaires (Wei, Yu, Shattuck, McCracken, & Blackorby, 2012). As such, individuals with HFA are in a position to be valuable contributors in technology driven workforces given their preference for these fields (Wei, Yu, Blackorby, Shattuck, & Newman, 2014). However, in Wei and colleagues (2012) study, it was also found that young adults with HFA were significantly less likely to enroll in college or university compared to students with
other disabilities (i.e., learning disabilities, speech/language impairment, hearing or vision impairment, orthopedic impairments, other health impairment, traumatic brain injury) with the exception of intellectual disability and multiple disabilities, despite having higher enrollment rates in STEM programs. To facilitate the transition to postsecondary education and foster academic success in college or university, students with HFA are likely to require support in various areas that can affect academic functioning such as socialization and adaptive behaviour.

Postsecondary education differs from secondary school in that the programs and courses are more complex in nature, thus the demands placed on a college or university student are higher than they were in high school (Kapp et al., 2011), and even higher for students with disabilities. Although students with HFA have the capability to succeed academically, many students with HFA may also require educational accommodations to maximize their academic potential with minimal interference of their disability (VanBergeijk et al., 2008). Examples of accommodations include a note taker, assistive technology (e.g., voice recorder, laptop), previewing class notes or lecture presentations, as well as test accommodations including extra time and access to a separate space for examinations in order to reduce environmental distractions such as noise (Camarena & Sarigiani, 2009; Prince-Hughes, 2002). As mentioned, students with HFA may have sensory dysregulation that could affect academic functioning in the college or university environment (Kapp et al., 2011), and a separate space for examinations may help to reduce distractions.

A particular challenge in postsecondary education is that students with disabilities may not qualify for the same educational accommodations as they received in high school due, in part, to changes in law that stipulate the provision of services for students with disabilities, outdated psychoeducational assessments, and assessment reports not specifically outlining the
functional impact of their disability (Roberts, 2010). Supports in high school are readily available and highly individualized to the needs of students with disabilities (Camarena & Sarigiani, 2009). Students with HFA may have special education assistants to help navigate the school environment and keep up with the demands of social and academic expectations in high school, supports that are not readily available in a college or university environment. The lack of continuum of services for students with disabilities between secondary and postsecondary education may lead to confusion for students with HFA, and may affect the support they require in order to demonstrate their academic potential.

Research has shown concerns among students with HFA with respect to receiving educational accommodations in postsecondary education (Camarena & Sarigiani, 2009). In a study conducted by Camarena and Sarigiani (2009) investigating postsecondary educational aspirations among adolescents with HFA using semi-structured interviews, results showed that adolescents with HFA (n = 21) were concerned about professors’ awareness of the needs of students with HFA as well as postsecondary disability services meeting their needs, particularly with respect to educational accommodations.

**Executive Functioning.** Executive functioning (EF) is a multi-dimensional concept that refers to several goal-directed behaviours such as planning, organizing, initiating, decision-making, working memory, and problem-solving skills. It has been postulated that EF is a core deficit in ASD and characterizes the neuropsychological profile of children with ASD (e.g., Bramham et al., 2009; Hill, 2004; Johnston, Madden, Bramham, & Russell, 2011). Research has shown that young adults with HFA also have impairment in EF (Bramham et al., 2009; Sachse et al., 2013), although studies have shown inconsistent results.
Bramham and colleagues (2009) conducted a study examining EF in 45 young adults with ASD (either Asperger’s Disorder or “atypical autism”) with a mean age of 32. Results showed that the young adults with ASD have significant deficits in EF, in particular, initiation, planning, and strategy formation compared to a normal control group and as measured by standardized neuropsychological measures (i.e., *Behavioural Assessment of Dysexecutive Syndrome, BADS* [zoo map subtest], *Verbal Fluency Test, BADS key search* subtest). In Sachse and colleagues (2013) study, the researchers examined EF among 30 adolescents and adults with HFA (ages 14-33) compared to a normal control group also using standardized neuropsychological measures (i.e., various subtests from the *Cambridge Neuropsychological Test Automated Battery, Inhibition of Interference: Stroop*). Results showed that the ASD group had significant deficits in spatial working memory, although planning, cognitive flexibility, and inhibition were intact. Interestingly, planning was found to be a significant deficit in Bramham and colleagues study, which may due, in part, to their sample including individuals with ASD who may have been lower functioning compared to the sample in Sachse and colleagues’ study, which primarily consisted of individuals with HFA.

Attending college or university requires further executive skills, including independence, on the part of students with HFA, as there is far less structure imposed by teachers and parents in a postsecondary environment than there is in high school (Kapp et al., 2011). It is likely that students with HFA may face considerable difficulty with EF in college or university, including difficulties organizing their materials, planning accordingly for assignments, papers, and examinations, and ensuring they attend class on time (VanBergeijk et al., 2008). Students with HFA may need prompts to start studying for exams, initiating term projects ahead of time, and
have larger assignments broken down into more feasible steps to help promote academic success (VanBergeijk et al.).

Little research has examined EF in postsecondary students with HFA who are currently attending college or university (Sasche et al., 2013). Additional research is needed in order to better understand the EF profile of postsecondary students with HFA, including supports and strategies that could be implemented to foster success in college or university.

**Self-advocacy**

In postsecondary education, it is the primary responsibility of students with HFA to self-advocate for the learning needs and navigate the disability services system in order to be considered for educational accommodations and to receive related services such as counseling (Adreon & Durocher, 2007; Kapp et al., 2011; Roberts, 2010). The notion of self-advocacy may come as a surprise to students with HFA who are accustomed to their parents and secondary schools navigating such support (Stodden & Mruzek, 2010). Establishing communication with disability services in college or university is an initial step to be considered for support, and usually requires students to self-disclose their disability, provide assessment documentation that verifies the disability and outlines its functional impact, and advocate for their own learning needs (Hurewitz & Berger, 2008). It is not the responsibility of postsecondary institutions to “actively identify” students with disabilities (Hurewitz & Berger, 2008, p. 113).

Self-advocacy can be difficult if the student with HFA does not want to disclose his or her disability, does not entirely understand what their disability means or how it affects them, or thinks that their disability should not be considered a disability (Camarena & Sarigiani, 2009). Further, Anckarsater and colleagues (2006) discuss that self-advocacy can be difficult for students with HFA due to student history of dependency on parents to navigate their educational
system, anxiety, and limited social skills. Hurewitz and Berger (2008) argue that it is the responsibility of high schools to teach students with HFA self-advocacy skills so that they can be better prepared in their transition to postsecondary education.

**Psychiatric Comorbidity**

Research has shown that adults with HFA have a higher rate of psychiatric conditions, particularly anxiety and depressive disorders, compared to the general population (Howlin & Moss, 2012; Joshi et al., 2013) and compared to individuals with ASD with lower IQ (Ghaziuddin, Ghaziuddin, & Greden, 2002). Evidence suggests that anxiety and or depression occurs in up to 65% of adults with HFA (Ghaziuddin, 2002; Green, Gilchrist, Burton, & Cox, 2000; Howlin & Goode, 1998), and adults are likely to be prescribed one or more psychotropic medications for their psychiatric symptoms (e.g., Esbensen et al., 2009; Tsakanikos et al., 2006). Sterling, Dawson, Estes, and Greenson (2012) examined whether severity of ASD symptoms, cognitive ability, and or the presence of other psychiatric disorders are associated with depressive symptoms in 46 adults with ASD (age range 18-44 years). Results showed that 43% of the sample reported significant depressive symptoms on a standardized psychiatric history interview. Participants with stronger social skills (as measured by the social domain on the *Autism Diagnostic Observation Schedule* [ADOS]), higher cognitive ability (average to above average range as measured by the *Wechsler Adult Intelligence Scale*), and higher rates of other comorbid symptoms (i.e., anxiety, obsessive-compulsive disorder) “endorsed significant levels of depressive symptoms” (p. 1015). The authors suggested that adults with HFA with higher cognitive ability and social skills might be more aware of their difficulties with socialization, thus contributing to depressive symptoms.
There are factors in a postsecondary educational environment that may lead to the onset of, or exacerbate anxiety and depressive symptoms in students with HFA, including changes in environment, coping with academic and social expectations, and challenges with living independently (VanBergeijk et al., 2008). According to Klin, McPartland, and Volkmar (2005), anxiety may arise from difficulties in processing social information, and depression may be the result of repeated failures with regard to socialization. In a similar vein, social environments such as the student union buildings, residence halls, and cafeterias may exacerbate feelings of anxiety due to possible sensory dysregulation as well as the general norm to socialize in these particular environments. VanBergeijk and Shatyermman (2005) stated that “environmental stressors for individuals with Asperger’s Disorder likely exacerbate their vulnerability to mood and anxiety disorders” (p. 29).

Unfortunately, students with HFA often have limited insight into their own mental health functioning (VanBergeijk et al., 2008). VanBergeijk and colleagues (2008) recommend that counseling services and resident advisors, as examples, be trained to recognize signs of anxiety and depression in students with HFA so that they can be best supported.

**College or University-Based Programming for Students with High-Functioning Autism**

Supporting students with HFA in postsecondary settings is gaining more public, professional, and research attention (Farrell, 2004; Glennon, 2001; Taylor, 2005; VanBergeijk et al., 2008), although supports and programs for students with HFA are not readily available in postsecondary education to the extent that likely would be beneficial and effective (Camarena & Sarigiani, 2009; Hurewitz & Berger, 2008; Zager & Alpern, 2010). It is argued that colleges and universities are not yet equipped to serve students with HFA based on their unique needs and characteristics of their disability (Hurewitz & Berger, 2008). Postsecondary institutions have
historically provided academic support such as educational accommodations to students with disabilities, but have not typically addressed supports related to life skills or socialization, key deficits in HFA (Hurewitz & Berger, 2008; VanBergeijk et al.; 2008; Zager & Alpern, 2010).

There is increasing demand for postsecondary institutions to develop programs to support students with HFA (Camarena & Sarigiani, 2009; Zager & Alpern, 2010). Many colleges and universities in North America have developed peer mentorship programs for students with HFA and autism support groups (e.g., Camerena & Sarigiani, 2009), though, unfortunately, this is not widespread practice. Zager and Alpern (2010) discuss an exemplary college-based inclusion program for students with HFA (i.e., the Campus-Based Inclusion Model [CBIM]), a partnership between a school district and a local college that provides postsecondary experience to help prepare students with HFA for college and adulthood. In the CBIM, students with HFA fulfill their high school requirements at the college and also enroll in undergraduate courses. Students receive training in the area of self-advocacy and self-determination skills, as well as transportation training to and from college. Vocational experiences (e.g., at the bookstore, cafeteria, library) and social skills training (by speech and language pathology [SLP] majors under the supervision of a licensed SLP) are also embedded within the program. The authors contend that students with HFA benefit from the program, as it facilitates academic, vocational, and social success. It is unclear, to date, whether there is research investigating the effectiveness of CBIM.

Although there is greater attention focusing on supports and programs for students with HFA in postsecondary education, there is limited research investigating the effectiveness of college- or university-based programs (e.g., peer mentorship) and it is unclear if the programs are embedded within an evidence-based framework. Ongoing research and program development is
needed to best address the unique needs of students with HFA in order to optimize their success in college and university.

**Experiences of Students with High-Functioning Autism in Postsecondary Education**

There is a scarcity of research that has investigated the experiences of students with HFA in postsecondary education (Gelbar et al., 2014). Gelbar and colleagues (2014) recently conducted a systematic review of articles looking at the experience of and supports for students with autism enrolled in postsecondary education (20 articles), none of which focused on the lived experiences of students with HFA currently attending college or university. Eighteen studies in the review were case studies and two were experimental in nature, examining a video modeling intervention and a counseling intervention. The authors indicated they used a “liberal definition of case study,” as several of the articles provided “very brief descriptions of the individuals’ experiences” and that the “case often supported the researcher’s theoretical positions” on postsecondary supports and programming for students with ASD (Gelbar et al., 2014, p. 2599).

In review of the literature, two studies were found that investigated particular experiences of students with HFA in university. Madriaga (2010) investigated how eight, first-year university students with Asperger’s Disorder (age range 18-23 years with the exception of one participant who was 30) navigated campus spaces. Through conducting life-history interviews and using grounded theory as the method, findings revealed that the participants experienced sensory dysregulation in spaces such as student union buildings, pubs, and libraries, and experienced social isolation as a result of their sensory issues, as participants would avoid spaces that heightened their sensory dysregulation. Although this study addressed an important issue (i.e., navigating campus spaces) among students with Asperger’s Disorder in postsecondary
education, the study focused exclusively on navigating campus spaces and leaves a gap in understanding the broader lived experiences of postsecondary students with Asperger’s Disorder.

Beardon, Martin, and Woolsey (2009) used an electronic open and closed-ended survey to investigate the perceptions of 238 students with Asperger’s Disorder or HFA with respect to challenges and support they receive in college or university. Findings showed that participants experienced difficulties with social interaction, academic functioning, and concern regarding others’ understanding of Asperger’s Disorder and HFA. This particular study added to the understanding of challenges that students with Asperger’s Disorder encountered in postsecondary education, an important area of investigation, but did not provide a more global, in-depth exploration of student experiences, which could reveal both positive and negative aspects of postsecondary educational experiences. The study included participants who self-identified with having Asperger’s Disorder or HFA, some of whom did not have a formal diagnosis. Although the investigation was not a rigorous exploration of the broad postsecondary student experience, it did document the extent to which a significant sample of students with Asperger’s Disorder, or students who thought they had the disorder, experienced challenges in their postsecondary studies.

**The Present Study**

Although professional and research attention in the area of adults with ASD is gaining further attention, studies related to adults with ASD is still limited with respect to diagnosis, prognosis, treatment, interventions, and long-term outcomes (Fombonne, 2012; Howlin & Moss, 2012). Further, there is little rigorous research examining the experience of, or the needs of students with HFA in postsecondary education (e.g., Gelbar et al., 2014). Much of the research focuses on the transition process for students with HFA to postsecondary education (e.g.,
Chiang, Cheung, Hickson, Xiang, & Tsai, 2012; Geller & Greenberg, 2010; Hendricks & Wehman, 2009; Kapp, Gantman, & Laugeson, 2011; Roberts, 2010; Zager & Alpern, 2010), and very few investigations examine the experiences of students currently attending college or university (Madriaga, 2010; Beardon et al., 2009). Although the former provides critical and much needed information with respect to supporting students with HFA and their families in the transition process, the need persists to conduct research in the area of young adults with HFA currently enrolled in postsecondary education in order to better understand their experiences.

Unfortunately, less is known about the experiences and needs for students with HFA in postsecondary settings in comparison to other disabilities, such as Learning Disorders, Attention-Deficit/Hyperactivity Disorder (ADHD), and physical disabilities (Hurewitz & Berger, 2008; Camarena & Sarigiani, 2009). The unique difficulties that students with HFA experience may present significant challenges in college or university (Adreon & Durocher, 2007; Camarena & Sarigiani, 2009; VanBergeijk et al., 2008), and appropriate supports and accommodations are needed to assist these students in experiencing academic success and greater independence (Glennon, 2001).

Understanding the experiences of attending postsecondary education from the perspectives of students with HFA who are already attending college or university can provide valuable insight into their functioning, including successes and challenges (Camarena & Sarigiani, 2009). As Camarena and Sarigiani (2009) assert, “the insights drawn from the current generation of college students are helpful in understanding how to best facilitate the educational aspirations of adolescents with ASD” (p. 117). Furthermore, Gelbar and colleagues (2014) assert that further research in the area of ASD and postsecondary education is a necessity, and
interviewing college students with HFA is a way to understand their experiences in postsecondary education.

To that end, the present study addressed a clear gap in the literature, that is, research that establishes understanding of the experiences of students with HFA attending college or university. This study adds to the literature in several ways in that it explores the experiences of students with HFA in postsecondary education in a global way and provides insight into aspects of college and university life meaningful to students with HFA. Second, this study includes students with HFA and Asperger’s Disorder who have confirmed diagnoses; and third, includes the voices of participants in various levels of their postsecondary educational career. To the best of the researcher’s knowledge, there has not been a study published that has investigated, qualitatively, the global experiences of students with HFA in higher education, making this study a first of its kind. Using the qualitative approach of interpretive phenomenological analysis as the research method (Smith et al., 2009), this study investigated the meaning of the lived experiences of 12 students diagnosed with HFA or Asperger’s Disorder attending college or university.

Conducting qualitative research allows for a rich and deep understanding of phenomena and human processes (Bolte, 2014). Using a qualitative method in this study allowed the researcher to give a voice to a population that is often “missed or misunderstood” in education (Scuitto, Richwine, Mentrikoski, & Niedzwiecki, 2012, p. 178). The research question was focused on the participants’ experiences, and was meant to be “exploratory, not explanatory” (Smith et al., 2009, p. 47). The focus was on meaning and process. Accordingly, the following research question was the focus of this study:

1) What is the meaning of the lived experiences for students with high-functioning autism or Asperger’s Disorder attending college or university?
CHAPTER THREE: Method

To investigate the meaning of the lived experiences of attending college or university for students with HFA, the qualitative approach of interpretive phenomenology analysis (IPA; Smith et al., 2009) was used. Engaging in qualitative inquiry allows participants to describe their experiences through their own voice (Lopez & Willis, 2004). Qualitative inquiry can be useful in reducing assumptions that may be made by professionals and assist in closing a possible gap between knowledge and reality (Beardon et al., 2009; Wertz, 2005). As discussed earlier, what is known about the needs of students with HFA in college and university is largely derived from theoretical positions and professional clinical expertise, rather than information obtained from research studies (Adreon & Durocher, 2007). The method described here allowed the researcher to engage college and university students with HFA in describing their experiences of attending postsecondary education, the phenomenon in question.

This chapter reviews the theoretical and epistemological approach to the research study, provides a description of the method and research procedures, and describes steps taken to ensure credibility and trustworthiness of the research findings. Unique ethical considerations are also discussed.

The Theoretical Approach of Phenomenology

Phenomenology, in general terms, is interested in understanding the way in which individuals experience their surroundings and interactions with objects and people through conscious acts (Giorgi & Giorgi, 2008). It involves studying the lived experiences of others through their perspective and “putting oneself in the place of others” to better understand a phenomenon (Crotty, 1998, p. 83).

The focus of this section is the work of two phenomenology philosophers, Edmund Husserl and Martin Heidegger, and how their work is related to this study. Phenomenology was
originally described as a descriptive approach by Husserl but was later challenged by his student Heidegger who described phenomenology as more interpretive in nature (Smith et al., 2009). In Husserl’s terms, one can describe experience by its “particular and essential features” (Smith et al., 2009, p. 14). An underlying essence of Husserl’s descriptive phenomenology is that “there are features to any lived experience that are common to all persons who have the experience” and, as such, a generalized description can be obtained (Lopez & Willis, 2004, p. 728). Husserl argued that descriptive phenomenology was possible through the researcher suspending or bracketing all prior knowledge (e.g., expertise, biases) in order to gain insight to the lived experience of the participants (Lopez & Willis, 2004). However, it was the philosophical work of Heidegger, Husserl’s student, who challenged this belief. Heidegger argued phenomenology was largely interpretive in nature, converging with hermeneutic principles (Lopez & Willis, 2004; Smith et al., 2009). Hermeneutics is an interpretive method for surfacing or eliciting what is “hidden in human experience or human relations” (Spielgelberg, 1976, p. 728). It involves looking for meaning in participants’ experiences through their narratives, even though the meaning may not always be known, or conscious, to the participants (Lopez & Willis, 2004).

Interpretive phenomenology has underlying premises that guide the process of inquiry and distinguish this approach from other forms of phenomenology. One underlying premise is that experiences are ultimately influenced by the world in which individuals live, also known as *being-in-the-world* (Lopez & Willis, 2004; Smith et al., 2009). According to Heidegger, participants’ experiences are influenced by social, cultural, and systemic factors, which cannot be separated from human experiences. Thus, in interpretive phenomenology, the researcher and participants interpret the participants’ narratives in consideration of such factors. An additional premise of interpretive phenomenology is that previous knowledge or expertise of the researcher
is valuable in guiding the research process and engaging in meaningful qualitative inquiry (Lopez & Willis, 2004). Contrary to Husserl’s beliefs, Heidegger argued it is impossible to entirely bracket predisposed knowledge or thoughts, and that it is the researcher’s expertise that ultimately led or guided the development of the research question regarding the particular phenomenon at hand (Lopez & Willis, 2004). Although it is important for the researcher to position herself in the research and make explicit how her knowledge will be incorporated into the inquiry, interpretive phenomenologists who engage in hermeneutic practice argue bracketing one’s thoughts or knowledge, as described by Husserl, is inconsistent with a interpretive phenomenological framework, as bracketing can only be partially achieved (Lopez & Willis, 2004; Smith et al., 2009). See the *Key Factors in Interpretive Phenomenological Research* section below for more information on the notion of bracketing in this study.

According to Smith and colleagues (2009), IPA is best endorsed through a social constructionist paradigm, but to “a less strong form of social constructionism,” as IPA also converges with symbolic interactionism (p. 196). The perspective of social constructionism posits, “all knowledge…is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context” (Crotty, 1998, p. 42). In relation to this study, the participants with HFA construct meaning of their experiences of attending college or university through their interactions with the social world around them, experiences that are influenced by social, cultural, and systemic factors.

IPA is a relatively recent methodological development that has gained popularity in psychology and other social and health science disciplines (Smith et al., 2009). IPA is a method that allows for exploration of a research question in a comprehensive, yet flexible manner. It is
inductive in nature, allowing for themes to arise through the accounts of the participants (Smith, 2004). Importantly, in IPA, the emphasis is on understanding individual experiences and the meaning of participants’ experiences in order to describe a phenomenon (Smith et al., 2009). For these reasons, Smith and colleagues (2009) approach to IPA was the method chosen for this study, as it is through the participants’ meaning of their lived experiences of attending college or university that we can begin to further understand what it is like for students with HFA attending postsecondary education. The following section describes IPA in detail.

**Interpretive Phenomenological Analysis**

Interpretive phenomenological analysis is an approach that allows researchers to examine the meaning of personal and social experiences of individuals in a detailed way and how individuals make sense of a particular event (Eatough & Smith, 2008; Smith & Osborn, 2003). Such an event or process is referred to as the “phenomenon” (Smith et al., 2009). IPA follows an idiographic method where the researcher is concerned with participants’ individual experiences in order to better understand a phenomenon (Smith et al., 2009). As such, purposive sampling is the norm in IPA research, with studies representing a smaller, homogenous sample size (Eatough & Smith, 2008; Smith & Osborn, 2003; Smith et al., 2009).

In this study, using IPA involved the participants sharing their stories, that is, their experiences of attending college or university as a student with HFA, the phenomenon in question. The participants described their experiences of attending postsecondary education through their own voice, and were viewed as experts on their experiences. Participants in this study offered the researcher “an understanding of their thoughts, commitments, and feelings” about their personal and social experiences through “telling their own stories” of attending
college or university, “in their own words, and in as much detail as possible” (Reid et al., 2005, p. 20).

IPA studies are dynamic in nature, where the researcher plays an active role in interpreting the meaning of the participants’ lived experiences (Smith & Osborn, 2003). The interpretive process includes a two-stage approach, also known as a double hermeneutic (Smith et al., 2009; Smith & Osborn, 2003). One hermeneutic occurs during the interviews with the participants and involves the participants’ attempt to make sense of, or interpret the meaning of their experiences as they reflect on their experiences of attending college or university. The other hermeneutic involves the researcher’s attempt to make sense of, or interpret what the participants’ are processing regarding their experiences of attending college or university during the interviews as well as throughout data analysis, hence the double hermeneutic (Smith et al., 2009; Smith & Osborn, 2003).

As part of the double hermeneutic process, the researcher tries to better understand or get close to the participants’ social and personal worlds; however, this cannot be done directly or completely, as access is affected by the researcher’s own thoughts, experiences, and predispositions (Smith et al., 2009). Thus, the researcher adopts a “broadening” of her viewpoint, open to achieving a deeper understanding of the participants’ experience (Haverkamp & Young, 2007, p. 277). The broadening of the viewpoint is an ongoing process where the researcher reflects on her predispositions and influence that could affect the interpretive process. This was primarily accomplished through writing a personal reflection, engaging in peer debriefing sessions, and using both empathic and questioning hermeneutics during the interviews in efforts to better understand what the experiences are like from the perspectives of the participants (Smith & Osborn, 2003). More information regarding the personal reflection and peer debriefing
sessions is included below in this chapter. Interpretive phenomenological research involves key factors that the researcher needs to take into consideration while conducting a study, which are presented in the following section.

**Key Factors in Interpretive Phenomenological Research**

The strength of an IPA study depends very much on the quality of the narratives provided by the participants, the ability of the researcher to maintain openness to the lived experiences of the participants, and the researcher’s awareness of her potential influence during the interviews and interpretation of the data. First, it is important that the participants have lived the experience of the phenomenon and are able to discuss their experiences at length, as this allows for a rich and detailed account of their lived experiences (Wertz, 2005). This factor was taken into significant consideration while recruiting participants and is further discussed in the *Participants* section of this dissertation.

Second, it is important for the researcher to be cognizant of any pre-judgment she may have of the phenomenon in question and reduce epoché, also known as bracketing or suspending one’s “natural attitude” so the researcher can be present and mindful of the information being conveyed by the participants (Creswell, 1998, p. 52; Crotty, 1998; Gubrium & Holstein, 2000). As discussed earlier, Heidegger argued that bracketing one’s knowledge is nearly impossible in interpretive phenomenology; however, it is still important for the researcher to make explicit how her predisposed knowledge will be introduced in the study and to be aware of any biases (Lopez & Willis, 2004). The researcher needs to identify and decide, *a priori*, the extent to which and how she will be involved in the interpretive phenomenological process, including what way her experiences will be introduced and included in the study (Creswell, Frey, & Fontana, 1993). To that end, the following section is a personal reflection regarding the researcher’s background
as it is related to the study and discussion of the possible influences her experiences may have on the process of inquiry.

**Personal Reflection**

Prior to conducting this study, the researcher recognized that her experience as a graduate student specializing in ASD might influence the process of inquiry. Similarly, she recognized that being a university student herself might influence the way the data are interpreted. Further, her experience as a clinician and former coordinator of the UBC Adult Assessment Clinic certainly provided insight into the needs of postsecondary students with disabilities, which could further influence the interpretive process. The recognition of these factors prompted awareness and sensitivity on behalf of the researcher throughout the research study.

First, the researcher has had substantial graduate clinical training in the area of ASD. Consistent with Heidegger’s philosophy, it was through the researcher’s knowledge and experience in the field where she identified a clear gap in the literature: the need to support young adults with HFA while attending postsecondary education. Prior to developing the research question for this study and while the researcher completed her Masters of Arts internship at the Provincial Outreach Program for Autism and Related Disorders (POPARD), she often pondered, “What happens to students with ASD after high school? Where do they go? What do they do? What supports are available?” In fact, these thoughts initially emerged while the researcher was in high school and observed her father who is a psychologist provide assessment and consultation services to young adults with developmental disabilities. During this time, she often reflected on the importance and need to support young adults with developmental disabilities, and admired observing a school psychologist providing psychological services for students with disabilities across the lifespan.
There were aspects of the researcher’s clinical training and background that fostered rapport with the participants, though there were also aspects of her training that led to preconceived ideas regarding the experience of students with HFA attending college or university. A critical component of an IPA study is that the participants are willing and able to speak at length and in-depth about the experience of a particular phenomenon (Smith et al., 2009). As such, it is important that the researcher develops good rapport and establishes a sense of trust with each participant. With respect to this study, the researcher used her clinical knowledge to help establish rapport with the participants. For example, she facilitated predictability by providing participants a verbal outline of what each meeting would entail (as a means to reduce potential anxiety), prefaced sensitive questions accordingly (e.g., “I’m going to ask something that might be uncomfortable…”), and provided ample reminders of scheduled meetings. She also provided updates with respect to the progress/stages of the research via electronic mail so the participants were not left wondering what was “next” after their initial interview.

Although the researcher used her clinical training to help establish rapport with the participants, her clinical background in ASD including being a certified UCLA PEERS provider and her experience as a clinician and coordinator in the UBC Adult Assessment Clinic also led to preconceived ideas (e.g., successes and challenges) of college or university experiences that may be more germane to students with HFA. As such, she was cognizant of minimizing these assumptions during the interviews and interpretive process. For example, prior to the interviews with the participants, the researcher prompted herself to remain open and inquisitive during the interviews, and did so by using both empathic and questioning hermeneutics as a way to engage
in non-judgmental active listening. The researcher also used paraphrasing and sought clarification when needed.

Second, the researcher recognized that her own experience as a university student may influence the process of inquiry, for example, discrediting certain experiences or giving more attention to particular aspects of a university experience. Thus, she used her researcher’s journal to write about her own experience as a university student so that her experience came into awareness. Also, the researcher kept a detailed journal of her thought process that occurred before, during, and after each interview, and made particular note of information that she believed could influence the inquiry and interpretative process. Any information that elicited feelings of questioning or uncertainty was debriefed with the researcher’s supervisor or peer reviewer.

Section Summary

In summary, using an interpretive phenomenological approach is particularly useful when a researcher is investigating the meaning of the lived experiences of individuals about a particular phenomenon being studied (Creswell, 1998), in this case, the experiences of students with HFA attending college or university. This approach is an appropriate method when the phenomenon under investigation has not been well studied. In almost any area of scientific study, important information often emerges from initial, careful observation and description of a phenomenon. Given the paucity of research examining the needs of students with HFA in college and university, it is critical that additional research is conducted with respect to understanding and addressing the needs of students with HFA in postsecondary education (Adreon & Durocher, 2007; Nevill & White, 2011). In a similar vein, it is important that individuals with disabilities feel empowered to share their views and have their voice heard (Carrington, Papinczak, &
Templeton, 2002), because too often the perspectives of individuals with disabilities are presumed rather than solicited. This particular method assisted in filling the gap in the literature by gaining a deeper and richer understanding of the phenomenon in question: the meaning of the lived experiences of students with HFA autism attending college or university. The foci of the following section are on the research procedures for this study, including information related to the research participants, inclusion criteria, recruitment, the screening process, and data collection.

**Research Procedures**

**Participants**

Interpretive phenomenological analysis is “deeply committed to the idiographic method” and purposive sampling, and as such, a smaller, homogenous sample size is the norm, ranging from 1 to 30 with most studies including around 8 to 12 participants (Eatough & Smith, 2008, p. 186; Smith & Osborn, 2003; Smith et al., 2009). To that end, participants for this study included 12 students (9 males and 3 females) diagnosed with either HFA or Asperger’s Disorder who were enrolled in a postsecondary institution (i.e., college or university) in British Columbia. ASD is approximately five times more common in males than it is in females (CDC, 2014), and as such, it is not surprising that more males participated in this research study. The researcher recruited the first 12 participants who expressed their interest in participating in the study; it is possible that more females could have been recruited if the time window for recruitment was longer. The following sections provide detailed information regarding participant recruitment, including the researcher’s procedures that were undertaken to solicit and select participants who could provide describe the phenomenon of interest.
**Inclusion Criteria**

There were four main inclusion criteria for this study. First, the participants were required to be college or university students with a formal diagnosis of ASD or Asperger’s Disorder rendered by a registered psychologist, paediatrician, or child psychiatrist. To confirm diagnoses, each participant provided a copy of their diagnostic assessment report to the researcher who then reviewed each report in detail. Second, it was required that the participants self-identified as a person with HFA or Asperger’s Disorder. This was a critical inclusion criterion in order for the findings to be an accurate reflection of the lived experiences of students with HFA. Third, the participants needed to be enrolled in either a non-modified two-year diploma certificate program or a four-year bachelor’s program. Initially, this inclusion criterion was limited to undergraduate students; however, one graduate student participant was included in the study due to his strong and compelling interest to participate. Lastly, to be included in the study, the participants were required to engage in one detailed interview speaking at length regarding their lived experiences of attending college or university and a second follow-up interview. The participants’ ability and willingness to engage in an in-depth interview was crucial, as a core aspect of IPA involves obtaining a rich and detailed account of lived experiences in a meaningful way (Eatough & Smith, 2008; Smith & Osborn, 2003). The four inclusion criteria were established to help in careful and purposive recruitment of participants. The researcher solicited several recruitment sources in British Columbia, which are described in detail below.

**Recruitment**

Participants were recruited from several sources in British Columbia including disability offices at postsecondary institutions, a university clinic, and community agencies providing services to individuals with ASD. Initially, the researcher contacted Access and Diversity (a
centre for students with disabilities) at The University of British Columbia (UBC) to create a research relationship on campus. After providing a summary of the study and notice of Behavioral Research Ethics Board (BREB) approval, Access and Diversity agreed to distribute the study advertisement (see Appendix B) to students with HFA registered with their office. Following, a memo including a description of the research study as well as the study advertisement was electronically delivered to disability offices at select colleges and universities in Metro Vancouver and Vancouver Island by Access and Diversity. As part of the memo, the disability offices were asked to contact students with HFA who were registered with their respective disability offices and provide them with the study advertisement. The disability offices were also asked to post the study advertisement in their offices so that prospective participants could contact the researcher if they had interest in participating in the study.

For this study, two postsecondary institutions (one college, one university) in Metro Vancouver and two postsecondary institutions on Vancouver Island (one college, one university) distributed the advertisement to prospective participants via electronic mail. Although this study had been approved by BREB, two interested postsecondary institutions required the researcher to complete ethics applications specific to their respective institutions prior to contacting their students. After completing their ethics applications and receiving confirmation of study approval, the respective postsecondary institutions distributed the study information to their students. Prospective participants who were interested then contacted the researcher via electronic mail expressing their interest.

Second, the researcher asked the Adult Assessment Clinic at the Psychoeducational Research and Training Centre at UBC to contact potential participants with diagnoses of HFA who were clients at the clinic and previously provided permission to be contacted for research
purposes. Similarly, the researcher asked POPARD to distribute the study advertisement. The
ABLE Developmental Clinic in Vancouver was also contacted and the director agreed to
distribute the study advertisement to clients with HFA or Asperger’s Disorder.

Other community agencies and individuals who were involved in the recruitment process
included psychiatrists working with adults with HFA or Asperger’s Disorder who forwarded the
study advertisement to their clients. Further, Autism Community Training- British Columbia
(ACT-BC) and the Autism and Developmental Disorders Lab (ADDL) at Simon Fraser
University (SFU) provided a link to the study advertisement on their social media outlets. The
study was also advertised in SFU’s ADDL annual newsletter.

Participants who were interested in the study contacted the researcher either through
electronic mail or telephone. Participants coming forward with their interest was an important
step in the research, as recruiting participants with HFA, a low-incidence population, could
present challenges by virtue of the disability. For example, expressing interest in a study involves
some degree of self-awareness and identifying with having a particular disorder. Similarly, the
social challenges and higher rates of anxiety in this population (Ghaziuddin, 2002; Green,
Gilchrist, Burton, & Cox, 2000; Howlin & Goode, 1998) may deter a young adult with HFA to
participate in a study that involves disclosing personal information to an unknown person for a
length of time. To that end, the screening process was a fundamental step in recruitment to
ensure prospective participants were indeed interested in participating in the study and that they
met inclusion criteria for this study.

**Screening Process**

A critical phase in this study was the screening process in order to ensure participants
were eligible to participate in the study and could speak at length regarding their experience of
attending college or university, as a central principle of IPA is for participants to tell their story to help reveal the experience of a phenomenon (Smith et al., 2009). The screening process included a telephone-screening interview conducted by the researcher, which entailed providing a brief summary of the purpose of the study and then asking each participant seven concise questions regarding their eligibility and willingness to participate in the study (see Appendix C). Prospective participants who were not comfortable speaking on the telephone were screened via electronic mail. As part of the screening interview, the participants were asked if they are currently enrolled in college or university, the name of the institution, their current status (i.e., academic year), if they self-identify with having HFA or Asperger’s Disorder, if they have a formal diagnosis of ASD or Asperger’s disorder, and whether they are willing to participate in one 60-90 minute interview and a follow-up interview of 30 minutes regarding their experience of attending college or university. Attending postsecondary education had to be a meaningful experience for the participants, as IPA requires the participants to provide a meaningful in-depth account of their experience (Wertz, 2005). As such, during the screening interview, the researcher emphasized the need for participants to speak at-length and in-depth about their experience of attending college or university, and explicitly asked if they are able to engage in an interview for about one hour. Fortunately, all the prospective participants that were screened expressed interest to participate in the study and met the inclusion criteria.

Informed Consent

Written informed consent (see Appendix D) was obtained from each participant at the beginning of the first interview. The researcher reviewed the informed consent form with each participant in detail, including general information about the research study, benefits and risks associated with participating in the study, the option to withdraw at any point during the study,
and the contact information for the principal investigator and researcher. As well, participants were informed that confidentiality would be protected at all times and pseudonyms would be used in place of actual names to ensure anonymity in the study. Further, the names of the postsecondary institutions were not provided in this dissertation to further protect anonymity. Ample time was given for questions or comments, after which the participant was asked to sign the consent form. After providing written consent for participation in the research, each participant also provided written consent for audiotaping of the interviews (see Appendix E). All interviews were audiotaped so that a professional transcriber could transcribe the interviews verbatim to allow for accurate data analysis. The transcriber signed a Confidentiality Agreement for Transcription Services form (see Appendix F). All data was stored in a locked cabinet in a locked office at the Psychoeducational Research and Training Centre at UBC.

**Data Collection**

This section describes the data collection procedures, which included obtaining background information and engaging in in-depth interviewing, the data collection method for this study. According to Smith and colleagues (2009), data collection in IPA studies usually includes semi-structured interviews so the researcher can obtain a sense of the participants’ experiences in a flexible and in-depth manner. Further, engaging in semi-structured interviews allows the participants to play an active role in what they choose to convey, in depth, regarding the phenomenon (Smith et al., 2009). As such, in-depth interviewing was the source of data for this study, as Smith and colleagues contend that in-depth interviewing “may be the best means of accessing” the meaning of participants’ experiences of a particular phenomenon (p. 56).

At the beginning of the interviews, the researcher completed a Background Information Form with each participant (see Appendix G), which included information regarding their age,
diagnostic classification, age of diagnosis, any comorbid diagnoses, current medications, the
college or university they attend, and their academic program and year of studies. Additionally,
participants were asked what supports they are currently receiving (e.g., educational
accommodations, peer mentor), supports they received in high school, their current living
situation (e.g., campus residence, at home), and whether they are registered with their disability
office on campus. Obtaining background information provided the researcher with a general
overview of who was participating in the study. It also provides the reader with context regarding
each participant to assist in determining the transferability of the findings to similar contexts or
situations based on shared characteristics, which is a central outcome of IPA research (Carlson,
2010; Creswell, 2007).

**In-Depth Interviews.** In IPA studies, the goal of the in-depth interviews is for the
participants to be storytellers rather than respondents to questions (Eatough & Smith, 2008). It is
an opportunity for participants to share their experiences of attending college or university in
their own words, and for the researcher to listen as the participants lead the interviews (Smith et
al., 2009). That being said, the interviews in this study followed a semi-structured interview
schedule (see Appendix H) to not only facilitate natural dialogue with the participants but to also
maintain purpose in the interviews such as facilitating discourse related to the research question
(Smith et al., 2009). Engaging in semi-structured interviews provided flexibility in the
interviews, allowing each participant to talk about their lived experiences recognizing that they
were the expert on the topic being investigated, yet also allowing the researcher to help guide the
interview at times (Eatough & Smith, 2008; Smith & Osborn, 2003). The latter was particularly
important as individuals with HFA can have difficulties with communication, particularly
difficulty engaging in reciprocal conversation, understanding the perspective of others, providing
context and elaborations, and the tendency to perseverate on preferred topics (e.g., Laugeson et al., 2011; Nordin & Gillberg, 1998). Despite these difficulties, the participants in this study engaged in meaningful dialogue, described their experiences in-depth and with detail, and seldom required re-direction by the researcher in their interviews.

The interview process included one in-depth, in-person initial interview with each participant followed by a second, shorter interview in person, while ensuring the participants were well informed of the process in efforts to develop good researcher-participant rapport. The initial interviews were conducted in a confidential location determined by each participant in order to help reduce any feelings of unease or anxiety associated with participating in an interview with an unfamiliar person (Smith & Osborn, 2003). The researcher offered the participants suggestions of locations (e.g., a private group study room in the campus library, at the disability centre on campus), with most participants choosing to book a group study room in the library on their campuses. Prior to conducting the interviews and during the telephone-screening interview, the researcher was mindful of facilitating as much predictability with the interview process by providing each participant a general overview of what the initial interview would entail. This was particularly critical, as students with HFA can experience discomfort or unease (e.g., anxiety) when faced with new environments or people, changes in expectations, or lack of predictability (e.g., Aspy & Grossman, 2007).

The initial interviews had a mean length of 75 minutes (range of 24 - 117 minutes) and the length of the transcripts ranged from 12 - 42 pages. To answer the research question, the interview schedule was designed to be open-ended, though specific to areas of a college or university experience. To elicit a story-telling approach, the first interview question was designed in such a way for the participant to lead the interview (i.e., “From the time you started
university until now, what has it been like for you?”). Subsequent questions were more focused in nature, asking the participants to speak to their academic and social experiences, as examples.

Although the participants initially led the interviews after the first prompt, the researcher was actively part of the process, as she tried to make sense of and interpret the meaning of the participants’ experiences of attending college or university as a student with HFA as they engaged in their story telling. This was accomplished by using both empathic and questioning hermeneutics (Smith et al., 2009). For example, the researcher asked the participants to elaborate if their discourse was not entirely clear, or would question the participants when they provided contradictory information (e.g., “I heard you said that you felt defeated while interacting socially with others but then also indicated that you don’t mind not having friends…what do you mean by that?”). The researcher only probed if she felt the participants were able to elaborate further or if clarification was needed (i.e., used judgment). There were times where the researcher did not probe or engage in questioning hermeneutics, for example, when she felt a particular area was not entirely meaningful to the participant (i.e., when the participant did not speak in-depth or descriptively about a particular experience). In this case, the researcher moved on to a subsequent question (e.g., “OK that was helpful information. Let’s move on. Tell me about your experience interacting with the disability office on campus”).

The flow of the interviews was largely open, allowing for tangential thoughts and comments to arise, as such comments can often be valuable in understanding the meaning of the participants’ lived experiences of the phenomenon (Smith et al., 2009). However, at times, the researcher re-directed the participants if she felt the discourse was not entirely relevant to the research question at hand. Generally speaking, the initial interviews followed a natural dialogical course with minimal need for the researcher to refer to her interview schedule, as most
participants naturally addressed the areas of inquiry anticipated on the interview schedule. Upon completion of each interview, the audio files from the interviews were electronically sent (password protected) to a professional transcriptionist to transcribe verbatim. Using a professional transcriber helped to ensure accurate transcription of the audio content. The transcriptionist selected for this study is a professional who has considerable experience in transcribing audio files for qualitative research studies at UBC and was referred to the researcher by a UBC professor.

The second, follow-up interviews were shorter in duration and ranged from 30-45 minutes each. The interviews were conducted in person or via electronic mail (for one participant) at a location convenient for the participants (i.e., a group study room in their university’s library; in an office at the disability centre on campus). The second interview was conducted after all the participants were initially interviewed and after the researcher concluded her initial data analyses. The purpose of the follow-up interview was to conduct member checks, which is the process of verifying whether the researcher’s interpretation of the data is a reasonable and accurate account of the participants’ experiences of attending college or university (Creswell, 2007; Creswell & Miller, 2000). During the follow-up interview, the researcher verbally provided each participant with a step-by-step breakdown of his or her transcript analysis. Then, the researcher asked each participant to read a one-page interpretive summary of his or her transcript to determine if the researcher’s interpretation of the interview was reasonable and accurate. Additional information regarding the second interview and member checking process is included below in the Ensuring Scientific Rigour and Credibility of the Research Findings section of this chapter. An additional purpose of the second interview was for the participants to provide additional comments or ask questions regarding the research process.
Each participant received a thank you card and $20.00 for participating in the initial interview and $10.00 with a thank you card for participating in the second, shorter interview.

**Data Analysis**

The data analysis process in IPA research is systematic, iterative, and interpretive with particular analytic attention given to the detail and depth of the data (Smith et al., 2009). The researcher tries to make sense and interpret the participants’ experience of the phenomenon by closely examining every aspect of the interview transcripts in a systematic and rigorous, yet flexible way (Smith et al., 2009). As such, analysis is a joint project between the researcher and the participants, as the researcher is interpreting what the participants conveyed in the interviews (i.e., the double hermeneutic). The analysis is idiographic where transcripts are analyzed case-by-case, starting with a detailed analysis of the first interview (Smith & Osborn, 2003). Each analyzed transcript informs the analysis of subsequent transcripts, as the researcher looks for both particular and shared experiences (e.g., themes) across participants (Reid et al., 2005; Smith et al., 2009).

The transcripts in this study were analyzed in the order in which the participants were interviewed. The data analysis process involved a macro- and microanalysis (R. A. Young, personal communication, July 11, 2013) while following Smith and colleagues (2009) approach to data analysis in IPA research. Further details regarding the data analysis procedures are provided below.

**Macroanalysis**

The macroanalysis involved reading a transcript in its entirety while listening to the original audio file to ensure accurate transcription of the data and obtaining a general sense (i.e., “gestalt”) of the participant’s experiences of attending college or university as a student with
Macroanalysis allowed for the researcher to be actively engaged in the data and enter the participant’s lived experience of attending college or university (Smith et al., 2009). This also allowed the researcher to become familiar with the interview data. Then, the transcript was read a second time in its entirety as a way for the researcher to obtain a general impression of the participant’s core experiences of attending college or university as a student with HFA (Smith et al., 2009). The entire transcript was treated as data, and no part of the document was omitted, ignored, or given special attention (Smith & Osborn, 2003). Based on the review of the audio file and thorough readings of the transcripts, the researcher used her initial impressions to write 3-4 sentences to reflect the participant’s core experiences regarding the phenomenon. The next stage of data analysis, microanalysis, was more focused on the details of the participant’s experiences of attending college or university.

**Microanalysis**

The microanalysis focused on a close, detailed exploration of the data in each participant’s transcript (Smith et al., 2009). As the researcher read the transcript for the third time, she assigned a descriptive code word (e.g., feeling supported) to each meaning unit (a meaning unit was a body of text specific to a topic; the meaning unit changed when the topic changed). The code words were assigned based on the researcher’s interpretation of what the participant was trying to convey regarding their experience of a particular account (e.g., the code word described what it “was like” attending college or university for the participant; Smith et al., p. 83). The code words were entered electronically on the transcript using the comment function in Microsoft Word. As the researcher assigned codes to meaning units, she highlighted supporting quotes that represented and illustrated the meaning unit in a vivid and detailed way, as a subset of quotes or “extracts” would eventually be selected to represent themes and
subthemes in the research findings. After completing this process, the researcher read the transcript a fourth time to reduce and revise codes (e.g., collapsing similar code words into one code word).

A final list of code words was generated on a separate spreadsheet for the first transcript, which served as a platform of codes for the next transcript. Then, the list of codes was compared to the 3-4 core experience statements that were generated during the macroanalysis to ensure congruency between initial impressions and the generated codes. If the codes were not congruent with the core experience statements, the researcher would re-read the transcript and the codes, and determine where the inconsistencies were. Fortunately, the codes were congruent with the core experience statements for all the participants in this study. Following this process, the researcher wrote a one-page summary on the participant’s core experience of attending college or university as a student with HFA, which was later used as a key element in the member checking process. Subsequently, the highlighted quotes were extracted (i.e., copy and pasted) from the transcript and moved to a new file that was named with the code word (e.g., feeling supported, wanting to contribute). This process aided in the development of emerging themes and subthemes, which is described in detail later in this chapter.

Visual Representations of the Data

Following the macro- and microanalyses of the first case, the researcher visually represented and organized the codes from the first transcript so that emerging themes and subthemes became better discernable (Smith et al., 2009). Initially, the data from the first transcript was organized by way of a graphic organizer. Graphic organizers are a helpful tool to visually organize information into themes or groups. The codes were listed on a piece of paper and then organized into emerging, tentative themes and subthemes (e.g., experiencing support,
sense of appreciation). Then, the codes were transferred to larger chart paper (also referred to as charting). Next to each code from the first case was the pseudonym of the first participant.

**Analysis of Subsequent Cases**

After completing the analysis of the first case, the macro- and microanalyses and visual representations of the data were completed for all remaining eleven transcripts using the same data analysis process. Code words that were generated in the first transcript were used in subsequent transcripts if the meaning units were the same in subsequent transcripts. When new themes emerged in the subsequent transcripts, new code words were assigned to their corresponding meaning units, and the new code words were added to the final charting. For each code, the participants’ pseudonyms were listed on the chart paper so the researcher could visually see how many participants experienced a particular theme.

**Saturation of Research Findings**

Saturation refers to the redundancy of findings that answer the research question (i.e., when themes start to repeat themselves; Wertz, 2005). Initial interviews are typically conducted until thematic saturation across participants occurs. In this study, no new themes emerged from the participants’ experiences after the sixth interview; therefore, it was determined by the researcher that thematic saturation was reached. However, additional interviews were already scheduled with participants who expressed their desire to participate in the study, and as such, 12 interviews were conducted. No new themes emerged from the experiences of the 7th through 10th participants. Interestingly, 1-2 new themes emerged with the 11th and 12th participants; however, the themes were considered unique to these individuals and were not represented by the other participants, and as such, it was still determined that saturation was reached after completion of the sixth interview.
The case-by-case macro- and microanalyses led to the development of emerging themes and subthemes in the data. Formulating emerging themes and subthemes followed a step-by-step process, which is described below.

**Development of Emerging Broad Themes and Subthemes**

The development of the broad and subthemes involved a multi-step process, working with a large data set of rich quotes that were extracted during the microanalysis of each transcript in order to make files of emergent themes (Smith et al., 2009). To develop broad themes, the researcher closely examined each file of emergent themes. The files were helpful in that the researcher could look at the internal consistency of each emergent theme (i.e., do the extracts “hang” together; is there a “magnet” pulling the extracts towards the theme?”). Then, the researcher read and re-read each file to discern emerging subthemes. For example, Experiencing Support emerged as a broad theme, and subthemes included various sources of support including Support from Professors, Feeling Supported by Community and Global Systems, and so on.

The development of broad and subthemes was a joint effort that involved both the participants’ quotes and the researcher’s interpretation of the participants’ experiences (Smith et al., 2009). For example, the researcher’s title of a theme may not have been directly communicated by a participant, but at the same time, the theme name is “intimately connected” to what the participant conveyed regarding the meaning of the lived experiences of attending college or university as a student with HFA (Smith et al., 2009, p. 92).

For a broad theme to emerge, 9 out of 12 participants had to have talked about the theme in a rich and in-depth manner, also known as the recurrence of themes across participants. This is in line with Smith and colleagues (2009) recommendation of at least half of the participants needing to speak to a theme for it to be classified as a broad theme.
Ensuring Scientific Rigour and Credibility of the Research Findings

Ensuring scientific rigour and credibility of research findings is a critical process in IPA, as it establishes whether there is trustworthiness or goodness of the research (Angen, 2000). Creswell (2007) describes scientific rigour and credibility of research findings as ensuring the researcher’s interpretation of the data is consistent with the meaning of the participants’ experiences of the phenomenon. A central goal of developing credible findings is to impose scientific rigour on the study. To that end, validation strategies were undertaken in this study to ensure that the researcher’s interpretation of the data was an accurate and credible account of the participants’ meaning of the lived experiences of attending college or university as a student with HFA. There are many validation strategies, though Creswell (2007) outlines eight strategies that are commonly used in qualitative inquiry. He recommends researchers use at least two of the validation strategies to ensure credibility of the findings. For the purpose of the current study, five validation strategies were used to best ensure scientific rigour, and are described as follows (the strategies are not in any order of importance):

**Researcher Reflexivity.** Researcher reflexivity is the process by which the researcher recognizes and self-discloses, a priori, any biases, assumptions, or beliefs that may affect the process of inquiry (Carlson, 2010; Creswell & Miller, 2000). Engaging in reflexivity from the outset helps the researcher minimize bias in the interpretive process. For example, the researcher “comments on her past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to the study” (Creswell, 2007, p. 208). Researcher bias is not a negative construct in qualitative inquiry as long as the researcher creates dialogue on her position in the study and how her background may influence the interpretive process (Harry, Sturges, & Klinger, 2005). The researcher engaged in reflexivity in two ways: 1) by writing, in the *Personal
Reflection section in this chapter, about her experience in working with individuals with ASD, her motivation to study this particular research question, and other influences that could affect the interpretive process such as being a university student herself; and 2) by writing in a researcher’s journal consistently throughout the research study about her thoughts, uncertainties, and questions that arose throughout the research process. For example, the researcher questioned the extent to which she was guiding the interviews by using a semi-structured interview format. The thoughts, uncertainties, and questions that emerged throughout the study helped to increase the trustworthiness of the research, as they prompted the researcher to engage in critical thinking throughout the research process, and reflect on her thoughts and questions with her research supervisor and peer reviewer (see below). In short, engaging in reflexivity prompted further awareness and sensitization of the researcher’s influence on the research process, which helped to increase the trustworthiness and credibility of the findings.

**Peer Review or Debriefing.** Peer review or debriefing is an external check of the research analysis process, generally completed by a peer reviewer who is familiar with the study and topic, but not directly involved with the study (Creswell & Miller, 2000). The peer reviewer for this study was a graduate from the UBC School Psychology doctoral program who has experience in conducting qualitative research and working with special populations. During the peer debriefing sessions, the peer reviewer asked the researcher several questions regarding the researcher’s position in the study and data collection process, as examples (Creswell, 2007). The peer reviewer also “checked-in” with the researcher to process any evoked feelings while conducting the study. The peer reviewing helped the researcher reflect on her procedures, which assisted in ensuring credibility in the interpretation of findings. For example, the peer reviewer challenged the researcher to think critically about her position in the study prior to conducting
the interviews with the participants (e.g., the extent to which the researcher would bracket her thoughts and predispositions). Discussions related to the notion of bracketing helped orient the researcher and her perspective, and how her perspective would potentially play out in the research. The researcher and peer reviewer met regularly during the research study (i.e., a total of 9 sessions) and the researcher kept written notes in her journal on each session.

**Member Checking.** Member checking refers to eliciting feedback from the participants regarding the accuracy and credibility of the researcher’s interpretation of their interview transcripts (Creswell & Miller, 2000). Member checking is often considered a critical and crucial strategy in ensuring credibility of data interpretation in qualitative research (Lincoln & Guba, 1985), as it allows the participants to play an active role in the data analysis process by confirming whether the researcher’s interpretation of their experiences was accurate and reasonable. In this study, member checks were conducted as part of the second interview with each participant at their respective postsecondary institutions. Conducting member checks at the individual level, examining early interpretations of data, is a common approach in member checking (Carlson, 2010). As such, the researcher conducted member checks at the individual level to ensure that her interpretation of each participant’s narrative was accurate and reasonable; thus, providing the researcher confidence in moving forward to a broader thematic analysis of all the transcripts in order to develop the final narrative.

During the interview, the researcher debriefed each participant on the data analysis procedures as outlined earlier in this chapter. Then, the participant was asked to review a one-page summary (i.e., the same summary that was compiled as part of the macro- and microanalysis) of his or her core experiences of attending college or university as a student with HFA. Participants were asked to comment whether the summary was an accurate and reasonable
account of their experiences (e.g., is the researcher “on the right track?” “Did the researcher understand this in the same way you meant it?”; Carlson, 2010, p. 1105). The member checks were conducted with 10 out of 12 participants (2 participants were unreachable) and of these, all participants confirmed that the researcher’s interpretation of their experiences was accurate and reasonable.

In addition to confirming congruency between the participants’ experiences and the researcher’s interpretation of the meaning of their experiences, participants were encouraged to ask questions regarding the research study and were offered the opportunity to add any thoughts or comments regarding their experiences of attending college or university. The second interview allowed the opportunity for the participants to be a collaborator in the research process by further lending their voice regarding their experiences of attending college or university. Although the second interview was not intended to elicit further data regarding their experiences, most participants freely, and without prompting, offered comments regarding the phenomenon. Poignant quotes that were made during the second interview, and that were consistent with themes and subthemes of the data, were included in the research findings. Overall, the researcher sensed the participants appreciated being involved in the member checking process, as they asked several questions regarding data analysis procedures, and reiterated their interest in the study as well as its importance.

**Thick and Rich Description.** Thick, rich description refers to the extent to which the researcher writes about the analysis of the participants’ data and findings in sufficient detail so that readers can make claims about the transferability of the data to similar settings (Creswell, 2007; Carlson, 2010). In a similar vein, thick, rich description allows readers to decide whether or not the findings transfer to other settings, participants, or similar situations based on “shared
characteristics” (Creswell, 2007, p. 209). Thick, rich description involves providing a deep and detailed account of the data, whereas “thin descriptions” have limited detail and focus on reporting facts (Denzin, 1989, p. 83). According to Creswell and Miller (2000), the researcher writes in a detailed way so that readers experience feelings of closeness to the participants and their experience. Thick, rich description is an important element of qualitative research, as it shows that the researcher was diligent in her approach to conducting credible research (Carlson, 2010). In Chapter 4, the researcher contextualized the findings with thematic summaries and direct quotes from the participants, and wrote about the accounts in a vivid manner so that readers can grab the essence of the lived experiences of students with HFA attending college or university (Creswell & Miller, 2003).

**External Review.** External review refers to the process by which the research process is examined by an individual who is not related to the study, also known as an external auditor (Creswell, 2007). The goal of external review is for the researcher to review aspects of the study to examine the accuracy and credibility of the research process, in particular, the interpretation of the data (Creswell & Miller, 2000). The external reviewer for this research study was a practicing psychologist with experience in conducting qualitative research and working with special populations.

The review process was three-fold: 1) the external reviewer was given two, coded transcripts to read in their entirety to determine whether the researcher’s coding of the meaning units was reasonable; 2) the reviewer was given two, corresponding one-page summaries of the participants’ core experiences to determine if the researcher’s interpretation of the data was consistent with the transcript data and coding; and 3) the reviewer used the same two, one-page summaries to determine whether the data in the summaries were reasonably reflected in the final
themes and subthemes. This three-fold process ensured that the data analysis process was subjected to thorough review at critical junctions in the data analysis process. In addition, the external reviewer was given access to the researcher’s journal, graphic summaries, and chart notes to assist in examining the overall trustworthiness and credibility of the research study.

In summary, the researcher subjected this study to scientific rigour in order to ensure credible findings. The five validation strategies used by the researcher greatly contributed to the goodness and trustworthiness of this research study. The strategies helped ensure that the researcher’s interpretation of the data was an accurate and credible account of the participants’ lived experiences of the phenomenon: attending college or university as students with HFA. The following section addresses ethical considerations in this study that are unique to working with special populations.

**Ethical Considerations**

Conducting a research study with special populations can entail unique ethical considerations, of which the researcher was acutely aware and sensitive to throughout the study. A main ethical consideration in this study was the sensitivity around having students with HFA speak to their experiences of attending college or university, which could elicit feelings of distress, anxiety, or unease. As discussed in the literature review of this paper, individuals with HFA experience many difficulties including increased risk of internalizing disorders such as anxiety and depression (Howlin & Moss, 2012; Joshi et al., 2013; Sterling et al., 2012). Similarly, social challenges such as making and keeping friends and engaging in romantic relationships often present emotional and behavioral difficulties for this population (Klin et al., 2005; VanBergeijk et al., 2008). Therefore, a Community Resource Form (see Appendix H) was developed with a list of local agencies providing mental health services such as counseling. The
Community Resource Form was given to one participant at the end of his initial interview. This participant spoke at length about his mental health concerns and history of receiving counseling services, and as such, appeared to appreciate receiving the form.

In addition to ensuring confidentiality in the research study, anonymity was also protected so that readers would not be able to discern who provided particular data (e.g., direct quotes). During the informed consent process, each participant was informed that participation was entirely voluntary and they could withdraw from the study at any time. Fortunately, all participants included in the study chose to participate for the duration of the study.

**Chapter Summary**

Interpretive phenomenological analysis was used to investigate the meaning of the lived experiences of attending college or university for students with HFA. The research method of IPA is concerned with understanding a particular phenomenon, specifically, the meaning of the lived experiences of participants in a meaningful way (e.g., Eatough & Smith, 2008; Smith et al., 2009). Twelve participants diagnosed with HFA were recruited from five postsecondary institutions and engaged in one detailed semi-structured interview with the researcher and a shorter, follow-up interview. Participants spoke at length to their experiences of attending college or university as students with HFA. All interviews were audiotaped and transcribed for data analysis. Data analysis followed an idiographic, iterative, and systematic approach, analyzing each transcript case-by-case, and searching for themes and subthemes in the data (Smith et al., 2009). The researcher ensured credibility and trustworthiness of the data by utilizing five validation strategies (e.g., Creswell, 2007; Creswell & Miller, 2000). The following chapter provides a detailed account of the findings of this study.
CHAPTER FOUR: Findings

The purpose of this study was to understand the meaning of the lived experiences of students with HFA attending college or university using the method of interpretive phenomenological analysis. Included in this chapter is an interpretive description of the meaning of the lived experiences of students with HFA attending college or university, a table of participant characteristics, and the findings of this study, including broad themes and subthemes. Each participant selected their own pseudonym to protect their anonymity in this study.

Interpretive Description of the Meaning of the Lived Experiences of Students with High-Functioning Autism attending College or University

The phenomenon of attending college or university for students with HFA is multifaceted, illustrating a range of positive and negative experiences. The phenomenon included having a sense of appreciation for the social maturity inherent in a postsecondary educational environment and aspects of academia including flexibility in course selection, engaging in lectures, appreciation for the caliber of teaching, and taking courses that are challenging and critically inclined. Despite having a sense of appreciation, challenges were experienced with the transition from high school, including understanding the fundamental differences between high school and postsecondary education regarding accessing services for students with disabilities, selecting a college or university, providing disability documentation, and understanding the admissions process. Further, challenges were experienced with navigating a new educational system such as registering for courses, accessing educational accommodations, and navigating websites.

The phenomenon of attending college or university for students with HFA included some difficulties, such as challenges with academic expectations including organization, managing time, and feeling overwhelmed as a result of having multiple, competing academic demands. A
range of support, both positive and negative, was experienced from various sources while attending college and university, including support from professors, peers, campus organizations including disability services, counseling services, campus housing, and feeling supported by systems outside the immediate postsecondary educational environment, such as parents, community mental health agencies, and iconic figures with autism. A desire to support others was also experienced (e.g., running a support group). The phenomenon included a desire for a better understanding of ASD by others (e.g., faculty members) so that students with HFA can be better supported. Relatedly, challenges were experienced by students with HFA regarding their own understanding of ASD and how it affects them, such as difficulty advocating for their learning needs due, in part, wanting to be “like everyone else.”

The influence of past experiences, particularly social and academic experiences in elementary and secondary school, was an experience in this phenomenon, particularly with respect to how these experiences shape current experiences in college or university. Also a part of the college or university experience for students with HFA is how the presence of autism and related symptoms (e.g., anxiety and depression) interfere with academic and social functioning.

The phenomenon of attending college or university for students with HFA included entering a new social world. A desire to socialize was experienced, but also uncertainty in initiating social interactions with others, engaging in back and forth conversations, and finding common interests for the purpose of building friendships. The process or strategy of developing and using a “social template” to socialize with others was experienced. Online social outlets were described as a primary source for socialization, but a desire for facilitated social opportunities on campus, such as smaller events and clubs related to academic interests was also a part of the phenomenon for students with HFA attending college or university.
Table 1: Participant Characteristics

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Diagnosis</th>
<th>Age</th>
<th>Gender</th>
<th>Race</th>
<th>Postsecondary Institution</th>
<th>Year of Study</th>
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<tbody>
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<td>Male</td>
<td>Asian</td>
<td>University</td>
<td>Year 1</td>
</tr>
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<td>Caucasian</td>
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<td>Year 1</td>
</tr>
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<td>Black</td>
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<td>Year 1</td>
</tr>
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<td>Male</td>
<td>Caucasian</td>
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<td>Year 1</td>
</tr>
<tr>
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<td>Caucasian</td>
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<td>Year 2</td>
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<td>Asian</td>
<td>University (Graduate)</td>
<td>Year 3</td>
</tr>
<tr>
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<td>Female</td>
<td>Caucasian</td>
<td>University</td>
<td>Year 2</td>
</tr>
</tbody>
</table>

Twelve participants (9 males and 3 females) with HFA participated in this study. The participants ranged in age from 18-28 and represented three universities and two colleges. Nine out of 12 participants reported a diagnosis of Asperger’s Disorder and three participants reported a diagnosis of HFA. Diagnoses of HFA or Asperger’s Disorder were confirmed for 11 of 12 participants by the researcher reviewing the participants’ diagnostic reports, which were provided to the researcher by the participants. One report was obtained from a registered psychologist with the written consent from a participant. All participants were registered with their respective disability offices at their postsecondary institutions. The participants in Year 1 of...
their studies had just finished their first year, and as such, were able to speak to their experiences of attending postsecondary education. Additional background information regarding each participant (i.e., Participant Descriptions) is provided in Appendix I.

**The Meaning of the Lived Experiences of Students with High-Functioning Autism attending College or University: Broad Themes and Subthemes**

Eight broad themes and corresponding subthemes emerged from the data analysis that depicts the experiences of students with HFA attending college or university (see Figure 1 below). The broad and subthemes are described below and in no particular order or weight regarding importance. Extracts (i.e., direct quotes) are presented verbatim to help convey the richness and detail of the participants’ experiences. The extracts were not amended in any way (e.g., stutters, repetitions, grammatical inconsistencies) in order to maintain integrity of the participants’ experiences and to also illustrate the uniqueness in verbal ability of students with HFA. Brief remarks made by the researcher (e.g., “mhm,” “OK”) were deleted to facilitate readability. Explanatory remarks made by the researcher are indicated within brackets (i.e., [text]). Ellipsis points (…) indicate omitted text from the extracts; text that was not germane to illustrating the participants’ experiences of attending college or university (e.g., significant repetitions, unintelligible text).
Figure 1: Broad Themes and Subthemes of the Lived Experiences of Attending College or University for Students with High-Functioning Autism
Theme One: Managing Academic Expectations

A broad theme that emerged from the data in a detailed, in-depth manner was Managing Academic Expectations while attending college or university. Participants experienced intensity in their role as college or university students where the management of academic expectations became a very real and challenging part of their experience. The challenges of organizing their materials, their time, and all the tasks or activities required for academic success presented real, and in many ways, new demands on the students, demands that felt overwhelming. In particular, participants described their challenges with organizing their materials, managing deadlines for papers and examinations, setting priorities and initiating and completing tasks, and feeling overwhelmed with multiple academic demands. To that end, the broad theme of Managing Academic Expectations is best represented through three subthemes: Difficulties with Organization, Time Management, and Feeling Overwhelmed.

Difficulties with Organization. Difficulties with Organization emerged as a subtheme within the broad theme of Managing Academic Expectations. Several participants spoke to their challenges in meeting deadlines on time (e.g., for papers), missing deadlines and appointments entirely, and difficulties with organizing materials in order to complete assignments. An extract from Leo’s interview captured his difficulty with organization and managing deadlines for assignments and examinations. Leo explained,

Getting assignments in on time is very difficult for me. Like, being an Aspie, losing things, being messy, professionally-messy. Um, missing a lot of deadlines. Like my creative writing professor had to give me like extensions on some of the assignments because I kept on missing them. This is when I was depressed, but at the same time I was
still doing that, like double booking appointments and stuff and, yeah. Extensions really help me as an Aspie for some things.

Keeping course outlines organized from multiple courses was described as challenging for Steven. He shared,

Organization, I’m horrible at organization, um (laughs)…Um I’ll often um, uh lose um um what are those called, um…course outlines for example…for psychology, I had like four course outlines and I just lose them everywhere and so I just, I’d keep going to the, the um to the teachers’ office because they had a few, I guess you could say almost like a bin at the front where all the papers would be in. So you’d just start looking through the papers and you’d find the course outlines…

Lindsay spoke at length regarding her difficulties with organization, particularly with respect to managing multiple steps in order to obtain educational accommodations before an examination. She expressed that the procedure is “almost not worth it,” and feels as though the process should be streamlined for individuals with organization difficulties, including access to a key support person to help students throughout each step. She explained,

I think that people who have executive dysfunction should be able to have a different thing…like there’s just so many steps…it’s really complicated and really exhausting and sometimes I don’t get my exam accommodation because it’s too much work, like I’m like: I can’t handle it.

In contrast, Jake reported more success with organization. He expressed he is able to complete papers in an organized way and submit them on time, though has difficulty submitting shorter assignments in a timely manner, as he deems them as “not as important.” In addition to
difficulties with organization, several participants conveyed challenges with time management, the focus of the next subtheme.

**Time Management.** Participants talked in detail about their difficulty with time management, particularly with respect to procrastination. Participants expressed that they procrastinate due to over-estimating the time they have to complete work (e.g., thinking they have “months” to write a paper or submit an assignment); consequently, leaving work until the last minute, yet still earning good marks. Participants described that this becomes a negative, perpetual cycle (i.e., waiting until the last minute to complete work) by not leaving enough time to complete future assignments. Further, participants described avoiding work entirely due to anxiety about his schoolwork. Zach conveyed difficulty with setting goals and priorities, and initiating assignments despite receiving educational accommodations (e.g., extra-time to complete term assignments),

> Procrastination, anxiety, and of course…not starting on it because, you know, it’s far away from now. A lot of more important things to do now so should focus on them [smaller assignments]. Doesn’t really work that way unfortunately.

Interestingly, Zach described his difficulty initiating assignments despite receiving extensions on his assignments. He explained, “Extensions don’t help much in that regard [completing an assignment] because it just lengthens up time to start it.”

Steven’s difficulties with time management made it challenging for him to follow procedures for accessing educational accommodations in a timely manner. He expressed that he would wait too long to contact disability services on his campus, and consequently, missed deadlines for exam accommodations. Steven explained,
I’ll procrastinate and…you know, lose the course outline and um, then I’ll find the course outline and I’ll be like [to disability services], you know, this test is this time and that doesn’t work for me…and it’s like: Oh, well if you had a problem you should have talked to us like a month ago about it because we sent you an email. And I was like: I didn’t know a month ago because I didn’t look on the sheet and I didn’t think, you know, put two and two together. You know, which, it is a failing on my part but it’s, you know, it’s stuff that I’m, you know, not very good at.

Steven later shared that he has an email account but only checks it once every few weeks or so.

**Feeling Overwhelmed.** Participants conveyed feeling overwhelmed by having to manage multiple, competing demands in college and university, demands that are not structured for them in any specific way. All the demands are important to complete and there is not someone who is imposing structure or organization in order to complete the demands. In particular, several participants described taking a full course load and keeping up with assignments and examinations in multiple courses as unmanageable, and as such, overwhelming. As William expressed, “I only did, out of four I only did, I only completed one. One I dropped…” Similarly, Jeff shared, “When I first came here [to college], I took two hard courses and I dropped the first one pretty fast.” Zach shared the same feelings about taking multiple courses and expressed, “…when you have many different courses, it’s very easy to get more and more anxious.” Markus spoke to the stress examinations caused him, which resulted in him reducing his course load so that it was more manageable. He indicated that taking five courses was the “worst decision I made this year” and that it caused a “stress breakdown.” Markus explained,

Around exam time stress levels go through the roof and I’m normally unbearable to be around, and at one point in the second term, where I decided five classes for the second
time, doing ten classes my first year was the dumbest thing I’ve ever done. And I had to drop a couple of them because I just couldn’t cope with doing five more general studies classes.

Not only did participants speak to the difficulty in managing full course loads, participants also described feeling overwhelmed with shifting their attention between courses, particularly with respect to learning course material, submitting assignments with the same due dates, and preparing for examinations in multiple courses. Jeff discussed how he likes to immerse himself fully into one subject and indicated that he has to “break immersion” to think about studying for another subject. Thus, he made the decision to take one course at a time to focus on “taking care of myself in general, period.” Similarly, Steven expressed that “shifting” between courses and assignments is “very, very hard” and “stressful.” He elaborated,

…when there’s say a paper and a test, and the paper’s on something totally different from the test is on, you know, it’s really hard to switch between the two things because you have to totally shift gears and shift trains of thought and that’s, that’s um a hard thing for me to do.

In contrast, Scott described his ability to remain organized and manage time well, which he attributes to his self-paced high school program where staff members taught him the skills he needed to manage academic expectations. Scott expressed, “I’m uh never had problems with executive functioning, as I said, it’s easier to do uh something where there is a specific deadline…”

**Summary of Managing Academic Expectations.** The theme of Managing Academic Expectations is a salient and significant part of the postsecondary experience for all of the participants. Almost all saw this aspect of their experience as challenging, and most as
overwhelming at times, particularly with respect to organizing their courses and materials, managing their time effectively in order to accomplish a goal such as submitting assignments before or on their deadlines, and feeling overwhelmed as a result of managing their academic expectations including competing demands. One participant acknowledged that managing academic expectations was demanding but reflected that his experiences in high school and skills he learned there prepared him to manage the academic demands. Although managing academic expectations was salient to this particular participant, it was not an area of challenge for him that it was for others. The next theme, Experiencing Support, illustrates the extent to which participants feel supported while attending college or university.

**Theme Two: Experiencing Support**

The notion of support was a salient experience for all of the study participants. The participants described a range of support, both positive and negative accounts, through various sources while attending college or university. Participants also conveyed wanting to support others in college or university based on their own personal experiences as students with HFA. The broad theme of Experiencing Support is represented through subthemes that centre on five perceived sources of support: *Support from Professors, Support from Campus Resources, Peer Support, Feeling Supported by Community and Global Systems,* and *Supporting Others.*

**Support from Professors.** Participants expressed that support from professors was an important part of their college or university experience. Participants conveyed feeling supported by professors in various ways including professors being helpful when feeling overwhelmed, professor availability and accessibility for support, providing educational accommodations, and following up with students. However, there was a range of feeling supported by professors, with
some participants not feeling as supported as they would like in terms of receiving educational accommodations.

Markus shared that he has had “mostly positive relationships” with his professors and has received extra help when needed. William conveyed that professors are understanding and willing to help. He expressed, “They want to see you get through it, they don’t want to see you fail.” Similarly, Sarah shared that her professors are “really nice and patient with me, and explain things a lot to me.”

Both Leo and Markus expressed that their professors were supportive when they disclosed their disability to them, were “willing to listen,” and exuded “sympathy.” As Leo shared,

…some of them [professors] are actually very quite positive. Um for example, uh my anthropology teacher, when I was in a state of depression I came to him and I told him about my experiences and I told him about my Asperger’s and he was very jovial about it.

Melody shared similar feelings of support from her professors, particularly around access to educational accommodations. Melody senses that her professors “care” about students with disabilities, as they are helpful in accommodating for “students with special needs.” She further explained,

Like last term, my web development instructor was really helpful…actually I think it was for my mid-term or for my final, he actually came in to check on me [at disability services]…to see how I was doing.

Although the experience of feeling supported was mostly positive, participants also described not feeling supported by professors, particularly with respect to obtaining educational
accommodations. Steven shared a story where he had a mid-term examination and a paper due on the same day, which he found “very stressful.” He approached his professor to inquire about a possible extension for one of the assignments, but did not feel that his professor was supportive, nor did Steven feel that she understood how his anxiety affects him. He described,

And so I said [to his professor], you know, can I turn in, you know, one, one day and I’ll turn in like, I’ll turn in the paper on the long weekend. And um the teacher pretty much refused, you know, flat out refused totally…she was like: Well you, once again the argument, an argument I really dislike…you can’t let, you know, your anxiety be a cage…you have to, you know, free yourself, you have to, you know…face your fears.

Steven continued to express that he is capable of completing the work with accommodations, as he shared “it may take a little longer but I’ll still do it.” He expressed that spacing out the deadlines would “tremendously help in a very, very significant way.”

William shared similar difficulty in receiving support from his professors after building the courage to ask for help. He described a lack of receptivity, largely on part of the school not knowing how to accommodate his needs. William indicated that he did not “receive much special accommodation.” He further shared,

I shut down a little bit…I felt anxiety build up and anger and fear. Um and I was reluctant to ask for help, as usually am. But the time I started saying: I don’t know what to do- “help,” they [professors] didn’t know what to do either; they didn’t have the support for helping someone like me.

Luke, the graduate student, spoke passionately to the lack of support he received while attending graduate school, such as being denied access to educational accommodations during his practicum and not receiving much guidance. Luke vehemently spoke to his human rights
petition he initiated against the university. Although Luke, overall, did not feel supported in graduate school, he indicated that he had one professor who provided him with support that helped him “survive” graduate school.

Participants in this study conveyed that they see professors as having a critical support role for students, and that both positive and negative support experiences were significant parts of their experience of attending college or university. Participants also described their experience of support from various campus resources while attending college or university, the focus of the next subtheme.

**Support from Campus Resources.** Participants experienced a range of support, both positive and negative, from campus resources such as disability services, campus housing, and counseling services. Participants conveyed a sense of feeling supported by disability services, including meeting with disability advisors in a timely manner and accessing educational accommodations. Melody described the disability services on her campus as a “very good and supportive environment” and she appreciates being greeted by her name when she arrives. Markus and Lindsay reported feeling supported in terms of receiving assistive technology such as a computer and voice recorder. In fact, Markus stated that the computer made his life “so much easier.” Markus further described his interactions with disability services on his campus,

Oh [name of advisor] has been great, I’ve really enjoyed any time I’ve had to work with her…there’s so many options available here to me…they’ve been really helpful to me and if I need something I can just drop [in]…if I needed something, I could come in here [disability services] and talk to [advisor name] and I’d have this stuff available to me and she’d have these ideas on the way I should be doing things and give me suggestions…they’re really understanding and helpful…
Markus has appreciated the support from his disability advisors, but recognized that too much help can lead to learned helplessness. He expressed that there is a point where too much should not be given otherwise “we [students with HFA] don’t learn on our own.”

Participants shared their sense of feeling supported from disability advisors who were available and willing to help with course registration, applying for grants, and navigating forms and procedures. Zach expressed that he appreciates the open door policy at the disability services on his campus, as his high school centre was “bogged down.” Lindsay attributed some of her success as a student to the support she receives from disability advisors. She shared, “the demands that are placed on the average college student are more than I could handle…I wouldn’t even be in school right now if it wasn’t for them [disability services]…”

Feeling supported was also experienced with other campus resources, including campus housing. One participant in this study lived on campus residence and shared that his floor manager was “very helpful” in his “healing” process from adverse experiences in high school. He shared that having his floor manager’s support helped him “recover” and was his “salvation” and “accelerator” once his healing began.

In contrast, participants also experienced not feeling as supported as they would like from their disability services in terms of feeling understood and accessing accommodations. Steven shared an experience where he received educational accommodations, but was still feeling overwhelmed with his academic demands. He felt that his disability advisor did not understand why he was feeling overwhelmed, as he said to Steven, “well you’ve had an extension, not allowed to be stressed.” William shared a similar sentiment and described his experience of receiving support like going to “war.” The perceived lack of support resulted in William making the decision to take the next school year off as a break. He explained,
Too much demand, um too much demand for services…I mean they did the best they could… [Name of disability advisor] and his team, they did what they could for me. Uh they tried, they had a whole list of things, it was like kind of a stipend, like a rations and supplies in a war. You’re going into battle and so lets try and get you some extra uh, extra shares.

Lindsay conveyed a difference in the quality of support she received from disability services when she transferred from a college to university. An excerpt from her interview captures her experience with receiving support from her university,

Um, at [university] it’s different, they’re still great, they’re still wonderful. I’ve been really grateful to have them but it’s a totally different system. ‘Cos way more staff members with a way higher workload. So, in order to talk to somebody or get some help from someone, um, you often need to be prepared like weeks in advance…like the stuff I need to do in order to get exam accommodations is really complicated and so many steps that it’s just almost not worth it. Like it’s really difficult…

William spoke to the perceived lack of support he received from counseling services at his university in terms of having guidance and access to services. William explained,

…I didn’t get special preferences for counseling services or anything. I didn’t have someone assigned to help me every step of the way. Uh maybe they don’t have the resources for that, probably they don’t. Maybe they…could get more resources for that but, uh belts are tight. Demand is high…it was, it was kind of a little cheap. I mean…their hearts are all in the right place but they only have so much to give.

**Peer Support.** Peer Support emerged as a subtheme within the broad theme of Support. Participants spoke to receiving support from peers during times of emotional duress. Markus
indicated that the support he received from peers while he was depressed was instrumental in his ability to cope with his depression, and that he has learned to also support others during similar times of emotional hardship. He shared,

I realized just how much I valued friends, and it was even more so after um my depression because, if it wasn’t for my friends, I wouldn’t be here any more. And so because of that I am there for any single one of my friends because they were there for me…I don’t believe people need to suffer by themselves…I tried to do that, and I refuse to let other people do that. Whether it’s here, there, hell I’ve even consoled people I don’t know very well because I…goes against the stereotype but I don’t like people being alone and I would rather empathize with people or sympathize with them than let them suffer by themselves.

William spoke to feeling supported and inspired by a graduate student with Asperger’s Disorder who is also an autism advocate and someone William perceives as a “mentor figure.” He resonates with this particular individual due to having similar autistic traits, and feels that there is “hope” with respect to managing his own symptoms. In this sense, the mentor figure is supportive in an indirect way for William. William shared,

…he has a lot of the same symptoms that I do, a lot, and he has managed to over come it using, sort of devoting his left brain to his iPhone. Like, he let’s technology organize his life. And I was in shock and awe and I felt like: oh my God maybe I don’t, maybe there is hope, maybe I am not just some failure doomed to watch the world pass me by and not fulfill any of my dreams. Um maybe I do have hope and I can reverse my fortunes.

William also conveyed a sense of peer support through on-line social outlets and described such outlets as his “support network.” He spoke elaborately to experiences where he
has felt supported by online peers when feeling emotionally dysregulated. Although he feels that the on-line support does not provide the physical connectedness inherent in social exchanges, he still appreciates having someone to talk to. He explained,

Like so, I’m able to connect with people online because there’s no barrier…it takes out my limitations, I can talk with them forever but at the same time you’re missing something…people want to be talked to, they want…people to look at them and relate to them and, you know, hug them and stuff…people want that physical thing and you don’t get that online. But I’m still, I mean…I can go to someone online and say: Help me please, I’m suffering. And they’ll say: Ok I’ll help you, I’ll be here for you, I’ll listen to you, and you can listen, and they can listen to you cry and all that.

**Feeling Supported through Community and Global Systems.** A subtheme that emerged within the broad theme of Support was Feeling Supported through Community and Global Systems, systems outside the college or university environment. The outlets of support described within this subtheme included parent support, community mental health support, and global support. With regards to parental support, Melody and Jake, among other participants, spoke to feeling supported by their parents in terms of organizing daily life and facilitating social interactions. Melody appreciates her parents’ support in increasing her independence. She shared,

…mom helps me write up a schedule for what I need to do that day and sort of know what time…what time everything should be actually done.

Although Melody appreciates the support she receives from her parents, she indicated the “constant reminders” are “annoying” at times. Jake shared a similar sentiment with respect to
feeling supported by his parents, though also expressed that he feels “annoyed” at times, as his parents’ efforts to facilitate socialization on his behalf seems “forced.” Jake shared,

There’s my cousin [name]…like me…doesn’t seem to be much of a people persons that makes us, that allows us to get along real well. And when we do have conversations, we really connect…though sometimes they feel a bit forced because usually at the pursuit of our parents… they try to insist that we uh hang out more. When really, they want to, when really the both of us just want to be left alone.

Both William and Lindsay spoke to receiving mental health support in the community, a helpful experience. William indicated that he received cognitive behavioural therapy to help with his negative thinking, which was “sorely needed.” Lindsay expressed, that after her late diagnosis, she received social skills intervention in the community, which helped her realize how her behaviour was affecting individuals she cared about, including her significant other at the time.

Participants also spoke to feeling supported in an indirect, global way. Markus expressed that the world is appreciating diversity “more and more,” which makes him feel supported in knowing he is not the only person with Asperger’s Disorder. Similarly, Leo feels supported in knowing that some of the world’s most iconic figures may also have Asperger’s Disorder. He expressed that thinking about these individuals has been a “strategy” that has helped him maintain “his sanity to a degree” and overcome the repercussions of being bullied in high school. Leo explained,

...the way I counteracted that (being bullied) was I did research on my own and I found that without Asperger’s or Au-autistic people, society couldn’t exist. So like Thomas Edison, Albert Einstein, Bill Gates, uh even Zuck-Mark Zuckerberg…
Leo further conveyed that thinking about Temple Grandin’s experience (a notable and influential scholar with Asperger’s Disorder) has helped him “branch out” of his comfort zone with respect to socialization and initiating interactions with others. He conveyed,

…Temple Grandin, “stretching out the limits,” so for me you know, stretching out the limits, like throwing myself out there, you know, slowly moving the encounters, improving the encounters each time… I should, you know, try to find myself in the process of trying to overcome problems and not just run away from them.

Leo continued to share that Temple Grandin’s concept of “stretching the comfort zone” was inspiring to him in that it “could lead to a more positive life for the Aspie.”

Supporting Others. Participants expressed that students with HFA and other disabilities need to feel supported while attending college or university, whether it is through support groups or more indirect sources of support such as “apps” to help them navigate aspects of postsecondary life. Leo, for example, “inherited” a support group with an office in the Student Union Building from a fifth year university student with Asperger’s Disorder. He shared his story of the importance of his group,

…one of the reasons I wanted to start an Aspie’s club was because from, being an Aspie, and looking at some of the histories of previous Aspie’s like Einstein, childhood was not always the most encouraging thing that society makes it out to be, especially to Aspies. And having groups that encourage growth rather than just psychological comfort is an important thing. That’s one reason I wanted to start my club was to, deriving from my own experiences, making it easier for Aspies coming in to [university], you know, have plants from the same soil grow together…not just comfort each other but really grow in
community ways. Like there could be an Aspie who was interested in Ocean Science and, you know, sharing that interest and growing.

Participants conveyed wanting to advocate and support other individuals with disabilities. Melody expressed, “my family really advocates for me…I feel very lucky to get the support I got. I want to help other students be able to get the support as well.” Scott shared a similar sentiment based on his experience of volunteering with a student organization on campus that advocates for students with disabilities. He shared, “services that exist are um obviously inadequate and there’s a huge number of people are only just coming in so, it’s um, something that’s quite important to me.” Melody shared a future aspiration, which includes developing a videogame company and a smart phone “app” to help individuals with special needs navigate the transit system. She shared,

…a goal of mine to make my own game company and have a whole huge thing involving supporting giving helping students get into the industry…helping people get jobs and by having people to get into the gaming industry because it’s really difficulty to get in…I want to help people understand, help better understand Asperger’s…showing students with special needs can do something…

**Summary of Experiencing Support.** The broad theme of Experiencing Support illustrates the extent to which students with HFA in this study feel supported through various avenues in college or university. Participants conveyed a range of feeling supported, both positive and negative, from professors, peers, campus resources, and community and global systems (e.g., parents, iconic figures with autism). Participants also expressed their desire to support others with HFA and other disabilities.
Theme Three: Managing Autism Spectrum Disorder (ASD) and Related Symptoms

Managing Autism Spectrum Disorder and Related Symptoms emerged as a broad theme in this study. Participants shared how their HFA symptoms play a role in their functioning as college or university students in addition to the overlay of symptoms from comorbid or co-occurring disorders such as anxiety and mood disorders. To that end, two subthemes emerged within this broad theme, including Managing Autism Spectrum Disorder Symptoms and Managing Related Symptoms while attending college or university.

Managing Autism Spectrum Disorder Symptoms. Managing ASD symptoms was a subtheme that depicts how ASD symptoms interfere in the participants’ postsecondary educational experience, and the extent to which participants need to manage their ASD symptoms while attending college or university. The experience of managing their ASD symptoms was portrayed both positively and negatively in the participants’ college or university experience.

Participants spoke to how their preference for a routine and restricted interests have been adaptive or helpful for them in college or university. Following a routine rigidly, as described by Leo, allows him to become “addicted to a routine” of going to class. William described the benefits of having restricted interests and how the interests can be a positive influence in a university context, as he is able to focus on courses related to gaming, a passion of his. He expressed that students with HFA are able to “fixate” on certain subjects and therefore “excel” in university, where their special interest is part of their course or program requirement. He further explained,

...I’m kind of the, Aspies, are kind of, you know, regular specialists. We tend to fixate on subjects and when we do that, we tend to excel. Because our minds are so fixed to that
and we just go at it. So we’re able to, if you give us, a subject to work in, we tend to do really well...

In contrast to the positive influence of ASD symptoms, other participants conveyed, in-depth, the challenges associated with managing their symptoms while attending college or university, particularly where their restricted interests and sensory dysregulation interfere with their success. Participants described how their restricted interests distract them from their schoolwork, whether it is in class or while studying at home. As Zach described, “I can definitely get caught up in things like playing videogames or such because it is something that interests me more,” than completing his homework. Similarly, William reported he uses “escapism” from his schoolwork to engage in online games, among other online preferred activities. He expressed having autism is like “having a slight allergy to the outside world” and that he can only take “so much of it,” thus escaping to his preferred interests. Jake shared that he becomes distracted in class by thinking about his restricted interests, such as fantasy heroes.

Participants in this study also described their challenges with sensory dysregulation and how these challenges affect their functioning in their postsecondary educational environments. For example, participants reported hypersensitivity to smell and touch (e.g., being touched by others), and being easily distracted by visual stimuli (e.g., knobs on a recording device) and noise (e.g., chatter outside the classroom or lecture hall). Steven expressed he becomes “thoroughly annoyed” by noise while he is in class, as it affects his focus and concentration. Similarly, Lindsay conveyed, “in a room with a hundred people, every shuffle movement I can hear, like every scratch of a pencil,” which causes her to focus on the background noise rather than the lecture. Leo spoke at length regarding his hypersensitivity to olfactory (i.e., smell) and
auditory (i.e., noise) stimuli and how it affects him socially, in campus housing, and during class. He shared,

…as an Aspie I have a very sensitive nose, I smell things very easily and I hear things very sharply so partying maybe not the best choice but that’s where you meet people…the worst is my smell, when I smell things it’s like magnified. I can trace things back to their source with their smell sometimes…like people would always smoke pot below the building floor and I would smell it in my room and I would go like: Ugh, oh man! And when I smell cigar-students who’ve just finished smoking cigarettes in class I go like: ahhh quite overwhelming.

This subtheme highlights the positive and negative repercussions of ASD symptoms in individuals attending college and university, particularly with respect to restricted interests and sensory dysregulation. In addition to ASD symptoms, participants in this study also spoke to managing related or co-morbid symptoms as a college or university student with HFA, the focus of the next subtheme.

**Managing Related Symptoms.** Participants in this study spoke at length to how their related (or comorbid) symptoms of other disorders interfere with their experience of attending college and university. Participants expressed that experiencing academic difficulties exacerbated symptoms of depression, ADHD, obsessive-compulsive disorder (OCD), and anxiety. In a similar vein, participants also shared that having related symptoms interfered or affected their academic functioning in college or university.

Participants reported how they experienced depressive symptoms while attending college or university. Leo spoke to being “heavily depressed” first term, which resulted in becoming withdrawn, not paying attention to his personal hygiene, and engaging in restricted interests
more intensely (e.g., videogames). Similarly, Jeff shared that his academic difficulties led to depression, and in particular, anhedonia, where he “disconnected” himself from all of his hobbies. William also expressed that making “little gains” in his personal development and academic difficulties led to depression and his decision to take the next year off of school. He shared,

…I was making like little gains in both academia and in personal development, and having terrible mood swings all the while. And it got to the point this year where I was going: I don’t deserve to go through life hating myself and wanting to die. Um I don’t deserve to um, put myself through agony in order to try and reach my goals. I don’t deserve the pain I put myself through and how hard I am on myself…um which is sort of why I’m taking a break [from school].

Participants also shared how their ADHD and anxiety symptoms affect their functioning while attending college or university, such as difficulty focusing while completing homework and coping with their medication “wearing off.” Markus shared that having OCD is helpful at work as he is “meticulous and picky” in the restaurant kitchen, though it causes stress at school if he is not as organized as he would like to be. He expressed, my “OCD causes more headaches than it helps…but sometimes it helps more than it hurts.”

A common thread among several participants in this study was the way in which anxiety impacted their functioning in college and university. This common experience was described with conviction and in great detail, particularly with respect to how anxiety affects their academic and social functioning. Regarding academic functioning, participants expressed that writing examinations (specifically, multiple choice exams) is anxiety provoking and leads to “shutting down” during examinations. Further, participants described initiating assignments and
learning in new environments (e.g., a lab) as anxiety provoking. Steven shared how his anxiety escalates as he is preparing for examinations. He expressed,

…very, very, very anxious, um, you know…very awake, very clenched…constantly repeating the information over and over and over and over again. Constantly looking at the book, just constantly re-reading lines. Um constantly re-reading lines and if I don’t understand them, getting very frustrated. I will, you know, start speaking them out loud over and over again to try and encode it…

Participants also described experiencing social anxiety, anxiety from past experiences (e.g., social issues in high school), and anxiety associated with participating in study groups. An extract from Zach’s interview captures his anxiety with group work in college,

I’m anxious about getting into the groups because usually they’re sort of, you know, small social groups already and I’m coming into them. And I know that my behavior can sometimes be a bit odd, so I don’t want to distract from that.

Participants also reported physiological symptoms related to anxiety such as increased heart rate, as well as insomnia. Jeff shared that he ruminates over his academic difficulties, which leads to insomnia requiring melatonin or medication. He described a 5-day period of insomnia, which he indicated was one of his “more dangerous” experiences in college. Markus shared that his insomnia leaves him tired during class, and as such, is grateful that he has a voice recorder for lectures.

**Summary of Managing Autism Spectrum Disorder and Related Symptoms.** The broad theme of Managing Autism Spectrum Disorder and Related Symptoms illustrates the challenges individuals encounter in college or university with respect to managing HFA and comorbid symptoms that interfere with their academic and social functioning. Although
participants spoke to some potential benefits of having restricted interests, the core experience of
the participants is that the symptoms affect them negatively while attending college and
university and have to be actively managed.

**Theme Four: Reference to or Influence of Past Experiences**

The broad theme of Reference to or Influence of Past Experiences was a prevalent theme
during the interviews with the participants. This broad theme is related to previous experiences
in elementary or secondary school such as challenges with socialization, academic functioning,
and managing co-morbid symptoms while attending elementary and or high school. Several
participants referenced experiences in the past that affected them, or have influenced them
currently in postsecondary education.

Participants reported challenges with socialization during elementary and high school that
have influenced the way they socialize in college or university, both negatively and positively.
Participants spoke to the negative repercussions of being bullied in elementary and high school,
and being “forced” to hang out with others (e.g., by parents and educators). Participants also
expressed having a “fear of rejection” while attending college or university based on their
negative past experiences with socialization. Leo spoke at length regarding how he was bullied
in elementary and secondary school, and has consequently distanced himself from others in
university, as he does not trust “anyone.” Leo shared that he is slowly trying to regain trust in
others “for the purpose of friendship” while attending university. Markus shared a similar
sentiment regarding social difficulties in high school. He expressed,

> I’ve kind of been fighting my own demons throughout middle school, early middle
> school, late middle school and early high school. It wasn’t until around my grade eleven
> year that I really came out of my shell and started making friends and it, it, it’s a battle.
I’m basically fighting my inner demons at all times, trying to kind of um work socially, like it’s learned, like just not something I was good at as a kid even. And so to be able to make friends and get to know people is something I’ve had to learn myself at a different rate than everybody else.

Markus continued to share that his “social life is better” in college, as he is not being “forced” or “obligated” to socialize with others (e.g., by his parents). He also shared that attending college has allowed him to “pick and choose” whom he wants to socialize with, which is one of the “biggest benefits coming out of high school.”

Participants in this study also referenced previous academic experiences that affected them in some way. Such experiences were related to loss of motivation and placing high pressure on oneself, not feeling supported, and “falling through the cracks” while in high school. Markus expressed that he placed too much pressure on himself to do well in high school and found it challenging to manage multiple deadlines. As a result, he lost motivation in high school and expressed that he “dug his own grave” and “just wanted to get the hell out of there [high school].” However, now that he is in college, his motivation has increased, as he does not have as many deadlines and can work at his own pace.

William spoke at length regarding how he did not get the support he needed through high school and consequently, “fell through the cracks.” He reported that his grade eight teacher did not have a lot of “patience for someone on the autism spectrum” and expressed, “the teacher was disgusted with me and thinking I had no talent.” He further conveyed,

I remember when I was in grade eight I felt like I was the one who fell through all the cracks, didn’t get the help they needed, wasn’t recognized. Um and a lot of kids who go
through that, a lot of kids with disabilities, a lot of adults fall through the cracks. And sometimes they manage to get through it anyway, um sometimes not.

Similar to the broad theme of Managing Autism Spectrum Disorder and Related Symptoms, participants spoke to their symptomatic challenges while attending high school, including depression and sensory dysregulation. Markus shared that his depression in grade ten “ruined” his work ethic “completely” and that he has “never” been able to regain his work ethic academically until he got a job while he was in grade eleven; a job he still holds. He expressed that his work ethic has “improved into college,” as his job has provided a sense of accomplishment.

Regarding sensory dysregulation, Scott expressed that his hypersensitivity to auditory stimuli was a “significant barrier to functioning” while he was in high school, though it “no longer affects” him in college. He shared that he avoided “all sorts of assorted environments” and he will still avoid places that are too loud (e.g., the movie theatre). Scott continued to share that his sensory issues, in addition to social problems and being bullied in middle school, increased his stress levels.

**Summary of Reference to or Influence of Past Experiences.** Although the focus of the study is on the experiences of attending college or university, many participants, through natural discourse, referenced past experiences that affected them in some way and some experiences that continue to influence how they approach social and academic experiences in college or university. Some participants used previous experiences with socialization (e.g., being bullied, difficulty making friends) to change or grow in postsecondary education from what they experienced in high school, for example, attempting to make friends in university despite
previous difficulty. The next broad theme is related to participants having a sense of appreciation while attending college or university, and is illustrated below.

**Theme Five: Having a Sense of Appreciation**

Several participants shared that they appreciated being a part of a college or university environment, particularly with respect to their social and academic experiences. Similar to the broad theme of Reference to or Influence of Past Experiences, participants often described their sense of appreciation of their college or university experience in comparison to their high school experience. The broad theme of Having a Sense of Appreciation is best represented through two subthemes including *Social Appreciation* and *Academic Appreciation*.

**Social Appreciation.** Participants expressed their appreciation of being a part of a college or university environment that is more socially “mature” in nature compared to high school. Many participants shared that they appreciate being in the company of “like-minded” students who have chosen to attend college or university as opposed to “having to be there,” and as such, feel more comfortable socializing with others. Markus explained,

> I feel more comfortable talking to people around here than I did in high school. Um I’ve nothing against the people in high school, but I prefer people here because there’s a sense of maturity I didn’t see in high school. And the people who are here want to be here. And I think to me that’s the biggest difference: you don’t go to university unless you want to go to university; where in high school you go to high school because you have to go to high school and so a lot of people there are just unbearable. Whereas here, I like everybody here.

Several participants shared this sentiment, and in fact, participants almost used verbatim words to express their appreciation of being in an environment where students are attending
college or university because they want to, not because they have to. Zach expressed that he was “always sort of hoping” for a mature environment in high school, and that “it is very nice to be free” of the students who were “dicking around or being bothersome.” Similarly, Scott shared that he has not had problems with being bullied as he was in earlier years. He expressed that university is “different” than high school in that he has “yet to encounter any active malice.”

Parallel with their appreciation of the social context, participants also shared their appreciation for academic experiences in college or university, the focus of the next subtheme.

**Academic Appreciation.** Participants expressed appreciation for various academic experiences, such as flexibility in course selection, opportunities to engage in course lectures, having respect for, as well as being respected by their professors. Regarding course selection, participants conveyed appreciating the ability to select courses in areas of their interest. For example, Jake shared that having the option to select courses made him “eager” to attend college. Steven appreciates having the autonomy to select courses he has “a lot of interest in.” He described attending classes as “hobbies” and provided an analogy of hearing a professor talk is like “watching a big screen movie.” Participants also appreciate engaging in course lectures, class discussions, and dialogue with professors. Steven appreciates lecture-style classes and finds his classes more “intellectually stimulating.” He explained,

…It’s been better than high school in terms of um, uh how would I put this? Um the, I like the teaching better. I like the, the teachers definitely know what they’re talking about and a lot better than high school…I like the lectures, I like listening to lectures. Um because we didn’t, I didn’t get that much in high school.

Steven continued to express his appreciation and respect for his professors’ credentials (e.g., doctorates) in that he can ask them “anything” about the course material and engage in
meaningful dialogue with his professors. In a similar vein, Scott expressed that his classes are “so much more interesting, challenging, and critically inclined” than in high school; he shared that his university courses have held his interest “much more” compared to high school.

Steven conveyed a sense of feeling respected by his professors while attending college compared to high school. He expressed,

Well, um one of the things in high school was everyone treated you, like everyone treats you differently, they treat you more like an adult now…um less condescending I would say um, is the words I would use. And they don’t, they don’t really try to baby you... like in…high school where they kind of treat you as like, you know, you’re…you’re below them kind of thing.

**Summary of Sense of Appreciation.** The broad theme of Having a Sense of Appreciation illustrates the participants’ fond appreciation for attending college or university, particularly with respect to the social and academic aspects of postsecondary education. Socially, participants appreciate being a part of a “mature” environment compared to high school and having the autonomy to interact with like-minded students. Academically, participants appreciate the opportunity to select courses that are of interest to them, attend lectures and engage in dialogue with professors, and appreciate the caliber of the professors’ teaching and expertise.

**Theme Six: Understanding Autism Spectrum Disorder by Others and Self**

Understanding Autism Spectrum Disorder by Others and Self is a broad theme related to the participants’ desire for others to have a better understanding of autism spectrum disorder, and is also related to the extent to which participants themselves understand ASD and how it affects them. Participants spoke at length and in depth to the notion of the “invisible disability” and how the needs of students with ASD are not immediately apparent compared to disabilities with overt
symptoms such as physical disabilities. For example, participants shared that they do not want to appear as a “slacker” when having difficulty with time management (e.g., missing assignments), or having their avoidance behaviours perceived as “slacking off” rather symptoms of anxiety.

The notion of the invisible disability is captured through an extract from Steven’s interview,

> I get anxious and stuff, I, I am bad, bad socially…a lot of people don’t understand. You know, um, you know, once again because I’m articulate, people think that uh, you know, I’m, I should be fine socially and there’s nothing outwardly wrong with me. And…I get treated as if, I, uh that I should know…what I’ve done wrong instead of: No, I actually have no idea what I did wrong.

Zach shared a similar sentiment in terms of his needs not being overly apparent,

> I seem very high functioning and for a lot of people I don’t seem like an Aspie. So one of the problems with being well adapted is: upside you don’t, you don’t have a lot of problems; downside, nobody recognizes it as easily and it may be a bit harder to convince some people that you may need the help.

Zach continued to express that Asperger’s Disorder is a “trendy disease” right now and the “problem with trendy disorders is everybody thinks they have it, and it becomes very watered down.” Melody shared a similar sentiment regarding the misrepresentation of Asperger’s Disorder in the media. She expressed, “there isn’t that big of an understanding…from what I’ve seen in the media, Asperger’s…can get a bad rap. So I feel it’s important to understand it. It’s a disability.”

Participants shared that having others (e.g., students) have a better understanding of disabilities would be helpful while attending college or university. Melody shared that group work would be easier if group members understood that she had Asperger’s Disorder, as they
would exercise patience with her. Luke also shared that if others knew the social difficulties of students with HFA, then they may be more patient with him and understand his “quirks.” In a similar vein, Leo felt as though his peer mentor at university did not have a good understanding of ASD and, consequently, was not able to “empathize” with him. As such, he would give her “various analogies to help her understand what it was like to be an Aspie.”

Another aspect in the broad theme of Understanding Autism Spectrum Disorder by Others and Self is related to the participants’ own understanding of ASD and how the disorder affects them, particularly with respect advocating for their learning needs. Participants expressed difficulty with self-advocacy, largely due to placing pressure on themselves to be on the “same playing field” as other students. This feeling was echoed throughout the interviews, with participants placing enormous pressure on themselves to deny their own access to educational accommodations. William shared that he “believed and deserved” to be on the same playing field as other students, as other students experience stress with schoolwork, not just him. He explained,

…I guess it’s the imposter syndrome. You’re so good at mimicking other people, with the condition, that you feel like: well maybe I don’t have Asperger's, maybe all the tests are wrong and maybe I don’t have this condition where I need special accommodations because I just, I mean, some part of me feels like all these other people, I can relate to them.

Similarly, Jeff shared that he regrets not enrolling in a preparatory college course, as his “priority was just to be like everyone else to an extent.” He further explained,
I also beat myself up for having this disability to an extent...just cause I feel I need to be like everyone else. Or just like, no support. Do it the way everyone else is doing it. But over time I’ve learned that, hey, I can get support...I can still work hard. And be smart. Luke, the graduate student, also shared his difficulties with advocating for himself, but provided further insight into this area based on his postsecondary experience. He expressed that he did not access educational accommodations due to his lack of self-awareness of his difficulties. He explained,

...part of the problem...was the lack of self-awareness for your own, you know, your own kind of deficits and impairments...a lot of people in the school system say that in order to get accommodations, you have to ask in the first place. But the problem is, ok here’s the problem: how do you know that you have problems and uh until you have tried your way through difficulties? And I think that’s one of the things that a lot of people with ASD, at least for myself, find it difficult. How do you know that you need help in the first place? You don’t even know about it because you’re, you’re not even self-aware of the problems.

Luke elaborated that it is difficult for individuals with ASD to express their needs and that focus needs to be placed on increasing self-awareness in individuals with ASD so that students can get support “in advance” and before the difficulties escalate.

**Summary of Understanding Autism Spectrum Disorder by Others and Self.** The broad theme of Understanding Autism Spectrum Disorder by Others and Self depicted the notion of the invisible disability and how it affects the study participants in college or university. Participants conveyed the importance of others to understand the needs of students with HFA in postsecondary education so that they can feel better supported, both socially and academically.
This theme also illustrated the extent to which participants have an understanding of ASD and how the disorder affects them, particularly with respect to advocating for their learning needs.

**Theme Seven: Managing the Transition**

The broad theme of Managing the Transition is related to the experience of transitioning from high school to postsecondary education and navigating a new system. The broad theme of *Managing the Transition* is best illustrated through two subthemes, which include *Managing the Transition from High School* and *Navigating a New Educational System.*

**Managing the Transition from High School.** Participants conveyed a range of experience with respect to managing their transition from high school to college or university. The subtheme of Managing the Transition from High School is related to aspects of preparing for postsecondary education, including selecting a college or university, understanding the admissions process, and realizing the differences between high school and postsecondary education with respect to available supports for students with disabilities.

A majority of the participants indicated that attending postsecondary education was a natural, most logical next-step after high school. Although some participants transitioned to university, others described their decision to attend a college instead of a university as a natural progression from high school in that class sizes were similar and the environment was “laid-back” and comfortable, making for a more “gentle” transition. Melody shared,

- I felt like going to college would be a better step up for me than just going straight to university…I felt more comfortable going through like more one-on-one stuff where you get more know better know your instructors…so smaller class sizes makes it feel a bit more…is a better step up from high school…
Similarly, both Scott and Jeff shared that attending college was a good way to “get your feet wet,” as college is a more comfortable, community-like environment.

Participants conveyed difficulty in managing the transition with respect to understanding, or realizing, the differences between high school and postsecondary education regarding the provision of supports for students with disabilities. William described his transition to university as “challenging,” as he realized he was not going to get the “hand holding” by school staff that he had in high school. He further explained,

…realizing that this one dude [disability advisor] has like 200 students or so in his case file. And realizing that it wasn’t going to be like high school, I wasn’t going to be assigned a…a teaching assistant. I wasn’t going to have someone I could confide with and who could give the lesson back to me one-on-one.

Jeff also shared that he wished he had more support during the transition to postsecondary education so that he could be better prepared for his courses. He explained,

I would actually have [liked] someone to help me a bit with the system early on, so it would a little easier and less intimidating for me, for me to figure out. And then I could get, maybe, the proper support I needed for Chemistry sooner…or the other courses I needed sooner, get the actual proper tutoring.

Similar to the subtheme of Managing the Transition from High School, participants described their experience, in-depth, of navigating a new educational system.

**Navigating a New Educational System.** In this subtheme, participants emanated their challenges with navigating a new educational system. Their experience of navigating a new system was related to learning a new registration process, navigating websites, providing documentation related to their disability, navigating various forms for grants, and accessing
supports, as examples. One of Melody’s extracts captured her frustration with providing
documentation to support her disability,

…my family and I had to go through a lot to try and reconfirm my diagnosis…that way I
can get the support…there was a lot of things, lot of…issues with trying and getting it all
sent in…it was kind of tedious how long it took.

Participants relayed their challenges with accessing educational accommodations in a
timely manner, largely due to not understanding the process in which to obtain them (e.g.,
submitting forms, providing documentation of diagnosis and psychoeducational assessments).
William shared that he was unaware that he could file a “Request for Academic Concession” and
as such, he “failed one class…but it was a class I could have passed if I had more time.” Jeff
expressed his regret in not communicating with disability services sooner. He explained,

One thing I regretted when I first came here that I didn’t get to know them [disability
services] a little sooner, like, after I registered would, like, get to know them. And I knew
that, I knew that, it turns out I had an outdated psyche-ed [psychoeducational assessment]
that was from 2007. But they were still willing to give me basic accommodations.

Lindsay shared her difficulty in navigating a new system when she transferred from a college to
a university in terms of navigating the campus, communicating with professors, and
understanding policies and procedures. She shared,

…it’s terrible, I get lost like from one day to the next even if I know where I’m going. So
um, that’s been really difficult because it’s [university] way bigger…I’m just starting to
hit my stride. Like arranging Student Aid is different here. Um, arranging disability
supports has been different here. And the class sizes make things different too because cl-
like the classes are almost always three or four times as large, um…yeah so larger and I
have a hard time with navigation…also the change in procedure and policy, for getting things organized. So um, signing up for classes, getting financial aid, all of those kinds of things: they’re different at [university] and I’m just, I’m just getting handle on it.

**Summary of Managing the Transition.** The broad theme of Managing the Transition is related to the participants’ experience of managing their transition from high school to postsecondary education, including selecting postsecondary institutions, understanding fundamental differences between high school and college or university with respect to access to services, navigating a new educational setting such as providing documentation related to diagnosis, navigating websites and forms, and understanding procedures related to accessing educational accommodations. The final theme in this research study is focused on the social experience of students with HFA while attending college or university.

**Theme Eight: Entering a New Social World**

The broad theme of Entering a New Social World emerged throughout all interviews in an in-depth and evocative manner. Although few participants expressed success in befriending others and maintaining a social network, the majority of the participants’ experience involved difficulties with socialization while attending college or university. The broad theme of Entering a New Social World is best illustrated through the following four subthemes: *Desire and Uncertainty, Difficulty Initiating Social Interaction, Following a Social Template, and Finding Social Outlets.*

**Desire and Uncertainty.** Several participants expressed a desire to socialize with others while attending college or university but encounter uncertainty in initiating social interactions. Leo expressed loneliness and a “desire to be accepted” by peers. An extract from his interview captured his desire to socialize,
Even before I had diagnosis for Aspie I was always trying to get other people to acknowledge me. I was always trying to get them to say: Hey, he’s there, he matters, right?

Leo elaborated that he would leave the door open to his dormitory on campus hoping someone would stop by. Jake also shared his desire to make friends and expressed that he is trying to be more of a “people person” now, as he realized “people are more important than cartoon characters and stuff like that.” Despite his realization, he “fears rejection” and thinks that he “might not be that good of a friend” due to his past difficulties with socialization.

Despite having a desire to socially interact with others while attending college or university, participants expressed uncertainty in initiating such interactions. Steven indicated that he would prefer to make friends, but “on the one hand it’s stressful meeting people…you don’t know how to go about it exactly.” Similarly, Zach shared, “I seem to have a bit of the natural charm thing but I also don’t quite know how to approach people…” Zach continued to describe a strategy he uses to initiate social interactions,

It’s one of those sorts of things where you’re almost just poke, poke, poke: did you get a good reaction? Did you get no reaction? …and if you’re shy, no reaction means: Oh they don’t like me, I’ll just go over here.

Participants spoke to avoiding social situations due to their uncertainty and the stress associated with interaction with others, as well as fear of rejection. Scott shared,

I mean, I, one could say that I’m self-deluding and that I really do want friendships but I don’t think so, I think I’m quite happy with the way things are now and uh the, anything like beyond, beyond that I would probably find stressful.
This subtheme illustrates the desire for socialization, but the level of uncertainty involved in initiating such social interactions. Despite feeling uncertain about social situations, participants described their experience of initiating interaction with others while attending college or university, the focus of the next subtheme.

**Difficulty Initiating Social Interaction.** Participants expressed social difficulty while attending college or university, particularly with regards to initiating interactions and relating to others. Leo described his interactions as “treacherous footwork” where he tries to join a conversation and “just crashing into it and just like skipping out right away.” Melody also shared that it is hard to join a conversation with others, and as such, she rarely initiates social interaction with others. Furthermore, Scott shared that communicating with others during group work is difficult, as he is “not as fast as others with replies.” Steven shared that meeting friends in college is difficult, as he perceives others as strangers. He explained,

…really, really, really hard to make friends in college. Um, yeah, because …well I mean you just don’t know the people. I mean it’s just, you know, a random assortment of people and you stick them in a [class] room…they’re just other people who are there…you don’t know anything about them, I mean, at all. You know, who are they, where are they from, who knows? …It’s no different from, you know, a stranger from the street popped into your, you know, into your class.

Scott expressed his difficulty with back and forth conversation, and consequently, avoiding socializing with others. He shared,

I think it would just uh be too much time and effort, because social does take effort and, and that has to do with the time that you have to formulate a reply. Because you can’t just be like: hmm, for ten minutes while you think of the appropriate response, obviously it
has to be quick…it does take energy to think that quickly…I suspect that I would probably find that a little, you know, stressful.

Scott further shared that he will wait for others to initiate communication with him, as initiating social interaction is a “social risk.” He expressed that he is happy with the “acquaintanceships” he has in university.

Relating to others was described as a hindrance in participants’ attempts to socialize with others, particularly with respect to finding common interests. Melody shared that it can be difficult to find others who are interested in videogames. Steven shared a similar sentiment with respect to finding common interests,

I don’t really know what to talk about. Like…of course that’s just my issue but (very slight laugh)…I know that the people won’t be interested in just talking about the uh, the uh, the course work (slight laugh)…they’ll be going on their, you know, different uh websites and stuff and I’ll be like: I don’t care, yeah.

William shared a similar experience of his difficulty relating to his roommates while living on campus. He expressed,

I didn’t relate, I didn’t get to choose who I roomed with. Two guys were brothers, golfers from Nova Scotia, majoring in Business and Economics, respectively…we might as well have been from different planets, the only thing we had in common was that one guy really liked Gladiator [the movie].

The subtheme of Difficulty Initiating Social Interaction highlights the challenges that students with HFA experience in initiating interactions with others and relating to others by finding common interests. The next subtheme is related to how participants use or follow a “social template” when interacting with others while attending college or university.
Following a Social Template. The subtheme of Following a Social Template is related to a social “process” that participants use or follow to interact with others. Participants describe how they carefully observe others while they socialize so that they can interact in similar ways. As William shared, socializing is a “learned and difficult” skill. Similarly, Lindsay expressed, “I totally memorize social patterns and use it as a code, it doesn’t come naturally to me and never has.” An extract from Leo’s interview illustrates his experience of using a social strategy,

Sometimes I actually use the strategy where I stop and I listen to what other people are saying. And then I go: Ok, so what I’m saying is similar to what they’re saying?

Similarly, Zach engages in a series of observations and questioning as a way to “learn” how to socialize. He elaborated,

Aspies learn about people, learn how to socialize instead of just having it…often when I’m talking to people, even when not looking for anything specific, I ask myself what, what are they expecting? What am I expecting? What’s the best thing for this…what’s the best thing to say to get this reaction? So it’s a very almost mathematical I guess, is a term for it, way to socialize.

Zach continued to explain how he tries to read others while in class prior to initiating any social interaction. He shared,

You know there is a lot of um being able to sort of read people, actually [process] of deduction where you can look at somebody and see certain things like, you know, do they have this, what’s their political affiliation, what’s their marital status? Um do they like this? Are they an artist? Are they a writer, you know, there’s a lot of little things you can tell from a person right away so that, that does help…but then also watching social
interest and watching rapport, are they looking towards me, are they asking me questions, are they taking any interest in what I’m saying?

The subtheme of Following a Social Template illustrates the process in which students with HFA follow while attempting to initiate and engage in social interactions in college or university. The final subtheme in the broad theme of Entering a New Social World is related to having social outlets in the college or university setting.

**Finding Social Outlets.** The subtheme of Finding Social Outlets refers to avenues in which students with HFA socialize and avenues in which they wish existed to foster socialization while attending college or university. Participants shared their fondness for social media Internet sites (e.g., Tumblr) where they can interact socially with others based on similar interests. Further, the socialization is laid out in text, increasing predictability of the interaction. As Zach explained,

> I have my social interaction [online], I have someone to talk to, but they’re not next to me, I can shut them off whenever…so it’s sort of, it’s a nice medium for me…everything is laid out in text, so you can read everything and you know exactly what’s going…

He further shared,

> Best thing about the internet is that you’re not grouped by socialization, you’re grouped by interest, so you meet people who have the same interests as you, and same values generally, which are the two things that are requisites for friendships in my opinion…

It is very nice online that you don’t get any of that initial judgment so, you know, I can have somebody who has this or that disorder, completely overweight, socially inept whatever, as long as they can still type and still have enough varied interests…
William shared a similar sentiment regarding his fondness for social interaction on the Internet, as it reduces any judgment related to having a disability. He expressed, “I’m able to connect with people online because there’s no barrier, there’s no Spoon Theory um to communicate and all that.”

Although participants appreciate having online social avenues, several participants expressed their preference for having more social opportunities on campus. Many participants expressed that having events on campus related to their interests would be helpful in facilitating social experiences, such as forming friendships. Participants also conveyed that having smaller events or clubs would help with communication and interaction with others. An extract from Steven’s interview captured his desire for a social outlet such as a club based on shared interests,

If there was like some kind of a club or something, you know…kind of um a way, um an easier way to meet people. Um, you know, at least where, you know, people would have some kind of shared common ground. That makes it easier because then…can have a conversation about such and such and I can br-branch into other things.

Jeff conveyed a similar interest in having a club related to academia. He shared,

Like, maybe for an example, a club, I don’t know, dedicated to science or something…just a group of friendly people that love the subject. That love to think.

In contrast, one participant shared his experience of participating in a club that helped him meet other students. Luke shared,

Joining Dance Club really helped me, you know, really broadened my social circle. And a lot of my friends went, I know to hang out a lot today, and we were close. I’ve met, I met, met through Dance Club or I met through friends who have met in Dance Club originally, so that really helped. So those were some of my happier times.
**Summary of Entering a New Social World.** The broad theme of Entering New a Social World illustrates the participants’ social experience while attending college or university. Although several participants conveyed a desire to socialize, they experience uncertainty and difficulty initiating and maintaining social interactions with others. Participants’ appreciated having social interaction through online means, but also expressed a desire for social outlets on campus, such as clubs or social groups, to help facilitate socialization and friendships based on shared interests.

**Summary of Participants’ Lived Experiences of Attending College or University as Students with High-Functioning Autism**

Eight broad themes and corresponding subthemes emerged from in-depth interviews with 12 participants with HFA regarding the phenomenon of attending college or university as students with HFA. The broad theme of *Managing Academic Expectations* illustrated the difficulty participants experienced with organization and time management, particularly with respect to managing multiple, competing demands, demands that are all important in postsecondary education. Managing academic expectations resulted in participants feeling overwhelmed while attending college or university. The broad theme of *Experiencing Support* depicted the range of support, both positive and negative, that participants experienced from professors, campus resources, peers, and community and global systems. Participants also conveyed the importance and desire to support others. The third theme of *Managing Autism Spectrum Disorder and Related Symptoms* illustrated how the participants have to manage ASD symptoms while attending college and university, coupled with the interference of related (or comorbid) symptoms of anxiety and depression, as examples.
The *Reference to or Influence of Past Experience* theme highlighted how the participants’ previous experiences in elementary and secondary school have shaped or influenced their current social and academic experiences in college or university. Participants conveyed appreciating the social and academic aspects of postsecondary education, often in contrast to their high school experience, which comprised the *Having a Sense of Appreciation* theme. The *Understanding Autism Spectrum Disorder by Others and Self* theme depicted the extent to which other individuals (e.g., peers) have an understanding of ASD, and also captured the extent to which the participants themselves have an understanding of ASD, particularly with respect to self-advocating for their learning needs.

The theme of *Managing the Transition* captured the participants’ experience with managing the transition from high school to postsecondary education, and navigating a new educational system (i.e., college or university). The final theme of *Entering a Social World* depicted various experiences of socializing in postsecondary education. Participants conveyed desire, yet uncertainty to socialize in college or university. Participants shared their difficulties with initiating social interaction and explained how they follow a social template in their attempts to socialize with others. Participants expressed their difficulty in finding social outlets and conveyed their desire for more social outlets on campus to facilitate socialization in college or university.
CHAPTER FIVE: Discussion

The current study aimed to understand the meaning of the lived experiences of attending college or university for students with HFA. Using the method of interpretive phenomenological analysis allowed for an in-depth investigation of the meaning of the lived experiences of the phenomenon in a detailed way. Twelve postsecondary students diagnosed with either HFA or Asperger’s Disorder participated in detailed, in-depth interviews with the researcher, sharing their experiences of attending college or university. Eight broad themes and corresponding subthemes emerged from the data analysis that describe the meaning of the lived experiences of attending college or university as students with HFA and are discussed below.

In this chapter, the findings and contributions of this study are discussed in relation to the extant literature. Further, the limitations and strengths of the study, recommendations for future research, and implications for the practice of psychologists, educators, and policy considerations are discussed. The chapter concludes with the researcher’s reflection and final remarks.

Significant Findings of the Research Study and Relation to Extant Literature

Understanding the experience of attending postsecondary education from the perspectives of students with HFA who are already attending college or university can provide valuable insight into their postsecondary functioning (Camarena & Sarigiani, 2009; Gelbar et al., 2014). As Gobbo and Shmulsky (2014) stated, “a first step in addressing the postsecondary achievement of students with ASD is to understand how these students currently fare at colleges and universities” (p. 13). Further, Gelbar and colleagues (2014) asserted that research in the area of ASD and postsecondary education is a necessity, and indeed, the findings of this study have helped to fill this gap in the literature.

The findings of this research study have contributed to the literature by both confirming our understanding, and adding to and expanding our understanding of the phenomenon of
students with HFA attending college or university. Very few research studies have focused on students with HFA in postsecondary education, an area that certainly demands more research attention. Of the few papers available, most are not research-based in nature and, although informative, many focus on the presumed theoretical challenges that students with HFA may experience in postsecondary education (e.g., Adreon & Durocher, 2007; Camerena & Sarigiani, 2009; Mynatt, Gibbons, & Hughes, 2014; VanBergeijk et al., 2009; Zeedyk, Tipton, & Blacker, 2014). The findings of this current study provide valuable insight into the global experiences of students with HFA enrolled in postsecondary education. Below is a discussion of the findings and contributions, by theme, and their relation to the extant literature.

**Managing Academic Expectations**

Managing academic expectations was a salient experience for all the participants in this study, particularly with respect to organizing course materials, managing time (e.g., assignment deadlines), and feeling overwhelmed by the many competing demands in postsecondary education. The experience of managing academic expectations was a very real and challenging part of the participants’ experience due, in part, to the level of independence and executive skills that are required to be successful in college or university. Students with HFA, in a high school context, are often provided support from teachers, educational assistants, and parents to help navigate and organize their day in a structured way (Kapp et al., 2011). Although this provides support for students, it often does not teach them necessary independent and executive skills needed to manage the demands of college or university.

Research has shown that young adults with HFA have significant deficits in executive functioning (EF), for example, initiating, planning, and cognitive flexibility such as shifting attention between two tasks (e.g., Brady et al., 2013; Bramham et al., 2009; Sasche et al., 2013),
skills that participants in this study described as challenging with respect to managing their academic demands. Unfortunately, there still remains a paucity of research investigating EF in young adults with HFA (Sasche et al., 2013) and specifically for postsecondary students with HFA. The findings of this current study illuminated participants’ difficulty with EF in college and university, including shifting their attention between more than one course, submitting assignments with the same due dates, and studying for multiple examinations. Consequently, participants dropped courses or elected to take one course at a time, which may suggest compensating for EF deficits, in particular, planning and cognitive shifting. Furthermore, participants conveyed difficulty with time management, for example, underestimating the time it takes to complete assignments and postponing studying (i.e., procrastinating), which may indicate deficits in planning.

The broad theme of Managing Academic Expectations highlights the critical need to support students with HFA with their EF, such as providing prompts for starting and completing term papers and studying for exams, and having larger assignments broken down into smaller, feasible steps (VanBergeijk et al., 2008). At the same time, students with HFA would highly benefit from direct instruction on executive skills, such as how to initiate tasks in a timely manner and monitor their own progress. Research has shown that children with HFA benefit from EF intervention, particularly organizational and self-monitoring skills (see Dorminy, Luscre, & Gast, 2009), though there remains a need for research investigating the effectiveness of EF intervention for young adults with HFA.

A salient challenge in providing EF support in college or university is that postsecondary educators (e.g., disability services, professors) may not fully understand the need to support students with their EF, how to ameliorate the difficulties, or even view this need as part of their
role to circumvent. As such, the high school environment may be an optimal setting to introduce EF instruction, as supports and services are highly individualized for students with disabilities in high school. At the same time, there is also a need for postsecondary institutions to better understand this unique need for students with HFA in order to provide appropriate services related to “scheduling, time management, academic coursework…” as examples (Zager & Alpern, 2010, p. 1).

**Experiencing Support**

Participants in this study experienced a range of support, both positive and negative, while attending college or university. The findings also highlight various sources of support including professors, campus resources, peer support, as well as the desire to support others. In addition, participants conveyed feeling supported by community and global systems such as their parents, and more indirectly, by iconic figures with autism (e.g., Temple Grandin). Although the experience of some participants was that they felt supported, other participants did not convey this same feeling. In particular, some participants perceived that there was not an understanding of how their HFA and comorbid symptoms (e.g., anxiety) affect their academic functioning on behalf of professors and disability advisors, and as such, felt as though these individuals did not understand their needs. Further, participants shared that there were not enough resources available such as counseling services.

Supporting students with HFA in postsecondary education is an area that has not received much research attention to date, and to some extent, could explain why some students with HFA are not feeling supported by professors and disability advisors. Postsecondary faculty and related educators may not know how to support students with HFA as they are usually accustomed to supporting students with learning disabilities, ADHD, and physical disabilities (Barnhill, 2014).
Further, disability offices are often burdened with large caseloads and not enough resources and services (Wenzel & Rowley, 2010). The findings of this current study highlight the critical need for postsecondary educators (e.g., professors, disability advisors) to have the knowledge, training, and capacity to best support students with HFA.

An interesting finding within the broad theme of Experiencing Support that has not been addressed in the extant literature, to the best of the researcher’s knowledge, is the desire for students with HFA to support others with disabilities. Participants spoke at length about aspirations to help facilitate growth and independence for others with disabilities, from a support group to starting a gaming company (and hiring individuals with disabilities) and developing a smart phone app to help with public transportation. The desire to support others is to be commended, and should be capitalized on in terms of supporting students with HFA so their desire to support others become attainable goals.

**Managing Autism Spectrum Disorder and Related Symptoms**

The findings of this broad theme contribute to the literature by highlighting how ASD and related symptoms manifest in students with HFA in a postsecondary educational environment. Participants reported difficulty in managing their restricted interests, sensory dysregulation, and comorbid symptoms of anxiety, depression, OCD, and ADHD. These findings are consistent with studies showing that ASD symptoms persist into adulthood, and the higher rates of mental health comorbidity in individuals with HFA, particularly mood and anxiety disorders (e.g., Howlin & Moss, 2012; Joshi et al., 2013).

Some participants indicated that their restricted interests and preference for a routine can be adaptive in college and university, in that focusing on restricted interests (e.g., videogame development) within the context of earning a college or university degree can be a positive
influence. Morrison, Sansoti, and Hadley (2009) reported that students with HFA can develop expertise in their area of interest, and it can be worthwhile to capitalize on the students’ preferred interest in postsecondary education. Further, in a recent study, Gobbo and Shmulsky (2014) found that college professors who have students with HFA in their classes reported that students with HFA can be “passionate and knowledgeable” about specific topics and “know more about the topic than anybody in the class” (p. 18). As such, the restricted interest can be seen as an academic strength, “especially when it overlaps with course content” (Gobbo & Shmulsky, 2014, p. 18).

In contrast, many participants indicated that their restricted interests distracts them from their schoolwork and that sensory dysregulation causes agitation and distractibility, both in academic and social contexts. These findings are consistent with research showing that sensory dysregulation continues into adulthood for individuals with ASD (Crane et al., 2009; Smith & Sharp, 2013; Tavassoli et al., 2014) and also consistent with theoretical positions contending that sensory dysregulation can result in social and academic impairment in college or university (e.g., Adreon & Durocher, 2007; VanBergeijk et al., 2008).

Participants also described at length having to manage comorbid symptoms of ADHD, OCD, depression, and in particular, anxiety, which reportedly interfere both with academic (e.g., preparing for and writing exams, needing to take time off from school) and social functioning (e.g., social anxiety from past social difficulties, participating in study groups). These finding are consistent with a recent study where professors reported that a challenge for students with ASD is having to manage their anxiety in the classroom, and during discussions, labs, and group work so that it does not “overtake teaching and learning processes” (Gobbo & Shmulsky, 2014, p. 18).
As elaborated by one professor, “once it [the anxiety] starts to spiral it is really difficult to get the student out of that spiral and back to a place where they can think about coursework” (p. 18).

These findings highlight the critical need to support the mental health of postsecondary students with HFA, including recognizing signs and symptoms of mental health issues, and how to provide timely and appropriate services so that the students can learn to effectively manage symptoms. Cognitive-behavioural therapy is an evidence-based approach for treating psychiatric disorders, including mood and anxiety disorders in individuals with HFA (Anderson & Morris, 2006). Research has demonstrated the effectiveness of CBT for treating anxiety in children and adolescents with HFA (e.g., Attwood, 2004; Chalfant, Rapee, & Carroll, 2007) and it has been argued that CBT is an effective method for adults with HFA as well (Attwood, 2004), though further research examining mental health treatment for young adults with HFA is needed. Furthermore, environmental strategies to minimize sensory dysregulation and associated discomfort are warranted, as it has been posited that environmental stressors can exacerbate the onset of mood and anxiety disorders (VanBergeijk & Shatyermman, 2005), and affect academic and social functioning (Kapp et al., 2011; Smith & Sharp, 2013).

**Reference to or Influence of Past Experiences**

Participants shared that their academic and social challenges in high school, including comorbid symptoms, have shaped their postsecondary educational experience. These findings provide unique insight into how the participants’ past experiences influence their current experience in postsecondary education, an area that has not been explored empirically to date. Participants shared that there is more autonomy in befriending others in college or university, as they are not being “forced” to socialize with others as they were in high school (e.g., by parents). Participants also shared that being bullied and “socially rejected” in high school has impacted
their socialization in college or university, as they are slowly regaining trust in others.

Unfortunately, research has shown high rates of bullying and victimization in adolescents with ASD (e.g., van Roekel, Scholte, & Didden, 2010). In a sample of 230 adolescents with ASD, van Roekel and colleagues (2010) found “prevalence rates of bullying and victimization between 6 and 46%, with teachers reporting significantly higher rates than peers” (p. 63). Little (2001) found even higher rates of bullying among children and adolescents with Asperger’s Disorder compared to the neurotypical population with results showing that students with AD were four times more likely to be victimized. Bullying can have long-term emotional and behavioural consequences (Scholte, de Kemp, Haselager, & Engels, 2007), and thus, it is not surprising that students in this study are coping with the repercussions from bullying while in postsecondary education. Academically, participants spoke to losing motivation due to depression and placing too much pressure on oneself in high school, but regaining motivation in postsecondary education, as there is more flexibility in selecting courses.

In short, the findings related to Reference to or Influence of Past Experiences illustrates how previous experiences can certainly shape or influence later experiences in life. The findings highlight the need to provide social, mental health, and academic support for students with HFA in elementary and secondary school.

**Having a Sense of Appreciation**

The findings related to Having a Sense of Appreciation illuminate how postsecondary education is a positive experience for students with HFA, both academically and socially. Barnhill (2014) discussed that attending postsecondary education can be a positive experience for students with HFA, consistent with findings reported in very few case studies demonstrating the positive experience of attending college or university for students with HFA (Taylor, 2011;
Prince-Hughes, 2004). Socially, several participants expressed that they appreciate being in a mature environment with more “like-minded” students who choose to attend college or university. Participants expressed that other students are not as “bothersome” and that there is not any observable bullying. Participants also expressed appreciation for academic experiences in college or university, including flexibility in course selection, engaging in course lectures, and appreciating the caliber of the professors’ teaching and expertise. Appreciating the intelligence and expertise of professors was also highlighted in a previous case study involving a postsecondary student with Asperger’s Disorder (see Taylor, 2011). Further, participants conveyed appreciation in having the autonomy to select courses that are “challenging and critically inclined,” and also feel as though their professors respect them.

**Understanding Autism Spectrum Disorder by Others and Self**

The findings in the Understanding Autism Spectrum Disorder by Others and Self theme highlight two fundamental issues related to understanding ASD, which include 1) others’ understanding of ASD; and 2) participants’ own understanding of ASD. Participants in this study described not wanting to be misperceived or misunderstood due to having a disorder that is “invisible” in nature. Participants expressed that they do not want to be perceived as “slacking off” when having difficulty with time management, or not receiving the right support because their difficulties are not apparent to others (e.g., professors). In addition, participants expressed that if other students understood ASD, participating in study groups and socializing with others would be easier as other students would understand their “quirks.” Indeed, this illustrates the paradoxical nature of HFA; given the average and above average cognitive and academic ability of this population, it is often hard for others to grasp the significant impairments in independent, daily living skills and socialization among students with HFA. These findings are consistent with
theoretical positions describing the invisible nature of high-functioning autism (e.g., Barnhill, 2014). Barnhill discussed that the symptoms of HFA are not as easily recognized compared to more overt disabilities (e.g., deafness, blindness), and consequently, professors and neurotypical students may not provide the support that is needed for students with HFA or be as understanding.

Fortunately, recent research has begun to examine autism awareness on college and university campuses among students and faculty (see Gobbo & Shmulsky, 2014; Knott & Taylor, 2014; Tipton & Blacher, 2014). However, findings have demonstrated that autism knowledge is limited on college campuses. In a study investigating autism knowledge through an on-line survey among 1,057 undergraduate and graduate students, and faculty and staff on a university campus, 71.6% of the sample reported that autism is increasing, though a statistically significant portion of these respondents incorrectly believed autism is increasing due to vaccines, which is unfortunate given the substantial research evidence disputing any link between autism and vaccines (Tipton & Blacher, 2014). The researchers also found that many faculty members had limited knowledge of ASD. The researchers concluded that greater autism knowledge among college and university students as well as faculty is needed, and may assist in a smoother transition for students with HFA from high school to postsecondary education.

A second fundamental issue related to the findings in Understanding ASD by Others and Self is the participants’ own understanding of ASD and the extent to which they self-advocate for their learning needs. Participants expressed a strong desire to be “on the same playing field” as other students and wanting to “be like everyone else.” As such, some participants did not access educational accommodations or waited until they experienced academic difficulty. These findings illuminate how the participants’ own understanding of their disability may be limited,
including self-awareness of their learning needs. One participant, a graduate student, expressed similar difficulties with self-advocacy, though shared further insight by attributing his difficulties to a lack of self-awareness. He eloquently shared that an emphasis needs to be placed on increasing self-awareness in individuals with HFA so that the students can receive support in advance and before the difficulties escalate.

There is a scarcity of research investigating self-awareness in postsecondary students with HFA, although Mynatt and colleagues (2014) contend that college students with Asperger’s Disorder lack self-awareness skills and that the lack of such skills may interfere with their postsecondary educational success. Furthermore, Geller and Greenberg (2010) also contend that students with HFA may not fully understand their strengths and weaknesses, and how to self-advocate for services. In the broader sense, young adults with HFA may have difficulty with self-determination skills, a set of skills related to understanding oneself, setting goals, self-regulation, self-advocacy, and independence (e.g., Fullerton & Coyne, 1999). It has been argued that building self-determination skills in students requires the assistance of teachers, other educators, and parents or caregivers (Abery, Rudrud, Arndt, Schauben, & Eggebeen, 1995). To that end, teaching self-determination skills to students with HFA in high school may be one avenue to better prepare students with HFA for their postsecondary academic experience, including how to self-advocate for their learning needs in college or university.

**Managing the Transition**

Research investigating transition planning for students with HFA from high school to postsecondary education is starting to gain considerable attention, both through theoretical papers and empirical investigations (e.g., Hendricks & Wehman, 2009; Hetherington et al., 2010; Hurewitz & Berger, 2008; Roberts, 2010; Shattuck et al., 2012; Stodden & Mruzek, 2010;
Wehman et al., 2014; Zager & Alpern, 2010; Zeedyk, Tipton, & Blacker, 2014). The findings of this current study, however, provide a unique perspective on both managing the transition from high school and navigating a new educational system from the perspectives of students with HFA currently attending college or university, as opposed to more common investigations involving adolescents with HFA and their parents. As stated by Gelbar and colleagues (2014), research focused on interviewing postsecondary students with HFA on their experiences in college or university is needed and may help to inform transition supports, and indeed the findings of this current study have help to fill this need.

Participants in this study discussed that attending postsecondary education was a natural and logical next step after high school, which is consistent with the notion that individuals with HFA have the cognitive and academic ability to pursue postsecondary education (e.g., Zeedyk et al., 2014). Some participants expressed that attending a college rather than a university was a natural progression from high school in that the class sizes are smaller and the environment is more community-like, making for a more “gentle” transition. In the same vein, VanBergeijk and colleagues (2008) discussed that choosing a smaller postsecondary institution may help in the transition for students with HFA, as class sizes are smaller in nature, providing the opportunity for professors to provide a more “personalized learning environment” (p. 1363). Adreon and Durocher (2007) also discussed that attending a college may provide more individualized attention for students with HFA. However, VanBergeijk and colleagues also reported that an advantage of attending a larger university is having diverse program options where students with HFA can harness their academic niches.

Although participants in this study described attending postsecondary education as a natural progression, several participants conveyed difficulty with managing the transition,
experiencing challenges with understanding the differences in the provision of services between high school and college or university. One participant expressed that attending university was not going to be like high school where he received “hand holding.” Another participant shared that he wished he learned the “system” earlier on (e.g., communicating with disability services earlier), so that he was better prepared for his transition and was able to receive “proper support” before his academic difficulties escalated. Part of the issue here is related to self-disclosure of disability to postsecondary institutions in order to be considered for educational accommodations; it is not the institutions’ responsibility to actively identify students with disabilities (Adreon & Durocher, 2007). As such, students with HFA require the knowledge and skills to make the decision whether to disclose their disability and self-advocate for their learning needs in advance.

The findings of this current study also highlight the challenges participants experience with navigating a new educational system, for example, registering for courses, navigating websites and forms for grants, and accessing educational accommodations. Participants described their frustration with not receiving accommodations in a timely manner, largely attributable to a lack of understanding of the process and procedures in obtaining them (e.g., providing updated assessment reports documenting their disability, submitting forms), thus contributing to the delay in receiving support.

These findings illuminate the importance of preparing adolescents with HFA in their transition to postsecondary education by educating the students on the fundamental differences between secondary and postsecondary education with regards to course registration and accessing educational accommodations, as examples. Including students in transition planning in a meaningful and purposeful way may help to build self-determination skills (Hendricks &
Wehman, 2009; Hetherington et al., 2010) and help to circumvent some of the challenges experienced in postsecondary education related to navigating a new system. However, research has shown that students with disabilities are rarely included in transition planning, and if they are included, their engagement was late in their high school experience (Hetherington et al., 2010). Hetherington and colleagues reported that “students [in their study] did not view themselves as engaged in the [transition] process, and most reported that their perspectives were not valued” (p. 169).

**Entering a New Social World**

The findings of this current study illustrate the social experiences of students with HFA in college or university. Although few participants conveyed success in befriending others and maintaining a social network, the core experience is related to difficulties with socialization in postsecondary education, consistent with previous outcome research that has shown that social difficulties in individuals with HFA persist into adulthood (see Howlin et al., 2013; Magiati, Tay, & Howlin, 2014), and not surprising considering a key deficit in ASD is significant impairment in social interaction and communication (APA, 2013; Fritschie, 2010).

The findings related to Entering a New Social World provide unique insight into the socialization experience of students with HFA in college or university from the perspectives of students themselves, an area of research that has not been explored empirically in the extant literature to date; however, theoretical papers exist positing the social challenges for students with HFA in postsecondary education (e.g., Adreon & Durocher, 2007; VanBergeijk et al., 2008). In the current study, participants conveyed a desire to socialize and befriend others, but at the same time, related considerable uncertainty initiating social interactions with others due to fear of rejection, not knowing how to approach others, and the “stress” associated with
interacting socially with another person. These findings are consistent with Carrington and colleagues (2003) and Klin and colleagues (2005) positions that many students with HFA show an interest and desire to seek out and develop peer relationships. Similarly, Daniel & Billingsley (2010) found that students with HFA avoid initiating social interactions or wait passively for others to initiate communication with them in order to avoid social rejection. Despite uncertainty, participants in this current study described their attempts to socialize with others, though experience difficulty in joining a conversation, engaging in reciprocal conversation, and relating to others. These findings are consistent with research on adolescents with HFA, demonstrating their difficulty with initiating interactions or entering conversations and finding common interests with others (Laugeson et al., 2011).

Participants in this study explained how they use a “social template” when socializing with others. Participants described a method of “learning” how to socialize by carefully observing the way others interact so that they can interact in similar ways. One participant indicated that she “memorizes social patterns” and uses the patterns as a “code.” Another participant described the process of systematic observation as “mathematical” in nature. To the best of the researcher’s knowledge, these findings have not been addressed in the literature and, to that end, provide unique insight into the methods students with HFA use to socialize with others in postsecondary education.

Within the social world of participants with HFA in college or university, the participants described their social outlets, such as online social media sites where they can socialize with others based on similar interests. Participants also shared that interacting online increases predictability in the interaction (as it is written out in text) and reduces any initial judgment related to their disability. Although participants appreciate online social outlets, several
expressed wanting more social outlets on their college or university campuses in order to create social opportunities (e.g., smaller events, clubs related to their interests). A study examining the improvement of socialization for adolescents with ASD by using their preferred interests during lunchtime activities showed that the participants had an increase in social engagement and number of initiations made to neurotypical peers (Koegel, Kim, Koegel, & Schwartzman, 2013). Although this study involved adolescents, it illustrates how preferred interests can have a positive, prosocial influence on socialization, and may prove to generalize to postsecondary educational settings, though empirical investigations are needed.

Supporting social functioning and participation in young adults with HFA is important for forming relationships and establishing support networks (Tobin, Drager, & Richardson, 2014) and very few recent studies have examined social supports for students with HFA in postsecondary education (see Barnhill, 2014; Gardiner & Iarocci, 2014; Knott & Taylor, 2014). Barnhill (2014) recently examined current support practices on college campuses (n = 30) that offered specific support for students with Asperger’s Disorder and ASD “above and beyond services typically offered by college or university disability offices” (p. 4). Results showed that 50% of the institutions provided social skills group instruction and 57% provided supervised social activities for students with AD and ASD. It is important to note that Barnhill conducted a comprehensive Internet search and literature review to identify postsecondary institutions in the United States that report they provide specific supports for students with ASD, and through this search, only 45 postsecondary institutions were identified, and of these, 31 of the institutions provided supports for students with ASD “above and beyond” typical services for students with disabilities (p. 4). These results unfortunately illustrate the lack of services available for students with HFA and their unique needs in postsecondary education.
Research studies have shown success in providing social skills support to students with HFA in postsecondary education (see Koegel et al., 2013; Mason, Rispoli, Ganz, Boles, & Orr, 2012). In a multiple baseline design study, Koegel and colleagues (2013) found that by implementing a step-by-step social planning tool for three university students with Asperger’s Disorder, participants showed a significant increase in attending social events per week and reported “a higher satisfaction with their college experience and peer interactions” after receiving the intervention (p. 899). Moreover, studies investigating the use of video modeling, an intervention often used with young children with ASD, have shown to be effective in increasing socialization, such as the use of social language (e.g., Maione & Mirenda, 2006). Drawing parallels to the adult population, a recent multiple baseline study demonstrated the effectiveness of video modeling in improving social skills of university students with Asperger’s syndrome, including improvements in eye contact, reciprocal communication, and modulating facial expressions (Mason et al., 2012). These studies hold promise for providing social support for students with HFA in college and university.

**Summary of the Experiences of Students with High-Functioning Autism attending College or University**

In this study, participants described a host of experiences germane to attending college or university as students with HFA, experiences that are challenging and some of which are positive. A core experience for the participants is that attending postsecondary education is an overall positive experience, as represented through the broad theme of Having a Sense of Appreciation. This finding contributes greatly to our knowledge of the experiences of attending postsecondary education for students with HFA, as it demonstrates that students with HFA
indeed appreciate their experience of postsecondary education and that it means something meaningful and positive to them.

Although a core experience is appreciating postsecondary education, there are other core experiences that illustrated salient challenges while attending college or university for students with HFA and are consistent with research that identifies the deficits characteristic of individuals HFA. These challenges include difficulty managing academic expectations such as keeping organized and managing time as well as social challenges including difficulty initiating interactions with others, experiencing uncertainty in social situations, and wanting more social outlets to facilitate socialization in college or university. What stood out within the social world of students with HFA are the strategies the participants use to interact with others, also referred to as “following a social template.” These findings illuminate the great difficulty students with HFA experience with socialization as they rely, in part, on “memorizing social patterns,” using social “codes,” and engaging in systematic observation of others to learn how to socialize.

Other core experiences in postsecondary education for students with HFA include difficulty managing the transition and navigating a new educational system with respect to learning and understanding fundamental differences between secondary and postsecondary education, including the provision of services for students with disabilities, course registration, and navigating school websites, as examples. Consistent with the phenotype of ASD, participants also conveyed how their restricted interests can be adaptive in college or university, but mostly described how their preferred interests and sensory dysregulation interfere with their academic functioning. Relatedly, participants expressed having to manage comorbid symptoms of ADHD, OCD, depression, and anxiety, as the symptoms negatively affect their academic and social functioning in college or university.
A noteworthy finding is regarding how the participants do not want to be misunderstood by others due to a perceived lack of understanding of ASD among postsecondary faculty, neurotypical students, and other service providers on campus. Participants described the challenges associated with having an “invisible disability,” in that they do not want to be misperceived by professors (e.g., as a “slacker”) or neurotypical students (e.g., during group work), or fear that they are not going to receive the right support as their needs are not as apparent to others as they are with students with more obvious disabilities (e.g., physical disabilities). Furthermore, participants shared their reluctance in accessing educational accommodations, as they want to be “on the same playing field” as other students, illuminating the need for students with HFA to increase their own self-awareness of their learning needs and build self-determination skills including self-advocacy.

Interestingly, a core experience of attending college or university is related to the influence of past experiences on current functioning, for example, how social problems (e.g., being bullied) influence current socialization in college or university. These findings illustrate how previous experiences, particularly negative ones, can have long-term implications on the emotional and behavioural functioning of students with HFA. Lastly, a core experience of attending college or university for students with HFA is related to receiving support. The findings illustrated a range of support, from feeling supported to not feeling supported by professors and disability advisors. Participants also described feeling supported by peers and through community and global systems. A notable finding is with respect to how participants conveyed their desire to support other students with disabilities by developing supports and resources (e.g., a support group, smart phone applications) to help increase independence.
Although the findings of this study illuminate poignant experiences for students with HFA in postsecondary education, it is important to note that similar experiences may also occur in postsecondary students with other disabilities as well as neurotypical students. For example, many college or university students can experience difficulties with time management and organization, and feeling overwhelmed as a result of their difficulties. However, unique to students with ASD is the intensity in which they experience challenges with managing academic expectations and navigating a new social world, as examples. These experiences, as illuminated in the findings of the study, are further exacerbated or heightened by having to simultaneously manage ASD and comorbid symptoms, and understanding and adjusting to significant changes with respect to the provision of services for students with ASD between secondary and postsecondary education, as examples.

Limitations and Strengths of the Study

The findings of this current study contribute to the literature in a valuable way by expanding our understanding of the experiences of students with HFA in college or university. However, every research study has potential limitations, and this current study is no exception. First, 9 out of 12 participants were male, and as such, males were disproportionally represented in this study. Although females were under-represented in the study, ASD is approximately five times more common in males than it is in females (CDC, 2014), and this disproportion of male versus female participants is mirrored in this study. Including more females with HFA in future studies is important, as studies with females with HFA are not as abundant as with males, and understanding the perspective of females could provide unique insight (e.g., similarities, differences) into their experiences of attending postsecondary education.
Second, six of the participants in this study had just completed their first year of postsecondary education. Although they were able to meaningfully reflect and describe their experiences, it is possible that the emergent themes may be different if the participants represented other years of postsecondary education. For example, the two oldest students in this study (age 28, respectively) described issues related to dating and employment, areas that were not addressed in a detailed way by the other participants.

Third, it is possible that the individuals who chose to participate in this study are students who are better connected to their postsecondary environment (e.g., with disability services), and as such, may represent a sub-group of students with HFA, which could affect the transferability of the findings. In a similar vein, a central goal in IPA studies is to better understand the meaning of individual experiences while looking for shared experiences across participants (Smith et al., 2009); therefore, it is cautioned that the experiences of the participants with HFA in this study may not be generalizable to all students with HFA. However, the findings of this current study are consistent with the extant literature, and, to that end, are likely to be an accurate reflection of the experiences of students with HFA or Asperger’s Disorder in college or university.

Lastly, one interview with a participant lasted 24 minutes (the mean length of the interviews was 75 minutes) due to difficulty elaborating on her experiences. Although the researcher conducted a telephone-screening interview with the participant to assess if she met the inclusion criterion of being able to discuss at length and in detail her experiences of attending postsecondary education, her difficulty doing so was not apparent until the researcher traveled to her college and met with her in person for the interview. However, what she chose to discuss was, in part, consistent with other participants’ interviews, and contributed to the understanding of the experiences of attending college or university. Also, one graduate student was included in
this study. This particular student expressed strong and compelling interest to participate in this study, and as such, was included. The findings from his interview were largely consistent with the other participants, suggesting that similar experiences (e.g., challenges, positive effects) persist into later years of adulthood.

Despite the limitations of the current study, there were several clear strengths that contribute to our understanding of the experiences of students with HFA in college or university, some of which are highlighted here. A substantial strength of this study was providing the opportunity for students with HFA to lend their voice and share their experiences of attending college or university. Unfortunately, the voice of students with disabilities is often minimized or unsolicited (Scuitto et al., 2012), whereas a key feature of this study was valuing, to a great extent, what the participants shared regarding their experiences of attending college or university. Related to this, the method of interpretive phenomenological analysis allowed the researcher to focus on the breadth and depth of the participants’ experiences (Smith et al., 2009), rather than focusing on one or two particular aspects of their postsecondary educational experience. This study was explorative, rather than directive, allowing the participants to share their general experiences and highlight aspects of their experiences that were meaningful to them.

An additional strength of this study is that participants were recruited from four postsecondary institutions, rather than from one school, which facilitates transferability of the research findings (e.g., Smith et al., 2009), as the participants comprised students from both colleges and universities. Relationally, participants spanned an age range from 18-28 years of age, also contributing to the transferability of findings, as there were common aspects of postsecondary education that were meaningful to the participants across this age range.
Furthermore, this study recruited participants that have documented diagnoses of HFA or Asperger’s Disorder. As discussed, research has shown that the discriminant validity between diagnoses of HFA and Asperger’s Disorder is not adequate (e.g., Howlin, 2003). Therefore, recruiting broadly (i.e., HFA and Asperger’s Disorder) was beneficial to this study, as it did not exclude students who had one or the other diagnosis. Related to this, all participants with the exception of one provided their diagnostic report to the researcher so that she could have confirmation of their diagnoses. This was a crucial step in this research, as it increases the validity of the findings in that the participants had confirmed diagnoses of HFA or Asperger’s Disorder, as opposed to symptoms but no formal diagnosis.

Lastly, this study was subjected to considerable scientific rigour to ensure credibility and trustworthiness of the findings. Creswell (2007) recommends that at least two validation strategies are used in qualitative research, and in this study, five strategies were employed to ensure rigour. The researcher engaged in reflexivity by writing in a researcher’s journal and describing her experiences in the Personal Reflection section in this dissertation. The researcher met regularly with a peer reviewer who challenged the researcher on her research process and procedures throughout the study. Further credibility was obtained by having the participants of the study assess the accuracy and credibility of the researcher’s interpretation of the interview transcripts by reviewing the findings. The research findings were written with thick and rich description, helping the reader to assess the transferability of the findings to similar settings. Lastly, a psychologist who was not related to the study conducted an external audit of the research process to examine interpretation accuracy and credibility.
Recommendations for Future Research

The findings of the current study, including its limitations, highlight the need for future research related to students with HFA in postsecondary education. While this current addresses a significant gap in the literature, there still remains a scarcity of research investigating various aspects of functioning of students with HFA in postsecondary education. First, a randomized controlled study investigating executive functioning deficits in postsecondary students with HFA is warranted. Given that students with HFA have the cognitive and academic ability to succeed in college or university, it is prudent they have the skills to organize their academic demands with minimal interference of EF difficulties. Information from rigorous research studies could identify particular EF deficits, and assist in developing appropriate supports in this area for students with HFA in college or university.

Second, the findings of this study illuminate the need for additional research in the area of mental health functioning of postsecondary students with HFA to help inform treatment practices in postsecondary education. Relatedly, studies examining the effectiveness of mental health treatment in postsecondary students with HFA are warranted.

As mentioned, half of the research sample in this current study had just completed their first year of postsecondary education. A study investigating the experiences of fourth year students and graduate students may provide helpful insight regarding their experiences, such as employment and dating experiences. Further, interviewing students in their first year and then again in their fourth year of undergraduate studies may provide insight with respect to supports received and strategies used to facilitate academic and social success in college or university.

Lastly, an additional area of research that would be of benefit is to investigate the experiences of postsecondary educators, including disability advisors, counselors, and
professors, in providing supports and services to postsecondary students with HFA. Research examining their knowledge and capacity to provide effective support is important in order to optimize the academic and social success of students with HFA. In a similar vein, the findings of this study illuminate the need to conduct program evaluation studies of programs that are currently implemented in postsecondary educational settings, such as peer mentorship programs through disability services, or other programs or supports available for students with HFA on campus.

**Implications for Psychologists and Educators**

The findings of this current study have implications for the practice of psychologists and educators. Psychologists, particularly those working in school systems, are in an optimal position to support students with HFA in high school by providing intervention in the areas of executive skills, social skills, self-determination skills, as well as mental health counseling. Psychologists are also in a position to assist in transition planning for students with HFA, and further, encouraging students with HFA to play a consistent and meaningful role in their Individual Education Plan (IEP) meetings to help build self-advocacy skills. Related to this, psychologists working in the schools are in a position to build capacity in school educators by providing professional workshops related to HFA (or ASD more generally), and the transition of students with HFA from secondary to postsecondary education, including pertinent changes in law, the provision of services, and how to access services (e.g., organizing relevant documentation). Indeed, it would be beneficial for high school students with HFA to also attend the professional workshops, which could be a goal in their IEP.

The findings of this study also have implications for psychologists working in postsecondary educational settings. Psychologists can help develop and implement specific
support programs for students with HFA including support groups, peer mentorship programs, and social skills interventions. For colleges and universities with such supports already in place, psychologists can conduct program evaluations to measure the effectiveness of the programs.

Lastly, psychologists can have a consultative role by providing professional workshops related to understanding ASD, including the strengths and unique needs of students with HFA and how to best support this particular population. Target audiences could include disability advisors, professors, students, campus residence directors and advisors, and individuals from counseling services.

**Implications for the Provision of Services in Postsecondary Education: Policy Considerations**

The findings of this study illustrate how difficulties with executive functioning, daily living skills, socialization, and mental health issues have implications for the academic functioning of students with HFA in postsecondary education, highlighting the importance of providing support for students with HFA in these areas. However, a primary role of campus disability services, historically, is to provide educational and testing accommodations for students with learning disabilities, ADHD, and physical disabilities (Adreon & Durocher, 2007) as opposed to support for socialization and executive functioning, areas unique to students with HFA. It is hoped that the findings from this research study help to inform policy development in terms of being one step closer to mandating postsecondary educational support in the area of socialization and executive functioning for students with HFA.

**Researcher’s Reflection**

Conducting this research study was an undeniably wonderful, albeit challenging, professional and personal experience. After developing the research question and deciding to
include students with HFA as the participants, I received conflicting feedback from others in academia with respect to including students with HFA as my participants. Some argued that the participants would have difficulty speaking to their experiences of attending postsecondary education given their social and communication difficulties (e.g., engaging in back and forth conversation, likely to respond with one-word answers, working with an unfamiliar person), whereas others indicated that participants with HFA would be helpful and talkative informants. I valued the feedback I received from others, and thought to myself, indeed the variation in feedback from others could be a reflection of the heterogeneous nature of HFA. The decision to interview participants with HFA was of great importance to me as a researcher, as it provided the participants the opportunity to lend their voice, a voice that is often silenced, undervalued, or overlooked. Individuals with HFA are intelligent human beings, and despite their deficits, they are in a helpful position to share their perspectives. During the interviews with the participants, I was deeply appreciative of their openness, willing to share their life stories, and level of engagement in the research process, as disclosing personal information entails a certain degree of vulnerability. It was truly an honour to work with a group of intelligent, thoughtful, hardworking, and sincere students who, despite their day-to-day difficulties, continue to pursue their academic goals and give back to the community by participating in research.

Conducting this research study was also a helpful clinical experience. As I continue to build my expertise in ASD, interacting one-to-one with the research participants was of clinical value. I observed the subtle nuances that are characteristic of HFA (e.g., idiosyncratic language), nuances that can be harder to detect in high-functioning individuals with ASD as opposed to individuals who are lower functioning. Further, by reviewing the audio recordings multiple times and re-reading the interview transcripts, certain autism characteristics became more noticeable
such as variations in tone and prosody, and repetitive behaviours such as finger tapping. The transcriptionist for this study did an excellent job of including nonverbal observations into the transcripts such as pauses, tapping, and other nonverbal, repetitive behaviours. These clinical observations were helpful, as a future goal of mine is to conduct initial diagnostic assessment for young adults with HFA.

Concluding Remarks

This study sought to explore the meaning of the lived experiences of students with HFA attending college or university, an area that characterized a significant gap in the extant literature. The findings of this study illuminated experiences of attending college or university for students with HFA, which included managing academic expectations, experiencing support, the desire to support others, managing ASD and related symptoms, the influence of past experiences, appreciating the social and academic aspects of postsecondary education, understanding ASD by others and self, managing the transition from high school including navigating a new educational system, and aspects of entering a new social world in postsecondary education.

Valuably, the findings of this current study illustrate how the needs of individuals with HFA persist into adulthood and across the lifespan. The symptoms do not merely disappear after secondary school or subside to a level where treatment is not needed. Indeed, it is during this critical time (i.e., attending postsecondary education) where students with HFA require substantial support. Given the heterogeneous nature of ASD, it is important that students with HFA receive tailored and individualized support that is parallel with their unique strengths and weaknesses. The findings of this study contribute greatly to our understanding of the lived experiences of young adults with HFA in college or university, and it is hoped that the findings
will help to inform the provision of services and supports for college or university students with HFA in order to foster their success in postsecondary education.
References


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Appendices

Appendix A: Recruitment Advertisement

THE UNIVERSITY OF BRITISH COLUMBIA
a place of mind

Are you a Student with High-Functioning Autism (HFA) or Asperger’s Disorder currently attending College or University?

Please participate in a research study investigating the experiences of students with HFA or Asperger’s Disorder attending college or university. The study is for a doctoral thesis.

The purpose of this study is to gain a better understanding of students with HFA or Asperger’s Disorder and their experiences of attending college or university. This study will help to better understand, through the eyes of the students, what college and university experiences are like. Findings from this study may assist in developing the best supports for students with HFA or AD in college or university.

If you choose to participate in this study, you will be asked to participate in 2 one-to-one interviews, totaling 2 hours. You will receive $20.00 for the first interview and $10.00 for the second, shorter interview. Your travel expenses to the interviews (if needed) will also be reimbursed.

If you would like to participate in this study, please contact:

Rashmeen Nirmal at (XXX)-XXX-XXXX

For more information on the study, please contact the research team:
William McKee, Ph.D. The University of British Columbia, (XXX)-XXX-XXXX
Rashmeen Nirmal, M.A., The University of British Columbia, (XXX)-XXX-XXXX

Thank you
Appendix B: Telephone Screening Interview

The Experiences of Students with High-Functioning Autism attending College or University

Telephone Screening Interview Questions

1. Are you currently enrolled at college or university?
2. What program are you in (e.g., 2 year Diploma, 4-year Bachelors)?
3. What college or university do you attend?
4. Do you live in a campus residence?
5. Do you have a diagnosis of ASD or Asperger’s Disorder? If so, would you be willing to bring a copy of your report to the first interview?
6. Do you self-identify as a student with high-functioning autism or Asperger’s Disorder?
7. Are you willing to engage in one detailed interview lasting about 1 hour, and one briefer follow-up interview (around 30 minutes)?
Appendix C: Informed Consent for Research Form

Informed Consent Form for Participation in a Research Study

Investigating the Experiences of Students with High-Functioning Autism Attending College or University

Principal Investigator: William T. McKee, Ph.D.
Assistant Professor/Director of the Psychoeducational Research and Training Centre
Department of Educational & Counseling Psychology, & Special Education
Phone: (XXX) XXX-XXXX
Email:

Co-Investigator: Rashmeen Nirmal, M.A.
Doctoral Student, School Psychology
Department of Educational & Counseling Psychology, & Special Education
Phone: (XXX) XXX-XXXX
Email:

Dear Participant,

Please read the following carefully. This form is a request for you to participate in the study. It also provides details regarding the study. We have provided 2 of these forms. Please sign one and return to the researcher. Keep the other one for your records.

Purpose of the Study:

We are interested in your experiences as a student with high-functioning autism or Asperger’s Disorder in college or university. Better understanding your experiences may help us develop appropriate supports to best help students with high-functioning autism or Asperger’s Disorder in college or university.
Participating in the Research Study:

1. Participating in this research study means that you agree to participate in a one-to-one interview for approximately 1 to 1.5 hours, and a follow-up interview lasting approximately 30 minutes. The interview time totals 2 hours.

2. After the first interview, you will be asked to participate in the follow-up interview to verify the information you shared and to ask any questions you may have.

3. Both the interviews will be conducted in a confidential location of your choice, for example, at your college or university, or at your home.

4. The interviews will be audiotaped for later transcription so we can make sure we do not miss anything you say.

5. If you like, you will be given the opportunity to review your transcript.

6. You will receive $20.00 for the first interview and $10.00 for your second interview (total = $30.00) for your participation in the study.

7. You will receive reimbursement for any transportation costs, such as taking the bus or parking fees.

8. Your participation in this study is entirely voluntary. You have the right to withdraw from the study at any point during the study. Your participation or withdrawal from the study will in no way affect your educational status at your college or university.

9. Your participation in this study is confidential, meaning your identity will be protected. Your transcript will be identified by a code number. The transcript will be stored in a locked filing cabinet in a locked room at UBC. Only the researchers, Dr. McKee and Ms. Nirmal, will have access to your transcripts. A pseudonym will be used in place of your real name in the research report.

10. This research study is a doctoral thesis at The University of British Columbia.

11. When the research study is complete, general information about the results of the study will be provided to you if you like.

12. By participating in this research study, you will help us better understand what it is like for you at college or university. Having a better understanding of your experiences may assist in developing supports for students with HFA and Asperger’s Disorder in post-secondary settings.

At any time if you have questions regarding the research study, you may contact the researchers, Dr. McKee or Ms. Nirmal, at the contact information above.
Do you have any questions?

Please check one of the following:

_____ Yes, I agree to participate in this research study

_____ No, I do not agree to participate in this research study

__________________________
Participant’s Name (Please Print)

__________________________
Participant’s Signature (Please Sign)

__________________________
Date
Appendix D: Consent for Participating in the Interviews Form

THE UNIVERSITY OF BRITISH COLUMBIA

Consent for Participating in the Interviews

This form is a consent form for participating in the 2 interviews. The interviews will be audiotaped so the researcher can remember exactly what you told her in the interviews.

——— Yes, I agree to participate in the interviews.

——— No, I do not wish to participate in the interviews.

_______________________________
Participant’s Name (Please Print)

_______________________________
Participant’s Signature (Please Sign)

_______________________________
Date
Appendix E: Confidentiality Agreement for Transcription Services

THE UNIVERSITY OF BRITISH COLUMBIA

Psychoeducational Research and Training Centre
Faculty of Education
2125 Main Mall
Vancouver, B.C. Canada V6T 1Z4
(XXX)-XXX-XXXX Tel
(XXX)-XXX-XXXX Fax

Confidentiality Agreement for Transcription Services

Investigating the Experiences of Students with High-Functioning Autism/Asperger’s Disorder attending College or University

Lead Researcher: Rashmeen Nirmal, M.A. | Principal Investigator: William T. McKee Ph.D.

I, ______________________________, transcriptionist, agree to maintain full confidentiality in regards to all audio files received in this study.

Furthermore, I agree:

1. To hold in strictest confidence the identification of any individual that may be revealed during the transcription of the audiotaped interviews;

2. To make no copies of the research-related materials, unless specifically requested to do so by Rashmeen Nirmal, the lead researcher;

3. To store all research-related materials in a safe, secure location as long as they are in my possession;

4. To return all research-related documents in a complete and timely manner;

5. To delete all research-related electronic files from my computer hard drive and any backup devices at the completion of the work.

I am aware that I can be held legally liable for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the audio files or other research-related materials to which I will have access.

___________________________________________
Name of Transcriptionist

___________________________________________
Signature of Transcriptionist

___________________________________________
Date
Appendix F: Background Information Form

THE UNIVERSITY OF BRITISH COLUMBIA

Department of Educational & Counselling Psychology, & Special Education
2125 Main Mall
Vancouver, B.C. Canada V6T 1Z4
Tel: (XXX) XXX-XXXX
Fax: (XXX) XXX-XXXX

Background Information Form

Name:
Age:
Gender:
Age at the time of Diagnosis:
University or College Name:
Program:
Year:
Major (if declared):
Minor (if declared):
How many classes do you take per term?

Do you live in a campus residence?

If not, where do you live and with whom?

Are you registered with your Disability Office on campus?
Please list any supports or services that you are currently receiving in college or university (e.g., educational accommodations, peer mentor):

What type of support did you receive in high school (e.g., special education assistant, educational accommodations)?
Appendix G: Initial and Second Interview Schedules

The Experiences of Students with High-Functioning Autism/Asperger’s Disorder attending College or University

Initial Interview Schedule

1. Tell me about your experiences in college or university. From the time you started college or university until now, what has it been like?

2. Why and when did you decide to go to college?
   a. What was it like when you decided to attend college or university?

3. What is it like academically?
   a. What is it like for you in class?
   b. What are your experiences working or interacting with course instructors and professors?
   c. Tell me about your experiences with course expectations (e.g., assignments, exams, papers, group work, in-class assignments, course load)

4. Tell me about your experiences or interactions with the disability office on your college or university campus.
   a. In terms of receiving accommodations, what has the process been like for you?

5. What is it like socially in university? Tell me about your social experiences.
   a. What is it like making and keeping friends?
   b. What is it like interacting with someone you have feelings for? How is it romantically?
   c. What are some things you and your friends do?

   If the student lives in a campus residence:

   1. What is it like living in campus residence?
   2. (If needed) What are some advantages of living on campus for you?
   3. (If needed) What are some disadvantages of living on campus for you?

4. What are some suggestions in making college or university life more helpful for you?

5. What does being a part of college or university life mean to you?
a. What does being a student mean to you?

6. Is there something I didn’t ask that I should have? Is there anything else you would like to share with me?
The Experiences of Students with High-Functioning Autism/Asperger’s Disorder attending College or University

Second Interview Schedule

1. Is the summary an accurate account of your experiences? Was anything inaccurate or misunderstood?
2. Is there anything you would like to add?
3. Is there anything you would like to talk about that we did not get the chance to talk about in our last interview?
4. Do you have any questions or comments?
Appendix H: Community Resource Form

The Experiences of Students with High-Functioning Autism/Asperger’s Disorder attending College or University

Community Resource Form

We understand that talking about personal issues can sometimes be difficult. While we are not able to provide support directly to you as we are conducting a research study, we do have a suggested list of community resources to explore services if you need. Fees and services provided vary across these various agencies, with some services free of charge. Seeking services is a decision that is up to you, but we have provided this list to make the process more accessible.

UBC Counseling Services

1040 Brock Hall-1874 East Mall Vancouver, BC V6T 1Z1
Tel: (604) 822-3811

Website: www.students.ubc.ca/counselling

British Columbia Psychological Services

402-1177 West Broadway
Vancouver, BC VGH 1G3
Referral Tel (604) 730-0522 or 1-800-730-0522

http://www.psychologists.bc.ca/

The British Columbia Psychological Services (BCPA) represents psychologists in BC and can provide a list of registered psychologists to address your needs.

Counseling Services at Simon Fraser University

8888 University Drive, SFU
Burnaby, BC V5A 1S6
Tel: (778) 782-4615
Intake Email: intake@sfu.ca

http://students.sfu.ca/health/services/counselling.html
Appendix I: Participant Descriptions

Leo

Leo is an 18-year-old male student of Asian descent who identifies with having Asperger’s Disorder and refers to himself as an “Aspie.” He was diagnosed with Asperger’s Disorder when he was 15-years-old, and expressed anger towards receiving a “late diagnosis” despite showing signs of autism in early childhood. Leo reported that he has co-occurring Attention-Deficit/Hyperactivity Disorder (Predominately Inattentive Type) and symptoms of depression. He was previously tried on Concerta medication, though is not currently on any medications. Leo attends a university in Metro Vancouver and is enrolled in a four-year Bachelor of Arts program. He lives in campus residence. At the time of his initial interview, Leo had just completed his first year of studies and received educational accommodations including extra time on examinations, a note-taker, and a private room for examinations. Leo also participated in a peer mentorship program for students with autism spectrum disorders once per week through disability services on his campus and also received counseling through counseling services on campus. Leo took four classes per semester in Year 1 and held a part-time job at a kitchen store (one hour per week). Leo would like to meet other university students with high-functioning autism or Asperger’s Disorder and is passionate about forming a support group on campus for students with high-functioning autism as well as neurotypical students who are interested in learning more about ASD. In high school, Leo received extra time on examinations, occupational therapy, and counseling once per week for social skills and depression. He also saw a tutor outside of school once per week.
Markus

Markus is a 19-year-old male student of Caucasian descent who identified with having Asperger’s Disorder. He was diagnosed when he was 16-years-old and reported co-occurring mood disorder and social anxiety. He was previously tried on Wellbutrin, Prozac, and Effexor medications, though is not currently on any medications. Markus attends a college on Vancouver Island and is enrolled in a four-year Bachelor of Arts program while majoring in English. At the time of the initial interview, Markus had just completed his first year of studies. He took five courses per term and worked 20 hours at a local restaurant as a cook, a job his mother helped secure for him. At college, Markus received educational accommodations including a laptop, extra time on examinations, writing examinations on a different date and in a private room, and access to a voice recorder for course lectures, though reported he did not access extra time, the voice recorder, or the private room very often. In high school, Markus indicated that he did not need educational accommodations, though experienced difficulty with motivation. He received counseling for two years in high school. Markus currently lives at home with his parents.

Sarah

Sarah is a 19-year-old female student of Black descent who identifies with having Asperger’s Disorder. She was diagnosed when she was 15-years-old and reported she has a co-occurring learning disability. Sarah attends a college on Vancouver Island and is enrolled in a four-year Bachelor of Arts program. She takes two classes per term. At the time of the initial interview, Sarah had just completed her first year of studies and received educational accommodations including a laptop, a voice recorder, and also saw a tutor on a daily basis. In high school, Sarah indicated that she received extra time and a private room for examinations, and educational assistant support in her classrooms. She lives at home with her parents. Sarah is
passionate about videogame art design and would like to work for a videogame company in the future. In fact, she asked the researcher, “If [your research] turned into a book, what would the front page picture be?”

**Zach**

Zach is an 18-year-old male student of Caucasian descent who identifies with having Asperger’s Disorder. He was diagnosed when he was 11-years-old and reported that he also has “low grade anxiety.” Zach attends a college on Vancouver Island and is enrolled in “general studies.” He reported that he attempted to take 4 classes per term, but it was “horrible,” and expressed that three courses per term is more manageable. At the time of his initial interview, Zach just finished his first year of studies. Zach lives at home and has a part-time job delivering newspapers in the morning (two hours per week). At college, Zach receives educational accommodations including extra time on examinations, extensions on assignments, a laptop, and also receives counseling services. As well, he has access to a private room for examinations, which he reported he does not use. In high school, Zach received extra time on examinations and assignments, a private room for examinations, and educational assistant support in his classrooms. Zach reported that his mother navigates the postsecondary educational system and the supports he requires on his behalf, which he appreciates. During the screening interview, Zach indicated to the researcher, “I applaud you for doing this [research] because people forget about us after high school.”

**Melody**

Melody is an 18-year-old female student of Caucasian descent who identifies with having Asperger’s Disorder. She was diagnosed when she was nine-years-old and reported co-occurring Attention-Deficit/Hyperactivity Disorder (AD/HD) and fine-motor difficulties. She also has
Neurofibromatosis Type 1 (NF-1). Melody is currently taking *Concerta* medication. Melody is enrolled in a two-year computer science program at a college in Metro Vancouver. At the time of her initial interview, she had just completed her third semester and took four classes per term. She received educational accommodations including textbooks in portable document format (PDF), a private room for examinations, extra time, and a laptop in class and during examinations. In high school, Melody had access to a laptop in class and during examinations, textbooks in PDF format, a private room for examinations, and a scribe. At the time of the interview, Melody lived at home with her parents. Melody is passionate about advocating for others with autism and individuals with special needs.

**Steven**

Steven is a 20-year-old male of Caucasian descent who identifies with having high-functioning autism. He was diagnosed when he was six-years-old and has co-occurring social anxiety, specific learning disability in reading, writing, and mathematics, and “undiagnosed” generalized anxiety disorder. Steven attends a college in Metro Vancouver and is enrolled in a two-year associates degree program in general arts. At the time of his initial interview, Steven had just completed his fourth semester and took two to three classes per term. Steven received educational accommodations at college including extra time on examinations, extensions on assignments, academic counseling, breaks during examinations, a private room for examinations, access to PowerPoint lectures in advance, and spelling and grammar check technology. In high school, Steven received extra time and a private room for examinations, a scribe, access to lectures prior to class, notes before exams (described this as an open-book exam format), a note-taker, educational assistant support in class, extensions on assignments, and breaks during
examinations and throughout the school day. At the time of his initial interview, Steven lived at home. Steven had mentioned to the researcher that attending college “means a lot” to him.

William

William is a 25-year-old male of Caucasian descent who identifies with having Asperger’s Disorder/high functioning autism. He was diagnosed when he was six-years-old. William attends a university on Vancouver Island and is majoring in Creative Writing. He would like to be a writer for a videogame company. At the time of his initial interview, William had completed his first year of studies, though took classes at various postsecondary institutions including a community college and a film school in Vancouver prior to his first year at the university on Vancouver Island. During the last school year, William took anywhere from one to four classes per term. William lives in an apartment with two roommates. At university, William received educational accommodations including extra time and a separate setting for examinations, and was able to take examinations on a different date and on a computer. He accessed counseling services but indicated it was not effective, as scheduling was too difficult. In high school, William received extra time and a separate setting for examinations, teaching assistant support in his classrooms, academic and emotional counseling, which he described as “very useful,” and access to resource room services. William spoke at length regarding his difficulties in high school and postsecondary studies. He expressed, “If I didn’t have the support, I would be dead.”

Scott

Scott is an 18-year-old male student of Caucasian descent who identifies with having high-functioning autism. He was diagnosed with HFA when he was 12-years-old. Scott attends a university on Vancouver Island and is enrolled in a four-year Bachelor of Arts program,
majoring in psychology. At the time of his initial interview, Scott had just completed his first year of studies. He initially took two classes per term and worked his way up to enrolling in four classes per term. Scott received educational accommodations in university including a lower course load (i.e., two courses minimum) and extra-time (eligible but has not used it). He receives counseling with a registered psychologist once per month and sees a speech and language therapist every two to three weeks. Scott attended a self-spaced high school program, which he felt was supportive and “much less stressful” than regular high school. He reported that the “regular” high school environment was difficult for him due to his sensory dysregulation and social issues. Scott lives at home with his parents and occasionally works in his father’s office completing tasks such as filing.

Jake

Jake is a 22-year-old male student of Caucasian descent who identifies with having “mild autism.” He currently takes Ritalin medication. Jake attends a college in Metro Vancouver and is majoring in English. At the time of his initial interview, Jake just completed his third year, though is in his second year of the English program. Jake has not accessed educational accommodations in college, though he receives academic counseling. In high school, Jake received educational accommodations including extra-time on examinations, a separate setting for examinations, a keyboard (but believed it was “too bothersome”), and shared teaching assistant support. Jake also saw a tutor in the community once per week, and saw a therapist for “check-ins” at a developmental clinic. Jake lives at home with his parents and has a paper route, which he completes two times per week.
Jeff

Jeff is a 19-year-old male student of Caucasian descent who identifies with having Asperger’s Disorder. He was diagnosed when he was four-years-old with Pervasive Developmental Disorder-Not Otherwise Specified. According to Jeff, he currently experiences symptoms of anxiety and depression and is treated with Prozac medication. Jeff attends a college in Metro Vancouver and is enrolled in a Bachelor of Science program. At the time of his initial interview, Jeff had just finished his first year of studies. He attempted to take two courses per term, but felt one course per term was more manageable. Jeff received educational accommodations at college including extra time on examinations, a separate setting for examinations, and Dragon NaturallySpeaking (a speech recognition software) for writing papers. He also accessed academic counseling on campus and saw a psychologist in the community for coping with anxiety and depression (approximately once every one to two months, as his “funding ran out”). At the time of his interview, Jeff lived at home with his parents. Jeff expressed attending college was an “eye-opener,” as he had to “fend for himself” and seek support on his own.

Luke

Luke is a 28-year-old male student of Asian descent who identifies with having Asperger’s Disorder. He was diagnosed with Asperger’s Disorder when he was nine-years-old. Luke is a graduate student, who, at the time of his initial interview, was completing his third year of his Masters of Science degree in special studies at a university in the United States. Prior to graduate school, Luke completed a dual degree program (Bachelor of Science/Bachelor of Arts) at a university in Metro Vancouver. Luke lived in an apartment and was an employed teaching assistant while in graduate school. Luke spoke at length to the lack of services and supports he
received in graduate school (e.g., educational accommodations), and consequently, filed a human rights complaint. He saw a counselor for symptoms of anxiety and depression and coping with the demands of daily living. In high school, Luke received social skills intervention and facilitated community outings with a social worker. He did not access educational accommodations in high school.

**Lindsay**

Lindsay is a 28-year-old female student of Caucasian descent who identifies with having Asperger’s Disorder. She was diagnosed with Asperger’s Disorder when she was 24-years-old and indicated her recent diagnosis “made so much sense.” Lindsay reported she, at times, experiences symptoms of depression. She took Ativan on an as-needed basis in the past, but is not currently on any medications. Lindsay attends a university on Vancouver Island and is a linguistics major. At the time of her initial interview, Lindsay was in the second year of studies. She completed her first year at a community college. She takes two to three classes per term and reported that taking more courses would result in “executive dysfunction.” At university, Lindsay receives educational accommodations including a note-taker, extra-time for examinations, a separate setting for examinations, extensions on assignments, and exemption from pop quizzes. Lindsay received a laptop from Assistive Technology BC, and attends therapy once every two to three weeks for “checking-in and processing life.” Lindsay also received treatment for social skills for two years after her diagnosis. Lindsay did not receive educational accommodations in high school and was not identified as a student with special needs. Lindsay lives in an apartment on her own and works periodically as a freelance music reviewer. Lindsay expressed to the researcher at the end of her initial interview, “When you’re already different, you might as well make that into a positive…be different in a positive way.”