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UNDERSTANDING THE FRIENDSHIP PROCESSES OF INDIVIDUALS WITH ASPERGER'S SYNDROME: A PHENOMENOLOGICAL STUDY OF REFLECTIVE COLLEGE EXPERIENCES

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree
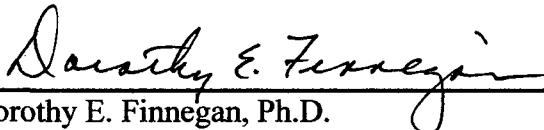Doctor of Philosophy

by
Kammie Bohlken Lee
April 2010

UNDERSTANDING THE FRIENDSHIP PROCESSES OF INDIVIDUALS WITH ASPERGER'S SYNDROME: A PHENOMENOLOGICAL STUDY OF REFLECTIVE COLLEGE EXPERIENCES

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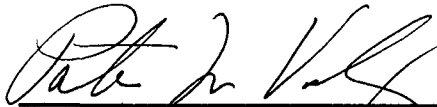
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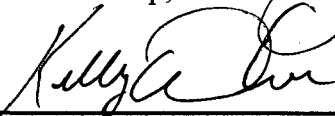
Approved April 2010 by

Dorothy E. Finnegan, Ph.D.
Chairperson of Doctoral Committee

Patricia M. Volp, Ed.D.

Kelly J. Whalon, Ph.D.

Dedication

This work is dedicated to my parents, Jim and Jammie Bohlken. Mom and Dad –
Thank you for your unconditional love, support, and encouragement throughout my life.
No daughter could ask for better teachers, cheerleaders, parents, and friends. Dad always
says, "You can choose your friends, but you can't choose your parents." Well, if I had the
choice I would choose you as parents *and* friends a hundred times over. Besides, I got
lucky because *you chose me* out of the cabbage patch after all. I love you for that, for
teaching me to always reach for the stars, and for so much more. Together, the three of us
make an awesome team.

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Acknowledgements

Thank you to the participants in this study for sharing your lives with me over the past two years. I have learned so much from you in so little time. I admire you for your courage, strength, and wisdom.

Thank you to my husband Dan for your support throughout this journey. You have been my source of comic relief, break time enforcer, back scratcher, and housekeeper. I know our time together has been overshadowed by this work. Thank you for your patience. You can now have your wife back.

Thank you to Dr. Dorothy Finnegan, my Committee Chair, for your support and editing skills. You gave me a reality check when I needed it most. Thank you for taking my ideas seriously, allowing me to have the freedom to pursue my interests in studying students with AS, and sharing in my excitement over discovering new territory.

Thank you to Dr. Kelly Whalon and Dr. Trish Volp for also taking my ideas seriously and understanding the need to support college students on the Autism Spectrum. Your practical experience, wisdom, and expertise in working with students was invaluable.

Thank you to all the wonderful professionals and support staff in my schools who teach and support children with Autism Spectrum Disorders, especially those who have had to endure my postulations and pontifications throughout the past two years of this study. You know who you are.

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ABSTRACT

This phenomenological study shed light on the reflective college experiences of 11 individuals with Asperger's Syndrome and High Functioning Autism from a competence rather than a deficit model of disability (Biklen, 2005). Using Goleman's model of Social Intelligence (2006) as a theoretical framework, the cognitive, behavioral, and affective processes of interpersonal interaction between participants and college friends was examined. Participants reported having difficulties in the areas of social awareness and social facility that impacted their ability to accurately demonstrate empathic concern towards friends. While participant's reported feeling empathic concern towards college friends, the demonstration of empathy towards friends required conscious effort and practice. Participants also identified four main qualities as being valued within their college friendships: trust, support, connection, and shared interests. Recommendations for practitioners in higher education and implications for future research are discussed.

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EDUCATIONAL POLICY, PLANNING, AND LEADERSHIP PROGRAM

THE COLLEGE OF WILLIAM AND MARY

UNDERSTANDING THE FRIENDSHIP PROCESSES OF INDIVIDUALS WITH

ASPERGER'S SYNDROME: A PHENOMENOLOGICAL STUDY OF REFLECTIVE

COLLEGE EXPERIENCES

Chapter One

Introduction

Today's college students enter postsecondary institutions with a wide variety of personal experiences, individual needs and differences. These individual differences include a rapidly growing population of students with disabilities. During the 2003-2004 school year, colleges reported that 2,156,000 undergraduate students out of a total population of over 19 million students had a disabling condition (National Center for Education Statistics [NCES], 2006). Over the past thirty years, the percentage of college freshman with a disability had nearly quadrupled from 3% in 1978 to 11.3% in 2004 (National Center for Education Statistics [NCES], 2006). The most recently published breakdown of disability types reported by the federal government from the 2003-2004 school year indicated that out of the total number of students reporting disabilities, 25% were identified as Orthopedically Impaired, 22% as having Mental Illness or Depression, 17% Health Impaired, 4% Visually Impaired, 5% Hearing Impaired, 0.6% Speech Impaired, 7% Learning Disabled, 11% Attention Deficit Hyperactivity Disordered, and 7% Other (NCES, 2006). Ninety eight percent of public postsecondary institutions report enrollment of students with disabilities (Stodden, 2003).

As required by Section 504 of the Vocational Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, and the Americans with Disabilities Act Amendments of 2008, postsecondary institutions that enroll students with disabilities provide some level of services, supports, or accommodations to assist their access to education (Rao, 2004; Stodden, 2003; AHEAD, 2008). Advocates for students with

disabilities insist that these supports are essential to improving the chances of securing employment, achieving financial independence, community involvement, and social acceptance (Stodden). With the assistance of these supports, more than 50% of students with disabilities who were enrolled in postsecondary education earned a degree or credential (National Center for Education Statistics [NCES], 1999). However, without supports, retention rates of postsecondary students with disabilities are considerably low and in turn, prospects for finding meaningful and substantial employment is significantly limited. Other sociological and economic barriers that face individuals with disabilities who do not earn postsecondary degrees face increased poverty, higher unemployment rates, poor opportunities for job advancement, discrimination, low expectations from employers, and inadequate workplace accommodations (Stodden).

Background of the Problem

Autism Spectrum Disorders

Within the past 20 years, increased attention has been given to a unique population of students with developmental disabilities who are transitioning from high school to college (VanBergeijk, Klin, & Volkmar, 2008). This population consists of students with Autism Spectrum Disorders (ASD). Autism Spectrum Disorder refers to a broad range of "neurodevelopmental disorders that affect development in the areas of social interaction, communication, and behavior" (Adreon & Durocher, 2007, p. 272). Autism Spectrum Disorder (ASD) encompasses a continuum of difficulties that affects each individual differently and varies significantly in severity. The term ASD will be used to describe a range of disorders known as Pervasive Developmental Disorders

(PDD): a) Autistic Disorder b) Asperger's Disorder c) Pervasive Developmental Disorder-Not Otherwise Specified d) Rett's Disorder and e) Childhood Disintegrative Disorder. Autistic Disorder is characterized by the Diagnostic and Statistical Manual IV (TR) as a qualitative impairment in social interaction, communication, and restricted repetitive stereotyped patterns of behavior (American Psychological Association, 2000). Delays in social interaction, symbolic play, and language used in social communication must be present before age 3.

According to the National Center for Disease Control (NCDC) (2007), more children than ever before are currently being diagnosed with Autism Spectrum Disorder. These incidences have significantly increased within the last 10-20 years. In its latest report published on December 18, 2009, the CDC reports that the prevalence of autism spectrum disorders in the United States is 1 percent of the population (Rice, 2009). Results from a study monitored prevalence rates in 11 states and found that 1 in 110 children 8 years of age in 2006 had an autism spectrum disorder. The study does not cover children who receive a diagnosis later than the age of eight, such as those with Asperger's Syndrome. One in 70 boys and one in 315 girls have autism, making the prevalence rate for boys to be 4.5 times higher in males than females.

Prevalence rates have steadily increased over time. This latest CDC report found a 57% increase in the prevalence of autism from its previous report conducted in 2002 using the same methodology. In 2007, the CDC reported that 1 in approximately 150 children in the United States had an ASD or 6.6 per 1,000 children (0.6%) (Rice, 2009). Prior to the 1990s, the estimated figure commonly was approximately 5 individuals per

10,000 (0.5%) (Rice). Over the past 20 years, there has been a 600% increase in the prevalence of autism. The rise in prevalence rates of ASD has been attributed to several factors including more reliable estimates, earlier diagnosis, more accurate diagnosis, and changes in the diagnostic criteria (Wellcome Trust, 2008; Embersin & Gremy, 2008). Changes in the availability of services and changes in public awareness in conjunction with special education law reform also contributed to many children with ASD being able to access community and school services (Embersin & Gremy, 2008). From the 1991-1992 school year to the 1998-1999 school year, the number of children receiving special education services for autism increased by 500%. Eighty percent of 8-year-old children with an autism spectrum disorder currently receive special education services (Rice).

Asperger's Syndrome

Asperger's Syndrome (AS), one of the five PDDs, is defined by the Diagnostic and Statistical Manual – IV (TR) as a "qualitative impairment in social interaction and restricted repetitive and stereotyped patterns of behavior, interests, and activities" that "causes clinically significant impairments in social, occupational, or other important areas of functioning" (APA, 2000, p. 275). The terms Asperger's Disorder (AD) and Asperger's Syndrome (AS) are interchangeable in the literature. Individuals with Asperger's Syndrome must have no clinically significant language delays, cognitive delays, self-help skills, adaptive behavior, or curiosity about the environment in childhood. Currently, no medical tests can diagnose Asperger's Syndrome and the etiology is unknown (Attwood, 2007).

While clinically significant delays in receptive and expressive language skills are

not present, most individuals with AS have difficulties with social language including reciprocal language and idiosyncratic patterns (Adreon & Durocher, 2007, Attwood, 2007). Individuals with AS typically demonstrate cognitive delays that fall within the average to above average range overall, but may demonstrate variability within their cognitive profiles throughout the life span. While these higher skill levels distinguish AS from autistic disorder, there are individuals diagnosed with autism spectrum disorder who do not demonstrate cognitive delays. For these reasons, there is considerable debate amongst medical and mental health professionals on the diagnostic line drawn between these two disorders and associated symptoms of each (Wing, 2005; Woodbury-Smith & Volkmar, 2008). Woodbury-Smith & Volkmar (2008) suggested that manifestations of AS vary widely between individuals, ranging from subtle behavioral characteristics to extreme impairments. Therefore, gaining a holistic understanding of the disorder may best be achieved through reading clinical descriptions and examples of behavioral characteristics of individuals with autism rather than simply a list of diagnostic criteria.

In this study, the term Autism Spectrum Disorder was used to describe individuals diagnosed with any one of the five Pervasive Developmental Disorders. While the term Asperger's Syndrome was used in this study as a categorization of individuals who have intelligence in the average range and no language delays in childhood, it is understood that individuals who are adults may actually have received a diagnosis in childhood of any one of the give PDDs prior to 1994 when Asperger's Disorder was officially added as a diagnostic category.

A review epidemiological studies conducted in 2003 estimated the prevalence

rates of individuals with AS to be about 0.26 per 1,000 or 2.6 per 10,000 (Fombonne, 2007). However, epidemiological studies are few and variance in estimates ranges from 0.03 to 4.84 per 1,000. Scholars and clinicians believe these rates are believed to be affected by differences in diagnostic criteria across the world. Males are believed to be diagnosed with the disorder much more than females with prevalence rates ranging from 1.6:1 – 4:1 males to females. Some estimates are as high as a 10:1 ratio of males to females (Baron-Cohen, 2004). These studies have been conducted in the United Kingdom. There is some evidence that the most recent U.S. prevalence rates for children likely includes children with high functioning autism and/or Asperger's Syndrome as intelligence rates for children with autism have appeared to rise. Between 2002 and 2006, there was 90 percent increase in 8-year-old children diagnosed with autism with borderline intellectual functioning and a 72 percent increase among children diagnosed with autism with average to above average intelligence (Rice, 2009). The Center for Disease Control reports that further analysis needs to be completed to understand this change as intelligence testing is variable with children with autism.

Characteristics of Asperger's Syndrome

Individuals diagnosed with Asperger's Syndrome have three common characteristics of the disorder that manifest themselves in ways that impact daily functioning. Although each individual with AS will have differing degrees of severity in how these characteristics are manifested, the following characteristics are present in all individuals with the diagnosis. These characteristics include impairments in social skills, difficulties with communication, and repetitive and restricted patterns of behavior.

Social skills. Although individuals with AS often wish to develop friendships and intimate relationships, they have difficulty keeping and making friends (Adreon & Durocher, 2007). Problems with interpersonal skills make participation in group projects difficult. As a result, individuals with AS may be overly sensitive to criticism and failure (Attwood, 2007). Furthermore, they may experience difficulty with understanding the perspectives and feelings of others, often referred to as deficits in Theory of Mind. Knowledge of social rules and skills associated with reading body language and verbal and nonverbal cues, otherwise known as social cuing, are also areas of challenge for individuals with Asperger's Syndrome. All of these social difficulties make it challenging for students with Asperger's Syndrome to form close interpersonal relationships throughout the life span.

Speech, language, and communication. According to the DSM-IV (TR) criteria for Asperger's Syndrome, individuals diagnosed with the disorder are expected to have no significant impairments in overall language development. However, many individuals with AS are described as having idiosyncratic speech. Their speech patterns may include highly advanced or specified vocabulary that may present as speaking in any overly formal tone or "stilted-sounding manner" (Adreon & Durocher, 2007, p. 272). Others may have difficulties with body space or speak in any overly flat, monotonous tone. Further difficulties include speaking in a reciprocal manner with give and take exchanges in conversation as well as difficulties in talking at length on topics of interest. Resistance to changes in the topic of conversation and failure to provide relevant background information on a topic may also be present (Adreon & Durocher). Furthermore,

difficulties in social nuances such as understanding humor, figurative language, sarcasm, and cynicism may also present challenges in the college setting. Typically, individuals with AS do not use the slang expressions of their peers. Due to the fact that they may have atypical or inappropriate use of body language and communication patterns, they may be at risk for ostracizing or teasing by their classmates (Adreon & Durocher).

Repetitive and restricted patterns of behavior, interests and activities. Individuals with Asperger's Syndrome may engage in self stimulatory behaviors that consist of unusual body movements such as rocking, tapping, or hand movements. These movements are often subtle or highly controlled in higher functioning individuals (Adreon & Durocher, 2007). They may also have an intense interest in certain topics that may be unusual to others and cause some social difficulties. Some individuals may engage in highly specified topics of interest and activities that become suitable as choices for future employment.

Students with AS may also have difficulty with transition due to the preference for routines and environmental stability. Some individuals become upset when schedules are changed and the environment is modified, such as class cancellations and furniture rearrangement. The need for sameness may be intense to the point that the individual may show little tolerance or flexibility in responding to the behavior of other individuals. As a result, the student with AS may become anxious or agitated when other persons do not follow the "rules," resulting in possible outbursts and social difficulties.

<div align="center">College Challenges</div>

Of those students diagnosed with ASD, some of those students who have high

functioning autism and/or Asperger's Syndrome matriculate to college. Typically these are students who have overall language and cognitive abilities in the average to above average range. However, they may be affected in various degrees in how they interact with others, communicate, and problem solve (Portway & Johnson, 2003). Sometimes persons with AS may be able to mask the extent of their difficulties through learned coping strategies and by being able to imitate others. Furthermore, they may be able to integrate socially but may appear awkward or shy. For these reasons, parents and professionals may overlook the disorder. An estimated 20% of children with AS do not meet the criteria as adults due to the capacity of symptoms to diminish with time (Woodbury-Smith & Volkmar, 2008). However, 70-80% will continue to demonstrate marked social impairment in adolescence and adulthood (Fombonne, 2007).

Although students with AS may demonstrate exceptional academic skills, the struggles associated with high school to college transitions, independent living skills, and academic and social demands may contribute to adjustment difficulties and development of anxiety disorders that may eventually lead to college dropout (Adreon & Durocher, 2007; Attwood, 2007; Harpur, Lawlor, & Fitzgerald, 2004). Individuals with AS may face specific challenges with academic content, living and working with others, developing relationships, developing and following routines, dealing with change, advocating for services, organization, time management, and study skills. Attwood (2007) emphasizes that students with AS are more likely to drop out of a course due to issues with stress management rather than the commitment to the course or lack of intellectual ability. Difficulties associated with the social demands of college may be a

significant source of stress and anxiety as well as a contributing factor to the high rates of anxiety disorders and depression within this population.

Statement of the Problem

Within the past 10 years, increased attention has been given to a population of students with ASD who are transitioning from high school to college. Students with ASD who attend college are individuals with high to superior intelligence and special interests and talents (Prince-Hughes, 2002; Harpur, Lawlor, & Fitzgerald, 2004). The college environment provides students with a unique opportunity to develop their special skills and interests and academic skills. However, many students with ASD struggle with negotiating social interactions and communication with others.

Adults with ASD report pervasive difficulties with not fitting in to many aspects of life including "babyhood, developmental patterns, schooling, expectations, friendships, and family life and society" (Portway & Johnson, 2003, p. 437). Regardless of the students' intellectual capabilities, academic performance, and possible contributions to his or her field of study, social difficulties can impact students' perceptions of personal success and have an impact on their choice to remain enrolled in college (Harpur, Lawlor, & Fitzgerald, 2004). Some students with ASD choose to leave the college environment due to the fact that they are not able to cope with the social demands of college.

When a student is placed in an incompatible environment that does not reinforce his or her behaviors, values, and attitudes, the likelihood of leaving the environment increases (Strange, 2000). Studies investigating the social relationships of individuals with ASD indicated that they thrive in environments in which they are able to build close

personal relationships (Robledo, 2006). These relationships served the purpose of providing social support to the individual. I believe that within the college environment these relationships also serve five larger purposes: 1) providing a bridge to the larger college community by influencing the student's involvement in social activities, 2) positively impacting levels of anxiety and depression, 3) providing a vehicle for social learning and empathic response, 4) impacting an individual's sense of fitting in and belonging within a college community, and 5) impacting student's decision to remain enrolled at a particular institution. In other words, the quality of a student's college experience may be highly impacted by the student's ability to build a friendship or social connection with a peer member.

Previous research on individuals with ASD focused on highlighting participants' characteristics and deficits from the viewpoint of the researcher (Biklen, 2005). Most research studies investigated the educational outcomes of children with autism who have significant cognitive delays. These studies made negative assumptions regarding participants' inability to take on the viewpoint of others, demonstrate empathy, recognize social conventions, and build social relationships. Due to difficulties with social connectedness and social reciprocity, some professionals assume that individuals with AS are not capable of forming the bonds associated with interpersonal relationships.

Based on autobiographical accounts from individuals with AS and my personal experiences working with children with AS, I believe that individuals with AS have greater insight into their social relationships and social difficulties than previously thought. I also believe that students with AS may have greater insight as to when their

behavior does not fit the norm, but often lack the knowledge or skills to know how to be successful at social interactions. This level of insight coupled with a feeling of lack of control can lead to social withdrawal and feelings of anxiety and depression. When students begin to feel unsuccessful in their academic and social endeavors, withdrawal and/or college dropout becomes a strong possibility. Having a peer relationship strongly influences a students' feeling of loneliness and can provide a model for appropriate social interaction (Attwood, 2007).

Few studies gave individuals with AS an opportunity to discuss their social and academic experiences without researcher bias and judgment on participants' ability to conform to the general population. Furthermore, few researchers investigated the friendships of individuals with AS within the context of the college environment. More research is needed that focuses on the perspective of individuals with AS who have experienced success in college as well as those individuals who have had academic and social difficulties. This research study investigated the experiences of adults on the higher end of the spectrum who view the world in unique and special ways and who are able to articulate their experiences. By allowing individuals with AS to describe their successes and difficulties in a first person perspective, we develop a better understanding of what supports are needed to retain these students. Due to the fact that little is known about the value of friendships in relation to the college experiences of students with AS, this phenomenological study investigated the meaning of those relationships. The focus on the perspective of the individual with AS, rather than from the perspective of the researcher, allowed for a novel way of viewing students with disabilities that concentrates

on a competence rather than a deficit model of disability (Biklen, 2005).

The problem of this phenomenological study was to understand the friendship processes and the value of friendship experiences for participants with Asperger's syndrome who have attended college through a lens that presumed competence rather than a deficit model of disability. This lens facilitated an analysis of the behavioral, cognitive, and affective processes involved in interpersonal engagement in order to understand how those relationships play a role in college adjustment.

Significance of the Study

As the population of students with Asperger's Syndrome in higher education increases, collegiate administrators and faculty will need to understand the academic and social needs of students with disabilities in order to prepare them for the workplace. Studies of individuals with AS indicate that most report having ongoing problems with finding and maintaining jobs (Muller, Schuler, Burton, & Yates, 2003). The most frequent obstacle to vocational success was navigating social interactions and one's ability to "fit in," regardless of whether or not they were able to meet the technical demands of the job or previous educational attainment including obtaining a college degree.

Although a few adults with Asperger's Syndrome have written autobiographical accounts reflecting on their college experiences, little research is published on the current experiences of college students and on their needs within the context of social experiences. In general, there is a "dearth of information addressing the needs of this college bound population" (VanBergeijk, Klin, & Volkmar, 2008, p, 1362). Awareness of

student needs and perceptions of the academic experience from a student perspective added to the understanding of how peer relationships influence social involvement for students with AS and shape future support services.

Given the limited research exploring the current college experiences of students with AS, a better understanding of the student's perspective was needed. Due to the relatively recent introduction of this diagnostic category in the DSM-IV TR, the identification of individuals with this disorder has significantly increased. Additionally, these students are matriculating into the college setting at a higher rate. Currently, anecdotal information from service providers and parents is available as reflections written years after the college experience is over (Palmer, 2006). Because of the diverse nature of this particular population, data was collected from the source, the students themselves, who experienced college firsthand.

Furthermore, collecting information from the students themselves was essential due to the fact that they may view their needs in ways that differ significantly from those who provide support. Capturing the voices of students with Asperger's Syndrome provided insight into the unique thinking and communication patterns typically present in this population. By conducting in-depth interviews with students, this researcher gained a level of insight into this phenomenon that is both context specific and detail rich. By understanding individual perspectives through a qualitative research design, I shed light on a topic that is rarely studied within the context of higher education.

Limitations

Locke, Spirduso, & Silverman (2007) define limitations as "limiting conditions or

restrictive conditions" (p. 16). Rudestam & Newton (2007) define limitations as the "restrictions in the study over which you have no control" (p. 205). Several limitations of the study make the results difficult to generalize beyond the participants and the specific settings in which they study and develop social relationships.

First of all, the nature of student's disabling condition limited the study. Individuals with AS demonstrate such a wide range of difficulties with sensory, communication, and social needs that findings cannot be generalized to other individuals with AS, other college students with disabilities, or the general population of college bound individuals. Furthermore, this study included students with AS who may have a variety of comorbid disorders including those associated with learning disabilities and other psychiatric conditions such as Attention Deficit Hyperactivity Disorder, Anxiety Disorders, Obsessive Compulsive Disorder, and Depression. None of the students were enrolled on the same campus making it difficult to generalize to a larger population of students in another institution, population, or region. Individuals who were willing to participate in this study may not be representative of individuals with AS who do not wish to disclose their disability or those who do not wish to discuss their college and social experiences. It may also be possible that those individuals who were willing to participate in the study may be representative of individuals who have overall positive social experiences rather than negative experiences, as negative experiences are naturally more difficult to discuss making a person more likely to decline to participate in this study if they have had unpleasant experiences. Likewise, the majority of the participants demonstrated relatively high independent living and self help skills that may not be

generalized to all individuals with AS who attend college.

Lastly, this study contains an unusually high number of female participants, with a ratio of 4:7, females to males as compared to population estimates of a ratio of 4:1 to 10:1 females to males. It is possible that differences between male and female friendship experiences as well as gender differences in social communication styles would influence the results of this study. Information on girls with AS indicates that they may demonstrate qualitative differences in social abilities; however, information on adult females with AS is limited (Attwood, 2007).

This study may also be limited by the method of inquiry including interviews and written responses to open ended questions. While providing detail rich information that cannot fully be captured through forced choice questionnaires, the self report nature of interviewing provides some limitations. Because participants were expected to self reflect on previous experiences, the accuracy of individual recollections may have been questionable. Individuals may have had trouble recollecting autobiographical data if a significant amount of time has passed between the college experience and the present. Furthermore, the extent of an individual's social or communication difficulties may have influenced his or her interaction with researcher or understanding of research questions. Follow up questioning was used to gather additional information and to clarify misunderstandings.

The findings of this research study were inherently influenced by researcher bias. Because I knew several of the participant's in this study through a support group for adults with AS, the results of this study may be influenced by the fact that a preexisting

relationship was developed with the participant's prior to the interviews. These preexisting relationships may have positively influenced the participants' levels of trust and self disclosure. Likewise, the existence of a prior relationship may have influenced my views of the participants, causing me to see them in an overly positive light. Control for researcher bias in qualitative research was minimized through self disclosure in a Researcher as Instrument Statement as well as a reflexive journal. Member checking was also used to minimize the risk of bias and allow the voices of the participants to be heard. Triangulation of data was used to gain information from multiple sources and perspectives.

Delimitations

Delimitations imply the deliberate boundaries placed on the research design that "restricts the population to which the study can be generalized" (Rudestam & Newton, 2007, p. 105). This study focused on students with AS who have attended college. In keeping with phenomenological methods, the study included small numbers of participants (Creswell, 2003). The study focused primarily on friendships in college rather in an effort to build upon existing literature that has previously focused on a broader view of student's total experiences including academic performance, accommodations, sensory needs, communication difficulties, disability services, etc. (Schlabach, 2008). While these topics were discussed in relation to the individual's social relationships, this study focused primarily on the processes involved in developing peer relationships in college to develop a greater understanding of how they fit within the larger picture of college adjustment. The study focused on peer relationships rather than

familial, support, professional, or romantic relationships to investigate the nature of dyadic mutual interpersonal engagement (Hobson, 2007; Ueno & Adams, 2006).

Furthermore, the method of inquiry for this phenomenological study delimits the type of inferences that were made about the participant's interactions with college friends. Because this qualitative study was designed to shed light on the participant's *perceptions* of their college experiences in most cases years after the experience, no inferences were made on what behaviors that actually occurred between participants and friends. Furthermore, critique of the strength of the participant-friend relationship was inappropriate given the nature of this qualitative study.

Definition of Terms

Social Supports

Social supports were defined as the individuals who provide assistance and guidance for adjusting to the social demands of the college environment. Several researchers have suggested that it is beneficial for college students with AS to develop relationships with individuals who can help guide them through difficult social situations (Attwood, 2007; Adreon & Durocher, 2007). These points of contact may vary depending on the situation. For developing independent living skills, the student may rely heavily on parental guidance, teaching, and input. For social situations, the student may develop a relationship with a social buddy or peer that can assist in providing guidance in social expectations and social conventions. For academically related environments, the student may develop a relationship with a tutor or an individual in the Office of Disability Services who can help the student with organization, time management, and problem

solving. Social supports are generally thought of as services that are provided to the individual as a means of promoting or teaching academic or social skills. This study focused on the role of friendships rather than social supports in college.

Peer Relationships

While social supports are believed to play an essential role in influencing a student's success in college, I believe that it is the development of a stronger peer relationship, closely related to a friendship, which will have a greater impact on student's academic and social success. A friendship is defined by Merriam-Webster as the "state of being friends" (Merriam-Webster, 2009). A friend is defined as "one attached to another by affection or esteem" (Merriam-Webster). By this definition, it is assumed that the peer relationship encompasses the ability to develop a social connectedness with another individual that involves feeling and emotion. For this study a peer relationship differed from a social support in that neither party engaged in the relationship for payment nor were any individuals related to the identified friend. In this way, the peer relationship differs from the relationship that may exist between the student and a professor, support staff, paid mentor, sibling, or parent. The following study investigated the value of friendships in the lives of individuals with AS who have attended college. Due to the phenomenological nature of the study, participants were asked to define their meaning of friendship during the interview.

High Functioning Autism

High Functioning Autism (HFA) is an informal term used to describe individuals who fall within a subtype of autism who are high-functioning versus low-functioning

(Tsai, 1992). In addition to meeting the criteria for autism, individuals who are diagnosed as having high functioning autism meet the following suggested criteria: 1) nonverbal IQ above 70 2) slightly abnormal or mildly delayed receptive and expressive language skills 3) slightly abnormal or mildly delayed receptive and expressive social skills and 4) some difficulty in independent living skills and social functioning but there are some "meaningful interpersonal relationships". (Tsai, 1992, p. 36). The DSM-IV TR does not distinguish between low functioning and high functioning autism. In order for an individual to meet the criteria for Asperger's Syndrome, they must not meet the criteria for any other specific Pervasive Developmental Disorder including Autistic Disorder. Medical professionals, researchers, and mental health professional debate the degree of overlap between HFA and AS with some professionals arguing that HFA and AS are different disorders and others feeling that there are no differences between HFA and AS (Attwood 2007, Barnhill, 2007, Wing 2005). Others argue that HFA and AS fall along a continuum of autism spectrum disorders. Comparisons of the cognitive, social, motor and neuropsychological tasks of adults with Asperger's Syndrome with those of High Functioning Autism indicate no differences (Howlin, 2007). Howlin (2003) also found similar delays in language comprehension and expression when comparing adults with Asperger's Syndrome and those with high functioning autism. Therefore, for the purposes of this study, those individuals with High Functioning Autism and Asperger's Syndrome will be considered a homogeneous group and the terms will be used interchangeably when discussing research on adult populations diagnosed with high functioning autism and Asperger's Syndrome.

Chapter Two

Literature Review

National trends indicate that more individuals with Autism Spectrum Disorders and Asperger's Syndrome are matriculating to college than ever before. While the number of students attending college with AS is unknown because students may be undiagnosed or choose not to self disclose, disability service providers report that there has been an increase of students with Asperger's Syndrome on college campuses (Brown, AHEAD conference, 2003; Trachtenberg, 2008; Willey 1999). In 2008, Dr. Thiefield Brown, a nationally recognized expert on postsecondary services for students with Asperger's Syndrome, reported that an average of 10 students per institution had a diagnosis of autism spectrum disorder (as cited in Erb, 2008). In 2006, Dr. Jane Thierfield Brown conducted an informal survey of 42 institutions and found an average of 8.9 students with AS at community and technical colleges and 4.28 students with AS at four year institutions (as cited in Wolf, Brown, & Bork, 2009).

Colleges may be unprepared to meet the academic and social needs of these students. Gwendolyn Dungy, executive director of NASPA, reported "It's a problem colleges and universities are 'very aware' of as the first big wave of children diagnosed with autism-related disorders moves beyond high school....We've been very interested in it and finding out how ready colleges are for these students. We want to establish a climate for success" (Dutton, 2008, para. 9).

Understanding various aspects of the disorder and the specific challenges faced by students are helpful when structuring supportive learning environments. One of the

biggest challenges facing students with AS are those associated with socialization. These factors may be related to historical, cultural, and societal contexts. The following areas of literature are relevant to this study: (a) historical trends related to AS diagnoses; (b) variability of adult outcomes of AS; (c) factors related to socialization for AS individuals; (d) social development and friendships in adults with AS; (e) social development and college life; and (f) college experiences and social difficulties for individuals with AS.

Historical trends related to AS diagnoses

Historically, Asperger's Syndrome as a psychiatric condition has only been widely recognized within the last 15 years. For this reason, much information about this disorder remains to be discovered, especially for adults who may have been undiagnosed or misdiagnosed as children (Woodbury-Smith & Volkmar, 2008; Robledo & Donnellan, 2008).

Asperger's Syndrome was originally described by Hans Asperger in a series of papers published in 1944. Dr. Asperger worked as a Viennese pediatrician in Nazi-occupied Austria (Attwood, 2007; Wing, 2005). In 1938, he published a paper describing the social and behavioral characteristics of four children: Fritz, Harro, Ernst and Hellmuth. The children demonstrated delays in social maturity and social reasoning while still having some aspects of social abilities that were unusual. Pedantic speech, impairments in verbal and nonverbal communication, unusual rate of speech, tone, and rhythm, and difficulty making friends were also noted. Dr. Asperger observed advanced grammar and vocabulary but unusual usage of language and conversational skills. He noted difficulties in sustaining attention to instruction, impairments in emotional

expression, and difficulties with self help and organizational skills that required more assistance from caregivers than that of the typically developing child. Sensory and motor impairments in terms of extra sensitivity to sounds, smells, and touch and clumsy gait were also documented.

Dr. Asperger noted that these characteristics could be identified in some children at the ages of 2 or 3 years but for others the characteristics of the disorder became obvious in older years. Due to the fact that some of the fathers of the children exhibited similar characteristics, Dr. Asperger felt that there may be a genetic or neurological influence rather than environmental contribution and that autistic personality disorder fell along a "continuum of abilities that merges into the normal range" (Attwood, 2007, p. 13). Due to the fact that he could not find a description for the unusual behavior patterns he observed, Dr. Asperger named the collection of characteristics he observed as Autistische Psychopathen im Kindesalter, which translates to "autistic personality disorder" in children.

For approximately 40 years, Dr. Asperger's writing was largely unnoticed by the scientific community until Lorna Wing published a paper in 1981 on a pattern of behavior that had been previously described by Dr. Asperger (Wing, 2005). At the time, Asperger's paper was largely unknown in English speaking countries. In 1991, Asperger's original writings were translated to English by Uta Frith (2003) encouraging more interest in the syndrome. According to Wing, the combination of her writings followed by Frith's translation of Asperger's original writings aroused considerable interest and as a result, the National Autistic Society received a significant increase in the

number of publications on Asperger's Syndrome, rising from two papers in 1981 to over 900 in 2004 (Barnhill, 2007; Wing, 2005). Wing's publication aroused a significant amount of public interest that continues today.

Around the same time that Hans Asperger published his paper, another Austrian physician, Leo Kanner, described a set of characteristics that involved severe impairments in language, socialization, and cognition. At the time of his publication in 1943, Kanner did not have correspondence with Hans Asperger. These characteristics described by Kanner (1943) shaped the understanding of the term *autism* in America and Britain. However, Kanner's description did not fully describe some of the children and adults with higher functioning skills that Wing later depicted in her paper published in 1981. Wing described 34 cases of children and adults ranging from 5 to 34 years of age with characteristics resembling the descriptions made by Asperger not Kanner. The children, who were higher functioning individuals, did not match Kanner's descriptions of *autism* at the time. Wing first used the term Asperger's Syndrome to describe these characteristics, crediting the original researcher and laying the foundation for a new diagnostic category within the autism spectrum.

With the 1993 publication of the 10th edition of the *International Classification of Diseases* (ICD – 10) and the 1994 publication by the American Psychological Association of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM – IV), Asperger's Syndrome was added as a category under Pervasive Developmental Disorder. Pervasive Developmental Disorder is a diverse disorder with several subtypes, one of which is Asperger's Syndrome.

Asperger's Syndrome is a lifelong developmental disorder that falls on the higher end of the autism spectrum. Individuals with Asperger's Syndrome demonstrate impairments in social interaction and restricted and stereotyped patterns of behavior, interests, and activities. Persons with Asperger's Syndrome generally have cognitive abilities, language skills, and adaptive skills, which fall within the normal limits. A review of 36 epidemiological studies with 7,514 children with autistic disorders around the world indicates that the median proportion of subjects without intellectual impairment was 29.6% (Fombonne, 2007). One study with preschool children found that as many as 94% of higher functioning individuals with Pervasive Developmental Delay Not Otherwise Specified and AS have IQs in the average range (Fombonne, 2007).

Variability of Outcomes of Asperger's Syndrome in Adulthood

In order to have a complete understanding of the lifelong challenges that face individuals with AS, it is important to gain an understanding of the impact on life functions such as educational attainment, independent living, and relationships for individuals on the autism spectrum. Despite the increasing reports of individuals diagnosed with autism, relatively little has been written about the outcome in adult life for persons with AS (Howlin, 2007). Due to the fact that Asperger's Syndrome was not recognized by the American Psychological Association as a separate Pervasive Developmental Disorder until 1994, children and adults with Asperger's Syndrome were either undiagnosed or misdiagnosed (Barnhill, 2007). Prior to Wing's 1981 report, children with autism were often identified as having childhood psychosis, early childhood schizophrenia, or infantile autism. For adults with AS, a misdiagnosis in childhood could

have had severe long term effects in terms of lack of educational opportunity, inappropriate psychiatric treatment, and possible institutionalization.

Barnhill (2007) notes that diagnosis may be complicated by the fact that the symptoms of the disorder may manifest themselves in various ways. For example, individuals with the syndrome may have strengths in vocabulary and rote memory skills or a particular knowledge of topics of interest that may mask social difficulties or stereotypical behavior. Therefore, parents and teachers may not initially recognize the student's difficulties due to the fact that their intellectual and physical abilities may appear to fall within the normal range. In adulthood, the syndrome may also be masked when intellectual ability is high and environmental support is good. Barnhill and Frith (2003) stress that over time and under unpredictable conditions the disorder will eventually manifest itself because the appearance of normality cannot be maintained. Difficulties with social skills may manifest themselves under periods of stress or in novel transitional situations such as the transition to college.

Attwood (2007) has noted that the typical age for a diagnosis of a child with Asperger's Syndrome is between 8 and 11 years. While a significant amount of information is now available on children with autism spectrum disorder, little has been published on adults at the higher end of autism spectrum. Within the Asperger's Syndrome diagnosis, adult outcomes significantly vary. Early studies consist of clinical impressions of hospitalized populations and case studies of individuals who were followed during long term treatment. The early writings of Asperger, Wing, Frith, and Kanner would fall into this group. Early follow-up studies of individuals with autism

were conducted in the 1960s with institutionalized individuals. Later follow up and longitudinal studies initially emerged in the 1980s and 1990s with small populations. Additional sources of information regarding adult outcomes can be found in autobiographical accounts and dissertation studies.

Longitudinal Studies

Only a few longitudinal studies conducted among homogeneous populations of individuals with AS have been published (Howlin, 2007; Cederlund, Hagber, Billstedt, Gillberg & Gillberg, 2008). Most studies have a wide range of variability in sample numbers, diagnostic criteria, ability levels of participants, and treatment methods, making comparisons across studies difficult. Overall, longitudinal studies completed with young adults with AS between 1985-2007 reflect that despite having intellectual ability in the average range, individuals with AS continue to have significant social difficulties, difficulties with employment, difficulties maintaining intimate relationships, difficulties with independent living, and impairments in communication (Howlin, 2007; Cederlund, et. al., 2008). However, there have been improvements reported among individuals over time in higher levels of independence, employment, and friends/acquaintances.

Howlin (2007) in a review of outcome studies conducted from 1956 to 2004 concluded that although the mean percentage of individuals being studied rated as having a "good" outcome before 1980 was 11%, this rate has risen to around 20% in the past two decades. Good outcomes are defined by as being either employed or in higher education or vocational training, living independently, and having two or more friends or a steady relationship. The number of individuals living with family members remained around

30%. Around 12% own their own homes. Furthermore, the average employment rate is approximately 20%.

The most recent and extensive follow-up study of individuals with AS was published in 2007. Cederlund, Hagber, Billstedt, Gillberg, and Gillberg (2008) conducted a comparison longitudinal outcome study of 70 males with AS and 70 males with Autism more than five years after the original diagnosis. Females were not included in the study due to the fact that only a small number could be identified. The study, conducted in Sweden, was the first of its kind to present a long term perspective on the outcomes of individuals diagnosed with AS and was designed to measure the diagnostic stability over time using specific criteria. Comparison data between groups was reported on overall clinical assessment, social and communication skills, intelligence, adaptive behavior, and Global Functioning. Researchers found that 27% of young males with AS, ages 16-36, demonstrated "good" outcomes as defined by as being either employed or in higher education or vocational training, living independently, and having two or more friends or a steady relationship. Twelve percent of the group no longer demonstrated clinical diagnosis for the disorder, demonstrating improvements in autistic like behaviors since original diagnoses. Fourteen percent of the population, 10 out of 70 participants, had either received a college degree or was currently attending college. Despite having average intelligence, 26% of the AS population was considered to have a "restricted" outcome as defined by unemployment or not living independently or poor outcome as defined by no friends. Although 27% percent of the population was living independently, they were *all* dependent on their parents for financial support.

Factors related to higher outcomes

Overall, several qualities appear to contribute to higher outcomes for individuals with AS. These qualities include IQ levels, age of initial diagnosis, appropriate educational opportunities, availability of social support networks, variability in manifestation of the disorder, gender, and comorbidity of other associated medical conditions such as seizure disorders and mood disorders. Intellectual ability and early language development have consistently been identified as the major contributing factors related to positive outcomes for individuals with autism (Howlin, 2007; Cederlund, et. al., 2008).

Howlin (2007) concluded from her review that those individuals with average to above average cognitive functioning demonstrate higher levels of academic achievement than those with below average cognitive ability. Individuals who have intellectual abilities approximating the normal range can obtain high school diplomas and attend college. Historically poor outcomes for adulthood were expected due to the severity of the diagnosis and social stigmas associated with the disorder. In fact, only within the past decade have higher educational outcomes, including college attendance, been a realistic possibility for individuals with AS. As an example of the overall pessimistic attitude towards individuals with autism being able to attend college, Kenneth Towbin, a scholar on Autism Spectrum Disorders, stated just over a decade ago, "A very small number of autistic persons are able to attend college and live independently. Although many make obvious strides in achieving greater social awareness, they remain socially odd, and they require lifelong supervision and educational support. The largest portion, perhaps 60%,

make modest gains or remain severely impaired. The outcome of autism has been directly correlated to overall IQ, language development, and appearance of seizures" (as cited in Sperry, 2001, p. 201).

Changes in societal attitudes also coincide with changes in educational opportunities for those with AS. Researchers have found that individuals with AS who have received an early diagnosis between the ages of 5 and 9 years of age had the highest outcomes (Cederlund, et. al, 2008). This may be related to the levels of educational and social supports provided to the students and the families at younger ages of development. One other factor that may influence educational outcomes includes the opportunity to develop special skills related to an individual's restricted patterns of interest (Howlin, 2007; Attwood, 2004, Prince-Hughes, 2004). These conditions are most relevant for individuals with AS who are most likely to apply their high cognitive skills to areas of special interest in the college setting. Currently, it is unknown the degree to which early educational opportunity, social support, and the development and support of special talents in socially appropriate ways impact the overall outcomes in a population of college bound individuals with AS. Even less information is known about the development, perception, quality, and maintenance of adult relationships, all of which are all important aspects of adult life for individuals with AS (Howlin, 2007).

Factors Related to Socialization for Adults with AS

Clinical research studies involving relationship development for adults with AS focused on the psychological disposition or psychological properties of the individual with the disorder. Theories of psychological functioning within Asperger's Syndrome

attempt to explain how the disorder manifests itself at the cognitive, emotional, and behavioral levels (Hodges, 2004). From the beginning of life, significant impairments in processing and perceiving social and emotional cues are believed to be at the heart of the disorder (Prior & Ozonoff, 2007). Individuals with autism spectrum disorders have been shown to have deficits in joint attention which then lead to deficits in reciprocity for social communication and peer interaction in later years. Deficits are also noted in emotional and face perception including the ability to recognize complex emotions such as pride and embarrassment in others and the tendency to avoid focusing on the eyes of others as a way to read the thoughts and emotions of others.

<div align="center">Mindblindness</div>

Deficits in joint attention, social reciprocity, and difficulties recognizing emotions are believed to be early signs of key deficits in "Theory of Mind" (ToM) (Prior & Ozonoff, 2007). ToM ties together what is currently known about deficits in social, communication, and cognitive deficits of individuals with autism during the developmental period to provide a cohesive explanation of the "psychological aspects of the disorder" (Prior & Ozonoff, 2007, p. 98). ToM describes "mindblindness" or the deficits that individuals with autism have in taking the perspective of others, including the ability to understand that other people have minds (Frith, 2003). Difficulties are noted in the ability to predict others' behavior because they are not able to conceptualize the thoughts, beliefs, feelings, plans, emotions, and intentions of others. Theory of Mind is also believed to affect self consciousness and introspection. ToM deficits may manifest itself in difficulties in thinking about thoughts and feelings, either about oneself or

another person. While ToM skills develop in typical children around the age of 4,

children with autism have been shown to demonstrate delays and impairments in the

development of ToM skills that may occur across the lifespan (Goleman, 2006).

The term Theory of Mind has often been used synonymously with empathy

(Attwood, 2007; Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006; Goleman, 2006).

The presence of empathic qualities is believed to be a key characteristic in developing

relationships and connections with others (Goleman, 2006). Empathy has two main

dimensions: (a) the "ability to attribute mental states to oneself and others, as a natural

way of understanding agents and (b) having an emotional reaction that is appropriate to

other person's mental state" (Wheelwright, 2007, p. 155). Empathy involves interpreting

what we see, making sense of the behavior, predicting what the individual will do in the

future, and how they might feel, and having an emotional response to another's emotion.

In this way, empathy has multidimensional properties, some of which are cognitive

(perspective taking) and some that are affective (emotional response).

Studies on adults with AS have traditionally identified deficits in the ToM: the

cognitive aspects of empathy through self report measures and the use of hypothetical

narratives (Baron-Cohen & Wheelwright, 2004; Lawson, Baron-Cohen, & Wheelwright,

2004; Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006). Because empathy is

multidimensional in nature, individuals may lack some components of empathy but not

lack other components. Rogers, Dziobek, Hassenstab, Wolf, and Convit (2006) found that

individuals with AS demonstrate difficulties with cognitive empathy, but no differences

compared to matched controls on scales that measure empathic concern. Empathic

concern is the ability to feel warmth, compassion, and concern for others. Individuals with AS also demonstrate higher scores on self-report measures of personal distress related to feelings of discomfort in social settings which may have a negative impact on their ability to demonstrate empathic responses.

This longstanding confusion between ToM and empathy has led to an incomplete conceptualization of the affective abilities of persons with AS (Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006). Individuals with higher functioning autism or Asperger's Syndrome are believed to be less impacted by ToM deficits than individuals with autism (Wheelwright, 2007). Furthermore, some researchers believe that ToM explanations are too simplistic to explain the variety of social, communication, imaginative deficits, and obsessive traits in all individuals with autism (Mitchell, 1992). Deficits in ToM may also be linked to other cognitive impairments such as mental retardation and deafness. Furthermore, adults with AS may be able to pass a variety of ToM tasks in controlled settings but demonstrate significant impairments in applying these skills in naturalistic social settings, such as educational and work environments (Barnhill, 2007). Individuals with AS tend to take longer and respond in more literal terms than typical individuals on ToM tasks (Attwood, 2007). These impairments may be due to cognitive processing difficulties in applying ToM skills with speed, spontaneity, and intuition as is required in naturalistic settings.

Anecdotal information from individuals with AS and reports from clinicians are consistent with the idea that individuals with AS can be very compassionate and caring (Grandin, 2006). This understanding has led some researchers to stress that individuals

with AS have specific difficulties with perspective taking, but once given enough information to understand the feelings and perspectives of others, they respond with appropriate affective empathy and concern (Rogers et. al., 2006). When they do not understand, they may seem uncaring and aloof. Clinical follow up interviews with individuals with AS have also found that even though they have difficulty understanding another person's behavior, it is not their intention to hurt other's feelings (Baron-Cohen & Wheelwright, 2004). When social situations are explained to some individuals with AS, they are better able to understand another's perspective and modify their behavior.

As is consistent with affective measures of high personal distress and empathic concern for others, adults with autism report that they have difficulties evaluating aspects of social interactions until they are able to obsess over it for hours or days later. Upon reflection they are able to provide better insight rather than while engaged in the interaction (Biklen, 2005). The task demands of attending to conversation, social cues, and monitoring personal responses involved in social engagement appear to be overwhelming enough for individuals with AS without adding the extra component of interpreting perspectives and responding with appropriate emotional reactions. Due to the fact that ToM theory focuses only on the cognitive aspects of autism while ignoring the affective and interpersonal aspects related to the disorder, significant revisions have been made since its initial conceptualization in the 1980s. Simon Baron-Cohen and his colleagues have developed the constructs of Systematizing versus Empathizing to explain the strengths and weaknesses of individuals with AS.

Systematizing versus Empathizing

Additional research into the various dimensions of ToM theory has focused on cognitive styles rather than deficits (Hodges, 2004). Individuals with AS possess higher systematizing skills than the general population, but poorer empathizing skills. In the general population, males have been found to have higher systematizing skills than females. Systematizing is defined as "the drive to analyze and build systems" (p. 302). Individuals who are adept at systematizing may be able to analyze and predict future behavior if those behaviors follow a prescribed pattern (Wheelwright, 2007). Systematizing may be of no value when predicting the moment by moment variability in other's behavior; whereas empathizing involves understanding the perspective of others and giving an appropriate affective response.

In this way, individuals with AS are described as being extremely rule driven in that they search for the underlying rules that govern behavior. Confusion sets in when a novel situation occurs for which no learned rule exists. Over time, however, individuals can learn to build a collection of situations and appropriate reactions from which to draw upon by constantly learning how to shape and improve their own social skills (Grandin, 2006). This evolution throughout the lifespan may explain why adults with AS show improvements in social learning over time to the point that many do not show difficulties on contrived ToM types of tasks such as those used on self report inventories. In theory, age may play a factor in the evolution of empathy as older adults have had more opportunities to experience social interactions and more opportunities to reflect upon those interactions. Thus, they become more experienced over the lifespan at drawing

from cognitive databases and on reflecting on their own experiences.

<div align="center">Emotional Relatedness</div>

Some scholars argue that the deficits present in AS are more complicated than the inability to take others' perspectives. While some scholars argue that ToM deficits are the precursor to being able to express emotion and connect with others, other scholars argue that interpersonal connection with others in a dyadic relationship occurs long before the presence of ToM abilities (Baron-Cohen, Hobson). Hobson (2007) contends that deficits in autism involve more than cognitive processes. The social interactions between the child and others, including social and affective engagement, are the precursors to cognitive development and development of ToM. In this way, the involvement of the child's experience of the world *through* others, not just through his or her own eyes, is considered. Individuals with autism "rarely think about themselves in relation to other people who have attitudes towards them, and rarely take up a stance in which they think about others, think about themselves, and compare the two in relation to one another" (Hobson, p.148). When they are unable to identify with others, their thoughts and feelings may remain inflexible as opposed to going through constant repetitive shifts in concurrence with the thoughts and feelings of other people as do typically developing individuals. This constant shifting of attitudes and perceptions allows people to be moved by others. Thus, in individuals with autism, the deficits lie in emotional relatedness *and* affective interpersonal awareness. Although typically developing individuals learn this skill naturally, individuals with AS need various levels of assistance in learning how to take others' perspectives.

Current studies of adults with AS have not analyzed the interactions that occur between individuals on an interpersonal level and simultaneously fail to acknowledge the affective aspects of relationships (Hodges, 2004). Self-report measures are inherently deficient in measuring true thoughts and feelings of individuals as they relate to lived experiences of the individuals. Furthermore, self report measures fail to capture the individual's thoughts and feelings in regards to actual situations and relationships. Measures of empathy should focus on an individual's real world relationships in an effort to fully understand a person's capacity for real connectedness and feeling as it relates to actual rather than hypothetical emotions.

Overall, empathy appears to be a multifaceted construct that is not fully understood in a population of individuals with AS. For these reasons, it is premature to assume that individuals with AS demonstrate an absence of feelings for others. While perspective taking aspects of empathy have been shown to be immature with individuals with AS, exactly how these processes are affectively manifested through interpersonal relationships is unclear. More information is needed to understand the interpersonal relationships of individuals with AS and how those relationships influence their future understanding of social processes from the perspective of individuals with AS.

Associated Psychiatric Disorders

Individuals with Asperger's Syndrome demonstrate medical and mental health difficulties in adulthood. Associated disorders include depression, anxiety, seizure disorders, sleep problems, Tourette's Syndrome, and ADHD (Woodbury-Smith & Volkmar, 2008). The most common difficulties identified in clinical case studies are

anxiety-related and affective disorders. Depression has been measured to occur at a rate between 55% - 65% of the population (Howlin, 2007; VanBergeijk, Klin, & Volkmar, 2008).

Howlin (2007) proposes several reasons for why this population seems particularly susceptible to these illnesses. First of all, individuals with AS often do not receive the level of support they need because they outwardly appear to have higher levels of functioning. Due to the difficulties associated with understanding nuances of social exchange, language, and communication, individuals often have significant difficulties with social integration and barriers to forming social relationships. Others may not fully recognize their unique challenges and have unrealistic expectations, resulting in higher demands for them to adapt to social expectations of normal behavior. Individuals with AS may be keenly aware of their differences and assumption of responsibility in negative social situations resulting in sadness and low self esteem (Barnhill & Smith-Myles, 2001). VanBergeijk, Klin, and Volkmar (2008) explain that anxiety is related to an individual's difficulties in relating to a world of social confusion and processing. Depression may be the result of repeated failures similar to learned helplessness or attribution of social failures to their own abilities. Sterling, Dawson, Estes, and Greenson (2008) found that individuals with AS who exhibit depressive symptoms also have less social impairment and higher cognitive ability compared to those individuals with AS who do not exhibit depressive symptoms. They concluded that higher functioning individuals may have the interest to form social relationships but impairments in skills and repeated failed attempts leading to rejection and failure

contribute to the development of depressive symptoms. Merkler (2007) also found that individuals with high functioning autism are more isolated than typical college students. Distress was related to isolation combined with low involvement in social networks and dyadic relationships.

Due to vast differences in social maturity, the transition to adulthood for individuals with AS may add to the difficulties relating to peers. Therefore, by the time an individual reaches their college years, they may have experienced a long history of failed social attempts and peer rejection. This transition period may coincide with the onset of depressive symptoms. More information is necessary in understanding the interplay between social relationships, social involvement, and the onset of depressive symptoms as it relates to individuals with AS in college.

Approximately 25% of adults with AS also meet the clinical criteria for a diagnosis of Obsessive Compulsive Disorder (Attwood, 2007). Obsessive thoughts may focus on bullying, teasing, and being criticized. An estimated 75% of children with AS also have attention problems that would warrant a diagnosis of Attention Deficit Disorder (Attwood, 2007). Associated problems include distractibility, impaired executive functioning, difficulties with problem solving, and difficulties with central coherence that impact college performance.

Social Development and Friendships with Individuals with AS

Difficulty with social relationships is a defining characteristic that is well documented with both adults and children with AS (Baron-Cohen & Wheelwright, 2003; APA, 1994; Woodbury-Smith & Volkmar, 2008). Most available research focuses on

social skill development of children with AS. Throughout childhood, individuals with AS have difficulties with the following areas of social development: social maturity, reciprocal and cooperative play, difficulties understanding humor and teasing, naivety in judgments, paranoia, and difficulties with character judgments (Attwood, 2007). Gutstein & Whitney (2002) attribute deficits in experience sharing throughout the development period as being the primary contributing factor to social incompetence for children and adolescents with AS. Many of these difficulties improve over time due primarily to natural cognitive development, social learning, and social maturation. With age, natural increases in social skills, social interests, and the ability to recognize social challenges also occur (Sperry & Mesibov, 2005). In fact, an estimated 20% of children who were diagnosed with ASDs as children show a reduction in symptoms over adolescence into young adulthood precluding their diagnosis as adults. Although these individuals may blend well into community and school environments, they are likely to continue to demonstrate some difficulties with odd or unusual social behaviors.

Wing (1992) described four types of social impairment shown in adult life for individuals with high functioning autism. These four subgroups are: aloof, passive, active but odd, and stilted social interaction. The *aloof subgroup* has limited social skills, engages in repetitive behaviors, and manifests an apparent lack of interest in people, but may present feelings of alienation. This subgroup is most often compared to the character Raymond in the movie *Rain Man*. For the *passive subgroup*, individuals have the ability to copy others and to learn job skills. These individuals are likely to have attended mainstream schools. Because of their passivity and naiveté, this subgroup may go

through the developmental period without a diagnosis of autism or a diagnosis may occur following difficulties with adjusting to new environments.

In the *active but odd subgroup*, individuals are driven to actively pursue their special skills and interests. Because cognitive profiles may show significant variability in skills, diagnosis may also be overlooked. Difficulties with social oddities may be present through exaggerated eye contact and verbal communication. These individuals have a tendency to come across as "too strong" in their efforts to gain peer acceptance and may be the victims of bullying. Interest in particular topics may be a benefit or a hindrance to the individual in adulthood if not properly shaped as these individuals often demand that others show the same level of interest in their chosen topics of interest.

The subgroup with *stilted social interaction* is most closely associated with Asperger's Syndrome. These individuals may not appear to have a disorder upon the first meeting. Typically, they may perform well at work where there are expected rules for behavior and relationships are formal and distanced. Difficulties are noted with developing intimate relationships with family as these individuals have difficulty responding to other's emotional needs. Stress may be evident in this subgroup when demands are placed on the individual to change his or her routine or to divert attention away from his or her special interests. When demands become too overwhelming, there may be explosions of anger or extreme emotions occur that starkly contrast the controlled emotions displayed in the work setting. Because these individuals can achieve high degrees of independence, a formal diagnosis is often overlooked. These individuals are often described as unusual or even eccentric throughout the developmental period.

For typically-developing individuals, the nature of social relationships also changes from childhood to adulthood. In childhood, peer relationships typically involve a large number of individuals with a wide variety of interests. Peer interactions are highly supervised and facilitated by adults. As children move into adolescence, peer relationships develop with peers who have common interests, but also to reflect more independence and less facilitation from adults (Attwood, 2007). As they mature into adolescence and adulthood, individuals with AS may struggle with being too rigid or dominant with their preoccupation with topics of interest and with being naïve in romantic relationships (Humphrey & Lewis, 2008).

Children with AS may also experience insight and awareness of their difficulties in social situations and their desire to fit in despite having significant difficulties in being able to do so (Humphrey & Lewis, 2008; Portway & Johnson, 2003). Schools may become a stressful and anxiety provoking environment due to the associated difficulties with bullying, social isolation, and loneliness (Attwood, 2007; Humphrey & Lewis, 2008). One study estimates that one in five children with autism or AS are excluded from school at some point due to behavioral difficulties (Barnard, Prior, & Potter, 2000). In a qualitative study conducted with students from secondary schools across north-west England, adolescents with AS reported teasing and bullying from peers with regularity (Humphrey & Lewis, 2008). Attwood (2007) explains that individuals with AS may make easy targets for bullies because they are often passive, shy loners who sometimes seek isolation when needing respite from the activity of the classroom. While studies have shown that high-functioning children with autism report higher levels of loneliness

and less understanding of the relationship between loneliness and friendship interaction, feelings of loneliness appear to be diminished when children are placed in regular classrooms in which they develop social networks with typically developing peers (Bauminger & Kasari, 2000; Bauminger, Shulman, & Agam, 2003; Chamberlain, Kasari, & Rotheram-Fuller, 2006). Chamberlain, Kasari, & Rotheram-Fuller (2006) found that children with autism experienced lower acceptance, companionship, and reciprocity than their typically developing peers within a regular classroom setting, but they did not report elevated loneliness. In other words, having exposure to social opportunities had positive emotional benefits even if the friendship did not have the same degree of reciprocity as that of typically developing peers. Chamberlain, Kasari, & Rotherham-Fuller (2006) concluded that "emotional benefits of relationships may differ for the individuals, and yet still be of value to both" (Chamberlain, Kasari, & Rotherham-Fuller, 2006, p. 239). Having childhood friendships also has added benefits of being a natural protective factor against bullying because it allows the victim to escape being an isolated target.

As children move toward adolescence they become involved in a variety of recreational and extracurricular activities that develop their social skills and special talents. The natural adolescent tendency to develop close personal relationships with fewer individuals with similar interests may also provide the adolescent with Asperger's Syndrome an opportunity to gravitate towards individuals with knowledge or expertise in their special topic of interest. This alignment with persons of similar interests may be a pathway to developing friendships in both adolescence and adulthood for the individual with Asperger's Syndrome. Having close friends during the period from adolescence to

adulthood and engaging in shared activities plays a vital role in building independence and social skills. Several authors have emphasized that the transition to adulthood can be a particularly stressful time for individuals with Asperger's Syndrome and their families (Howlin 2007, Palmer, 2005, Willey 2005). A case study of five adolescents with AS in Australia found that participants desired to develop friendships but struggled with an overall lack of insight into what defines friendship as well as the reciprocal properties involved in maintaining friendships (Carrington, Templeton, & Papinczak, 2003).

Adults with AS may also demonstrate significant difficulties in reading social cues, understanding the rules of friendship, and understanding how to maintain work, school, romantic, and social relationships. Initiating and developing social relationships and communication difficulties are sources of frustration and stress. Furthermore, sensory integration difficulties may make social engagement mentally and physically challenging and overstimulating. For all of these reasons, adults with AS may have difficulties finding people with whom they want spend time and who accept them for themselves without having to change (Attwood, 2007; Prince-Hughes, 2002; Barbiracki, 2002). These difficulties manifest themselves in associated feelings of isolation and a longing for greater intimacy in work and school environments.

In adulthood, friendships also play a vital role in building identity, trust, and intimacy, important phases of development and maturation (Selman, 1980; Muuss, 1996). Despite the challenges of relationship development, close relationships may also serve as models for social behavior. A handful of qualitative studies have investigated the nature and value of interpersonal relationships with adults with autism within the past decade.

Individuals with autism stress that they wish to engage in successful interpersonal relationships (Robledo, 2005; Hurlbutt & Chambers, 2002; Hurlbutt & Chambers, 2004, Babiracki, 2002; Muller, Schuler, & Yates, 2008; Jennes-Coussens, Magill-Evans, & Koning, 2006; Biklen, 2005; Jones, Zahl, & Hews, 2001). Robledo (2005) found that academically successful individuals with Autism Spectrum Disorders, who attended college, engaged in intimate, mutual, and reciprocal supportive relationships. Through qualitative interviews, participants identified properties of their supportive relationships as consisting of mutual trust, respect, caring, presumption of competence, focus on independence, and communication. All individuals in this study identified a family member or paid staff member as a key factor in their success.

Hurlbutt and Chambers (2002) also found that individuals with high functioning autism believe that family involvement and support contributed to their feelings of self worth. Participants also reported valuing support systems that contribute to their feelings of self worth and an overall desire to be accepted and respected for their differences (Hurlbutt & Chambers, 2002; Babiracki, 2002). Most participants identified their mothers as primary sources of support. These studies did not focus on relationships specifically related to their college experiences. It is unknown if the type of relationship (family, peer, helper, mentor, friend, acquaintance) may serve different purposes for individuals in college.

One study that examined the differences between individuals with AS and participants from the general population found that while adults with AS do have friendships, their relationships were "less close, less empathetic, less supportive, and less

important to the individual" (Baron-Cohen & Wheelwright, 2003, p. 513). In comparison to the control adult participants, individuals with AS were less likely to engage and enjoy interpersonal interaction with other individuals for its own worth. Data for this study was collected through a self-report questionnaire entitled the Friendship Questionnaire (FQ). A positive correlation was found between empathic traits and friendship interest. Likewise, a negative correlation was also found between severity of autistic behaviors and friendship interest. Like other studies investigating the properties of empathy, the FQ focused heavily on the cognitive aspects of friendships rather than affective properties and provided little information as the nature and properties of real life relationships of individuals with AS.

<center>Social Development and College Life</center>

College transition can be a stressful period wrought with many environmental changes in living arrangements, peer relationships, and academic challenges. These changes can be extremely difficult for all students but especially harrowing for individuals with AS who prefer consistent structure, order, and familiar routines. Poor adjustment to the changes associated with the college environment can lead to drop out and overall dissatisfaction with a particular institution (Pascarella & Terenzini, 1980; Astin, 1985). Attachment to peers and to their university is associated with academic, social, and emotional/personal adjustment among emerging adults, specifically in the first year of college (Swenson, Nordstrom, & Hiester, 2008; Pittman & Richmond, 2008). Greater feelings of alienation are also associated with poor academic and emotional adjustment.

Although relationships with high school best friends are important for emotional and social adjustment during the first few weeks of college transition, later in the first semester, the college student must make new college friends in order to adjust socially to the new college environment. If students do not make new friends within this first year window, there is a greater chance for isolation and drop out. For individuals with AS who have significant difficulties with transition and with making new friends, the adjustment to college life may be even more challenging. Little is known about the role that peer relationships play in a student's overall academic and social adjustment for college students with AS.

<div align="center">College experiences and Social Difficulties</div>

Autobiographical Accounts

Longitudinal studies examining long term outcomes for adults with Asperger's Syndrome have concluded that relatively few individuals with the disorder complete a degree program as compared to graduation rates of nondisabled peers. However, colleges around the nation are beginning to admit more students with AS and provide additional supports that hopefully will lead to greater retention rates. Most information obtained about college attendance and supports needed during college life are from are from the following sources: (1) a small number of individuals who have been diagnosed with the disorder and attended college; (2) professionals who have provided educational support or clinical treatment to individuals with Asperger's Syndrome; or (3) parents who have had a child with ASD who has attended a university (Attwood, 2007, Palmer, 2005, Perner, 2006, Willey, 1999). However, studies focusing on the college experiences of

individuals with AS are few. One dissertation study examining the challenges faced in the college setting by five individuals with AS in college found that all experienced difficulties dealing with the social and sensory demands of college (Schlabach, 2008). Four out of the five participants primarily engaged in social activities with family members or friends from high school rather than new college friends. This study focused primarily on students' utilization of academic accommodations, relationship with Disability Service providers, and holistic college experiences. In depth investigation of students' college friendships was not the focus of this exploratory study.

Personal accounts of life experiences and challenges in dealing with the disorder are now available from high functioning adults living with the disorder (Willey, 1999; Robison, 2007, Prince-Hughes, 2002). Individuals with autism often identify themselves as belonging to a separate *culture* (Prince-Hughes, 2002). These authors with AS discuss their social experiences as being an outsider looking into a social world in which they are constantly trying to *fit it* while knowing that they were different but not having a name for their condition until adulthood. Several authors including Lianne Holliday Willey, Temple Grandin, Lars Perner, and Stephen Shore have graduated from college, have postgraduate degrees, and now work as faculty members or writers. These individuals describe in detail their many challenges in dealing with the social stressors of college and work environments.

In the introduction of a collection of essays from twelve college students with autism, Dawn Prince-Hughes (2002) explains:

Our internal needs and motivations are often at odds with the physical

environment of the university and many of its social and emotional demands. Behaviors that are "normal" to us (talking long and enthusiastically about our special areas of interest, disregarding personal appearance and sometimes hygiene, speaking plainly rather than censoring our thoughts) and our coping mechanism (such as small rituals, a need for continuous clarification, an attachment to comfort objects) make us stand out as odd and sometimes unwelcome members of the university community. As promising students with special needs, we find ourselves being pushed from the one place that can maximize our potential and give our lives meaning. (2004, xviii)

She adds, "many brilliant students find the university a formidable mixture of overwhelming sights and sounds, full of change and disruption, and dependent upon social matrixes that are utterly mystifying. They quit university, never to return" (2004, xx). Common themes throughout these autobiographies include "the confusion and frustration, fear and anxiety experienced in having to mix and fit in with their peers in school, college, and workplace, and their problems in coping with the demands of family life" (Howlin, 2007, p. 273). In discussing her experiences as a college student and later as a faculty member, Willey (1999) states:

"the experience at the university pointed out to me how little I understood about human behavior...I did realize, by then, that there were some rules to friendships, some parameters that made them possible and sustaining, but I was unclear as to what those rules and parameters were. To be perfectly honest, I remain confused" (p. 68).

She continues on the topic of friendship:

I was hit hard when I had to realize smarts were not enough to make it in this world. I was turned upside down when I had to admit I could not find anyone who saw things like I did. I was crippled when I found out it took more than I had to give to make new friends. Looking back, it is really no wonder I was never able to build any friendships in college. I was not very good at figuring people out. And so it seems, no one was very good at figuring me out either. Without friendships, my version of friendships, that is, I had very little support. Without peers to show me how to fit in and how to make the most of what I had, I could not stay connected. I foundered. (p. 60)

It may be friendships have lifelong value to individuals with AS even if they are not aware of that value during their college years. Willey (1999) reflects on the value of one special friend:

I think back too, on a boy I dated during my last year of college when I was no doubt moving beyond the roughest parts of my young adult AS. He was the only close college friend I had. The only person who made his way through to me, no doubt after a long walk with patience that set him on a dogged determination to find out who I was. This friend found a way to meet me in my world, without making any demands that I meet him in his. Ironically, I do not even think he knew what he had done. To him I was a friend he liked to do things with, someone to share life with for a while. He never batted an eye when he saw I lived with two dogs and five cats, instead of a bunch of girls. He never expressed

any concern over my weird habit of grilling people for too much information. He

always stood by me patiently when I freaked out from having had too much

sensory stimulation. He never questioned me or criticized me, he just let me be. If

only everyone could be that gracious – maybe then, we would not even need a

definition for Asperger's Syndrome. (1999, p. 62)

Although students with AS may not view college as an opportunity for building

social relationships, they are capable of reflecting upon the value of college friendships.

Susan, a 30 year old graduate student in linguistics, writes about her college

undergraduate experience (Prince-Hughes, 2000).

Going to college was much like going to another high school, except now I got to

spend more time studying what I liked and I faced fewer social demands. There

were no pep rallies, cliques, and bullies, and unlike most people, I did not think of

college as a place to make friends, go to parties, and so forth. It was just a place to

study. So in a large part, the change initially was small and for the better. It

would have been a lot different if I had gone away to college. (2002, p. 97)

She goes on to describe her relationships with friends, one male and one female.

With her male friend, Susan engaged in intellectual conversation about her topics of

research interest on the bus ride to college each day. With her female friend, she

describes learning countless social skills. Susan writes about the *value* of this friendship,

I also studied her intently in the nine years I knew her and extensively modified

my mode of self-expression in the process. Many of my expressions, from the

patterns of intonation in my voice and the way I smile, have existed only since my

early 20s and were copied directly from her. My current boyfriend sometimes tells me that despite my awkward-ness and shyness I seem to express myself naturally, but I know it comes only with great effort and sometimes strain. (2002, p. 98)

Many individuals with AS have described the process of learning social skills as learning a different culture or learning a different language (Jim, Prince-Hughes (Ed.), 2004; Willey, 1999, Grandin 2006). Dawn Prince-Hughes (2004), anthropologist and professor of archaeology, describes her life journey through autism as a "culture of one." She writes,

Many people, again lay and professional alike, believe that all people with autism are by definition incapable of communicating, that they do not experience emotions, and that they cannot care about other people or the world around them. My experience, both personally and with others like me, is that in many cases quite the opposite is true. A significant number of autistic people who care deeply about all matter of things, and are profoundly emotional about them, share these capabilities in the privacy of their journals, diaries, and poetry. They do not show them to the world, which is too intense and often too destructive or, worse, dismissive. (2004, p. 31)

She goes on to explain the nature of her social relationships:

People with Asperger's seem not to want to reach out, but it is not always a problem of desire, but one of comfort: they need to feel at ease in their bodies and at ease with people they might be interested in knowing, for instance. In the past I

have felt unable to reach out to people because I was physically uncomfortable"
(2004, p. 175).

Summary

Asperger's Syndrome was originally described by Austrian pediatrician Hans
Asperger in 1944. However, Dr. Asperger's works went largely unnoticed until 1981
when Lorna Wing further described a subset of individuals with impairments in
communication, social skills, and repetitive behaviors that were qualitatively different
from those described as *autism* by Leo Kanner. The term Asperger's Syndrome was later
added to the DSM-IV in 1994 to be recognized on the continuum of Pervasive
Developmental Disorders. Research on Asperger's Syndrome as a specific syndrome
apart from autism is limited but expanding as the general public increases its interest in
autism spectrum disorders.

Individuals with Asperger's Syndrome are believed to have cognitive abilities
which general fall in the average to above average range. However, 70-80% individuals
with Asperger's Syndrome demonstrate a very restricted lifestyle with few friends,
activities, and occupational engagement despite having normal to high cognitive ability
(Cedurland et. al., 2008). High dependency on others and isolated lifestyles are
significant areas of concern. Deficits in perspective taking, otherwise known as Theory of
Mind, and deficits in cognitive empathy are believed to contribute to these difficulties,
but do not fully encapsulate the affective aspects of interpersonal engagement.

However, qualitative studies and autobiographical reports indicate that individuals
with AS have a desire to "fit in" and develop reciprocal social relationships. In addition,

they experienced repeated social failures in childhood and adolescence that contributed to lifelong feelings of rejection, loneliness, and depression. These feelings were exacerbated by the stressors of transitioning from adolescence to adulthood and from high school to college. The engagement in positive peer relationships may serve to ease this transition and provide additional benefits in teaching social skills and social modeling for this unique population. For students with AS "whom intellectual activity and a place in the academy are indispensable lifeline that give them the connections they need while providing an outlet for their unique intelligence," the college experience can either be an extremely rewarding or a devastating encounter (Prince-Hughes, 2002, xvii).

Although the development of friendships for typically developing students is beneficial for personal, emotional, and academic adjustment, the nature and value of friendships in college for a population of students with AS was unknown. It was also unknown how individuals with AS develop friendships within the college setting. Interpersonal engagement, as described by the behavioral, cognitive, and affective processes of friendship, with AS has largely escaped researchers. Furthermore, an understanding of empathic processes in friendship development was also unknown for individuals with AS, especially within the context of the college environment, an important developmental period of change and transition. Due to the fact that the capacity to develop adult friendships within the college environment is largely under-investigated, this study investigated the nature and value of friendships within the context of interpersonal engagement, focusing on the perceptions and experiences of individuals with AS. This phenomenological study focused on the individual through a lens that

presumed competence rather than adopting a deficit model of disability as is often used in

clinical studies (Biklen, 2005). This lens was valuable in supporting participants with AS

in finding new ways to express themselves and to understand friendship processes within

the context of college.

Chapter Three

Methods

The Problem

Within the past decade an increasing number of individuals have been diagnosed with Asperger's Syndrome (AS) and/or autism spectrum disorders. Based on societal shifts in attitudes and educational opportunities for individuals with disabilities, individuals with average to above average cognitive abilities now have the opportunity to attend college. Disability service personnel report increasing numbers of individuals with AS attending college. Although individuals with AS may be academically successful, outcome studies have found that 80% of adults with AS often have difficulties in building social relationships and developing independent living skills. Psychological studies with adults with AS have found difficulties with perspective taking, or Theory of Mind difficulties, and with developing empathizing skills, key components of interpersonal engagement. However, research studies differ on how the construct of empathy is defined and measured. Empathy is believed to be a multidimensional construct involving both cognitive and affective aspects of emotion, yet some studies focus primarily on the cognitive aspects of empathizing skills while minimizing the affective aspects of empathy.

Studies measuring the multidimensional construct of empathy have shown different results depending on how the construct was measured on self report questionnaires. Some scholars contend that individuals with AS are not capable of empathizing; whereas others propose that individuals with AS show deficits in the

cognitive aspects of empathy but are capable of demonstrating appropriate aspects of affective empathy. Qualitative studies with academically successful individuals with AS have also found that participants are able to build reciprocal supportive relationships built on mutual trust, respect, caring, and a focus on independence and communication. Although these studies focused primarily on supportive relationships formed with close relatives and paid support staff, they provide a stark contradiction to the general picture of the individual with AS as being a cold, aloof individual who is unable to engage and connect emotionally with others. In fact, individuals with AS anecdotally report being able to develop and value their mutual social relationships.

College friendships for individuals with AS may serve the purpose of providing a model for appropriate social skills. These relationships may assist in building self-concept, reducing feelings of alienation, and assisting individuals in adjusting to college. Friendships may serve as a protective factor to developing feelings of loneliness and subsequent depression. Even though all of these benefits have been reported by scholars and parents of individuals with AS, no studies have investigated the properties of friendships within the college environment from the reports of individuals with AS. Very little research has investigated friendships within a population of college bound individuals with AS. This study was designed to shed light on the behavioral, cognitive, and affective processes involved in interpersonal engagement in order to understand how those relationships play a role in college adjustment. The processes of empathy, one of the major building blocks in developing relationships, were examined. Using qualitative methods, the study added to the understanding of how empathizing skills were involved

in the development of college friendships for individuals with AS.

Rationale for Qualitative Methods

Qualitative research is "an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem" (Creswell, 1988, p.15). In keeping with social constructivism, qualitative research is based upon the premise that individuals seek to develop subjective understanding about the world. Because participant's understanding about their experiences is contextual, meaningful, and varied, the goal of research is to understand the social and historical contexts of interpersonal interactions (Creswell, 1988). Research in the qualitative tradition focuses on the natural setting in the field as the primary source of data. Data is gathered as words or pictures for inductive analysis. Furthermore, the focus is on the participants' perspectives and patterns of meaning.

Qualitative studies differ from quantitative studies in that they focus on very few cases with many variables (Creswell, 1988). Quantitative studies focus on several cases with few variables. Qualitative research questions focus on answering how or what questions with the objective of better describing a particular topic; whereas quantitative studies begin with a why question for comparison between variables. The objective of a qualitative study is to shed light on a specific topic that has rarely been studied or to better understand the processes behind a specific phenomenon that needs to be explored. In the qualitative tradition, the researcher is the key instrument of data collection. In this way, the researcher's role is that of an active learner whose main objective is "tell the story from the participants' view rather than as an 'expert' who passes judgment on

participants" (Creswell, 1988, p. 18). The focus of the research is on collecting and analyzing data that will tell a story while simultaneously giving readers insight into a phenomenon.

A qualitative approach was compelling for this study due to the fact that I studied a topic that needs further exploration. The construct of friendships for college bound individuals with AS is a topic that was largely under investigated and widely misunderstood. Many variables are involved and theories are not available for adequately understanding the processes involved in social development. With the exception of a few qualitative studies, detailed research information on the topic is limited. This qualitative study was designed to understand the world through the lens of the individual with AS, rather than from the perspective of the researcher.

In keeping with the constructivist paradigm, the goal of the research was to address the processes that occur between individuals within a specific social, historical, and environmental context (Creswell, 2003). Strange & Banning (2001) contend:

> examining collective personal perspectives of an environment (from inside participants as well as from outside observers) is critical for understanding how people are likely to react to those environments. Thus, whether individuals are attracted to a particular environment or satisfied and stable within the environment, is a function of how they perceive, evaluate, and construct the environment. In effect, their perceptions are the reality of that construct for them. In that sense, these approaches espouse a phenomenological orientation to human environments that seeks what participants see in the environment as a basis for

understanding and predicting their behavior. (p. 86)

For special populations, social constructivism is a logical approach to evaluating the perceptions of individuals who may view the world differently than the general population based on differences in life experiences. As is documented by individuals with AS who have attended college, social perceptions and social experiences differ greatly than those of typical college peers. For these reasons, it was most appropriate to allow the participants' voices to speak for themselves without judgment or comparison to "normal" populations.

I believe that is important to attempt to view the world through the lens of the participants in order to understand how they construct meaning of their relationships. Whereas quantitative studies with this population has involved a "deficit-seeking framework" of inquiry that focuses on identifying the ways in which individuals are different from the general population, this qualitative inquiry was built on the premise that individuals with AS are competent individuals (Biklen, 2005). "Presuming competence" is a term used by Douglas Biklen (2005) to describe the notion that individuals with autism spectrum disorders wish to be viewed as intellectually competent individuals who are capable of making decisions regarding their own lives. However, when competence is presumed to be deficient, individuals are dehumanized and participation into larger society is denied.

Other qualitative researchers have found that individuals with high functioning autism wished to be considered competent individuals who are able to make decisions regarding their social lives. Presuming competence favors optimism over pessimism and

looks for ways to uncover or better understand the participant's perspective. Biklen (2005) concludes that "the observer's obligation is thus not to assume the meaning of something another person does but rather to presume there must be a rationale and then to try and discover it, always from the other person's perspective, listening carefully" (p. 282). By interacting and engaging with individuals through qualitative inquiry, I gained an understanding of the subjective friendship experiences of individuals with AS.

Conceptual Framework

In qualitative research, theory is used as a guide to explaining behavior, perceptions, and attitudes. Current psychological theories on adults with AS focus on how the individual's behavior deviates from accepted norms, but do not provide a cohesive model to explain the processes involved in friendship-making for this population. For a theoretical perspective, this research drew upon the fields of human development and psychology. Although the following theories have constructs that can be applied to the current study, full application to a population of individuals with AS is problematic because the theories are intended to be applied to typically developing individuals. Friendship patterns across clinical populations may be very diverse from those of the general population (Ueno & Adams, 2006). However, inclusion of these theories is helpful for providing guidance on central themes or aspects of friendship development and empathic response.

Adult Friendships

Adams, Blieszner, and Ueno (2006) provide a model of adult friendship called the Adams-Blieszner-Ueno Integrative Conceptual Framework for Friendship Research (see

Figure 1). The model is a revised version of the Blieszner and Adams Integrative Conceptual Framework originally developed in 1992. This revised model depicts friendship patterns as "dynamic and contextualized" (Ueno & Adams, 2006, 151). Further, the model illustrates individual characteristics as leading to the development of interactive motifs (cognitive, affective, and behavioral) which then influence friendship patterns. Adams, Blieszner, and Ueno (2006) describe friendship dyads as being situated within larger networks. Internal structures of friendships in terms of size, homogeneity, and network density, and hierarchy constrain interactive processes. Reciprocally, the processes of friendships also modify and sustain friendship structure (Ueno & Adams, 2006, p. 151). Friendships are also affected by "structural, cultural, temporal, and spatial dimensions" and in return friendships and individuals have a direct and indirect effect on their contexts (p. 151). This model also takes into account how dyadic friendships fit into a larger social network.

This model takes into consideration how the characteristics of the individual play an interactive role in the development of dyadic relationships. This consideration is important for understanding how interpersonal skills and thinking qualities for the individual with AS may affect the cognitive, affective, and behavioral processes used in friendship development. The Adams-Blieszner-Ueno Integrative Conceptual Framework for Friendship Research is comprehensive in its examination of structure, processes, and networks and thus would require a large scale study that is not practical for this study or this population. Thus, the scope of study for this research project must be narrowed. This study will concentrate on using the portion of the model that focuses on interactive

processes within friendship dyads only. Due to the fact that individuals with AS will likely develop close interpersonal relationships with small numbers of individuals labeled as "friends," it will be most meaningful to investigate friendship dyads rather than larger friendship networks.

Figure 1. Adams-Blieszner-Ueno Integrative Conceptual Framework for Friendship Research
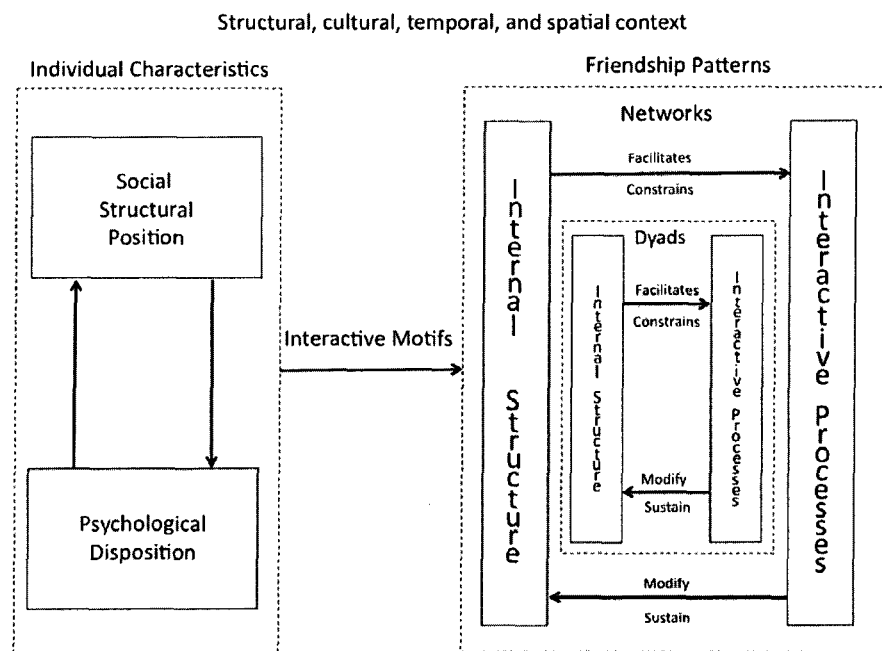
source: Ueno & Adams (2006), p. 152.

Friendship Processes

Friendship processes reflect the interactive aspects of friendship patterns within dyads and within networks (Blieszner & Adams, 1992). They include the behavioral,

cognitive and affective processes. *Behavioral processes* refer to the overt action processes of the relationship. "They include communication, such as disclosure of one's thoughts, feelings and actions. Other behavioral processes are displays of affections, social support or resource exchange, cooperation, accommodation to a friend's desires, joint activities, betrayal, manipulation, competition and the like" (p. 13).

Cognitive processes are those that reflect the internal thinking processes of each partner about himself and the relationship. These processes involve performance evaluations, stability of relationships, friendship roles, interpretation of events and behavior, and interpretation of needs. Cognitive processes may also involve evaluations of how much the friend is similar to oneself and the ability to understand the feelings of one's friend. Furthermore, cognitive processes also involve "psychological attributes such as values, needs, and personality traits [that are] distinct from the structural feature of homogeneity, which refers to similarity of social positions such as gender and age" (Blieszner & Adams, 2006, p. 13).

Affective processes encompass emotional reactions to friends and the construct of friendship. Affective processes may involve the following positive and negative emotions: empathy, trust, loyalty, satisfaction, commitment, indifference, anger, hostility, and jealousy.

Because each friendship is unique, these processes vary widely within and between friendships in strength and intensity. Researchers have found that individuals may vary friendship processes to meet the needs of the individual friend and to meet the needs of the relationship (Blieszner & Adams, 1992). As a result, all three types of

processes interact and influence one another. Likewise, each individual process can either strengthen or weaken the friendship. For example, behavioral processes in terms of how often friends engage in preferred activities together will likely affect relationship satisfaction, an affective process (Ueno & Adams, 2006). Individuals may also vary widely in how they employ these friendship processes within each dyadic relationship.

Interactive Processes

The Adams-Blieszner-Ueno Integrative Conceptual Framework for Friendship Research describes how the interactive processes of friendship dyads fit within the context of dyads, networks, and friendship patterns. Understanding the specific behavioral, cognitive, and affective processes involved in two-person interaction requires a narrower lens. David Goleman (1995) initially proposed a model of Emotional Intelligence (EI) that focuses on the competencies of individuals that influence relationships. The competencies he specified can be grouped into two clusters, self-awareness and self-management that describe capacities *within* individuals (Goleman, 2006). *Self-awareness* involves skills such as knowing one's emotions, recognizing feelings, and self-understanding (Goleman, 1995). *Self-management* involves motivating oneself, managing emotions, empathy, and handling relationships. EI focuses on the "ability to manage our emotions and our inner potential for positive relationships" (Goleman, 2006, p. 5).

Goleman later developed a theory of social intelligence (SI) to describe the social competencies that occur when two people interact and connect. These competencies can be viewed as the underlying skills that contribute to self-awareness and self management

skills. According to Goleman, his theory of social intelligence takes a broader stance to focus on the interactions that "transpire as we connect" rather than the "capacities that an individual has within" as demonstrated with EI (Goleman, 2006, p. 5). In this way, SI is seen as a two-person psychology; whereas, EI is described as a one-person psychology. Goleman explains that social intelligence (SI) focuses on the emergence of processes that occur as individuals interact. SI is built on the premise that individuals receive social and emotional feedback from others during interactions which *reciprocally influence* our own responses and social interactions. This reciprocal interaction is ongoing and continual as individuals continually monitor our social interactions and responses to meet the needs of the individual, the partner, the situation, or the relationship.

Social Intelligence (SI) includes competencies of social awareness and social facility. These competencies involve understanding the social world and recognizing and interpreting interactions external to the individual. *Social awareness* "refers to a spectrum that runs from instantly sensing another's inner state, to understanding her feelings and thoughts, to 'getting' complicated social situations" (Goleman, 2006, p. 84). Social awareness includes primal empathy, attunement, empathic accuracy, and social cognition. Primal empathy encompasses feeling and sensing nonverbal signals and emotions. *It may include sensing other's feelings on a subconscious level. Attunement is* the process of tuning in to others or listening with full receptivity. Empathic accuracy means understanding another person's thoughts, feelings, and intentions. Social cognition refers to understanding how the social world works or understanding social rules.

Social facility is the second part of social intelligence. It is built on the foundation

of social awareness with the goal of allowing appropriate interactions. Social facility includes synchrony, self-presentation, influence, and concern. Synchrony involves appropriate nonverbal interaction including delivery of facial expressions, eye contact, and body movements. Self presentation is presenting oneself appropriately including controlling emotions. Influence involves "shaping the outcome of social interactions" and knowing what emotions to display in certain settings in order to attain a desired effect (Goleman, 2006, p. 84). *Concern* involves a person's ability to care for others and responsiveness to other's needs.

Goleman (2006) contends that people register emotion on two different planes, the *low road* and the *high road*. The low road involves neuropsychological functions that are below our awareness, including information that individuals register automatically such as facial expressions of others. The high road describes more conscious thought that is methodical in nature.

High road thinking allows individuals control over behavior as opposed to the low road which is more emotional and automatic in nature. The low road is believed to be saturated with emotion; whereas the high road is extremely rational. The high road involves thinking about feelings; whereas the low road involves processing and understanding past, current, and future feelings, behaviors, and thoughts. Furthermore, "the low road lets us immediately feel with someone else; the high road can think about what we feel" (Goleman, 2006, p. 16).

The dichotomy between high and low roads can also be depicted as the *emotional mind* and the *rational mind* (Goleman, 1995). The emotional mind is believed to be more

impulsive, quick, powerful, and sometimes illogical. The rational mind is described as "more prominent in awareness, thoughtful, able to ponder and reflect" (Goleman, 1995, p. 8). It takes the rational mind longer to process and react than the emotional mind; therefore, the progression of awareness works in progression from feelings first to thought second. Figure 2 is my representation of how these processes work together to manage our emotional reactions.

Figure 2. Emotional versus Rational Mind

Two Person Engagement occurs along a continuum of Subconscious and Conscious Thoughts.

Automatic-Affective   Controlled-Cognitive

Threshold of Awareness

Emotional Mind   Rational Mind
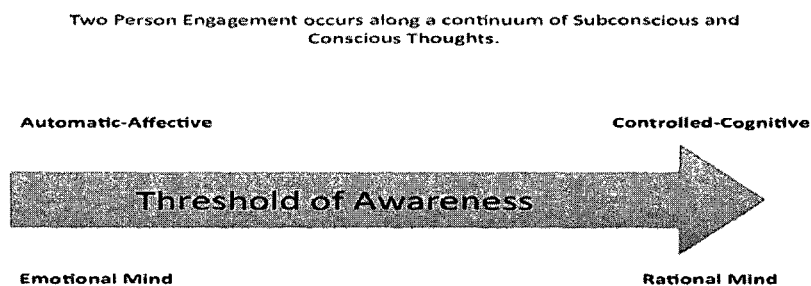
Individuals who are successful in social situations are adept in appropriate empathic responses, both in the form of appropriate verbal behavior and appropriate nonverbal behavior. Furthermore, individuals who successfully navigate the social world are skilled in reading social situations, understanding the feelings of others, monitoring their own social responses, and managing their own thoughts and feelings across various social settings. My depiction of this interaction is shown in Figure 3.

Individuals with Asperger's Syndrome are believed to have difficulties with social

awareness, social facility, self-awareness, and self management. Researchers often lump

these characteristics together under the term empathy, concluding that individuals with

Asperger's lack perspective taking qualities, the fundamental ability of empathic

accuracy, and therefore, they must be unable to feel empathy (Rogers, Dziobek,

Hassenstab, Wolf, & Convit, 2007; Goleman, 2006).

Figure 3. Two Person Engagement

Two-Person Engagement involves Intertwined
Affective and Cognitive Processes that Produce
Empathetic Responses and Behaviors.
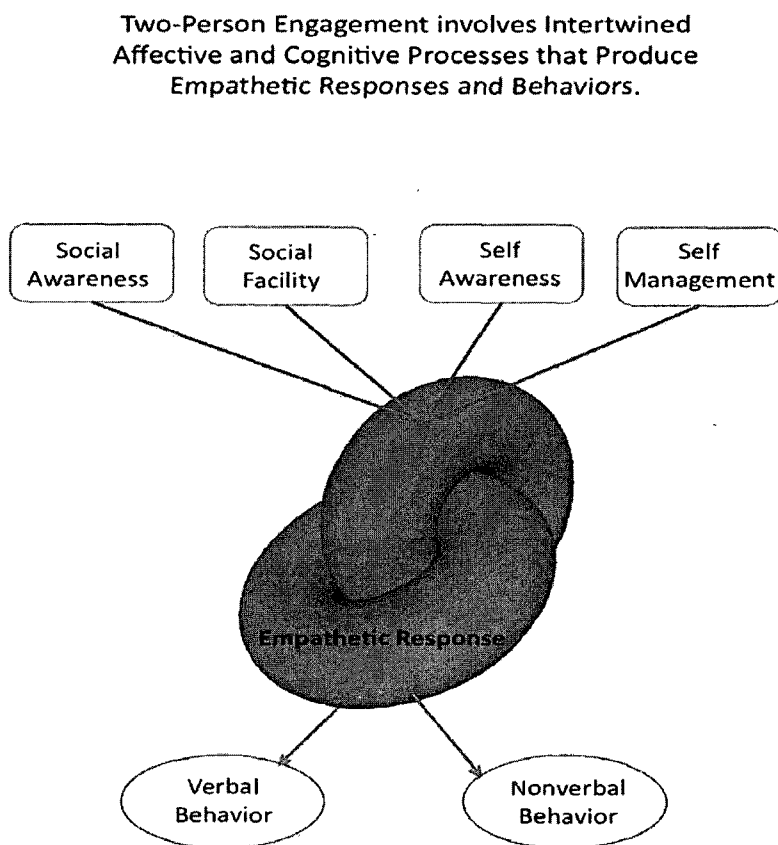
However, previous research has demonstrated that empathy is a multidimensional

construct that is not easily identified and captured through one dimensional Likert type

question focusing on hypothetical situations. I believe that individual characteristics and

skill levels in each of these areas influence the success of the interaction and the

individual's ability to adapt his behavior to new settings and individuals. Figure 4

displays my interpretation of how these processes interact for individuals with AS.

Figure 4. Skills Involved in Interpersonal Engagement for Individuals with AS

Skills Involved in Interpersonal Engagement
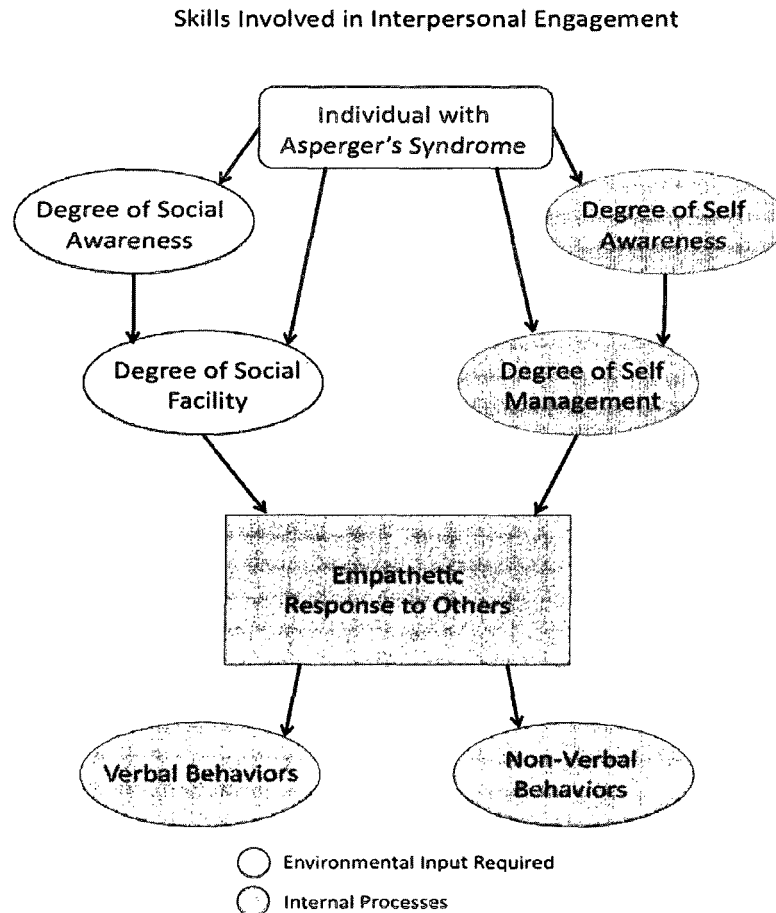
As with typically developing individuals, social awareness and social facility involve processes which involve managing and understanding external events and self-awareness and self-management involve recognizing and controlling internal processes. The degree to which individual characteristics influence external processes is largely unknown for individuals with AS. Furthermore, for individuals with autism spectrum disorders understanding and feeling empathy is likely a developmental process that is highly influenced by environmental stimuli such as setting and other individuals (Grandin, 2006; Prince-Hughes, 2004). Various environmental stimuli, including positive and negative social experiences, are likely to have profound influences over an individual with AS's capacity to exhibit empathic responses. Likewise, individual characteristics, including previously learned behaviors, natural talents, and acquired skills, are likely to have profound influences over an individual with AS's capacity to exhibit empathic responses.

For this study, the concepts of social awareness, social facility, self-awareness, and self management were used to shed light on the processes that are involved in friendship development and to assist with data analysis. These concepts provided working definitions of processes that I employed for labeling the thoughts, feelings, behaviors, processes, interpretations, and emotions of participants, to the degree that they apply. Based on my conceptual model, my interview questions focused on how the individual with AS interpreted the relationship, how they interpreted the emotions and behavior of the friend, and how they felt throughout the relationship. Based on the reflective nature of the study, I did not capture immediate emotional responses because

many of those feelings are associated with the emotional mind and not fully available to the participant's awareness. However, I was interested in aspects related to the rational mind, including the individual's reflections of how they first felt when meeting their friend and how that relationship and associated feelings developed over time. In keeping with phenomenological tradition, I was open to the possibility that the concepts of social awareness, social facility, self-awareness, and self-management did not fully describe the actions, thoughts, and feelings of with AS. Therefore, in addition to viewing the data only through the lens of Goleman's model, I also used a holistic approach to understand the value of friendship for participants in this study. These two approaches are delineated in Chapters 5 and 6.

<div align="center">Research Questions</div>

The overarching questions that guided this study are: What are the behavioral, cognitive, and affective processes involved in friendship development with individuals with AS? and What is the value of peer relationships to individuals with AS who have attended or are attending college? In order to answer these overarching questions, several additional questions were used to guide the study.

1. How did individuals with AS define the term friendship?

    a. What behavioral processes were involved in friendships?

    b. What cognitive processes were involved in friendships?

    c. What affective processes were involved in friendships?

2. How were empathic responses influenced by an individual's degree of social awareness, social facility, self-awareness and self-management?

3.   How did peer relationships influence a student's decision-making process when considering to remain enrolled in a particular institution?

4.   How did peer relationships influence social understanding and social involvement in the college setting?

5.   What social experiences did individuals with AS find challenging and meaningful in college?

6.   What social supports and skills did students feel they needed be successful in college?

Participants

Purposeful sampling is used in qualitative research to identify individuals who will be the most helpful in allowing the researcher to understand the problem and the research question (Creswell, 2003). This strategy allows for obtaining information rich data for in depth study (Patton, 2002).

Criterion sampling involves selecting participants based on their ability to meet certain conditions (Creswell, 1998). Participants in this study were included based on five major criteria. The first criterion is a self-reported diagnosis of Asperger's Syndrome by a psychiatrist, psychologist, or other health care professional. A diagnosis of autism spectrum disorder or high functioning autism may also meet this criterion if the person was diagnosed with the disorder during the developmental period before the diagnosis of AS was added to the DSM-IV TR. The second criterion was either current or previous enrollment in a postsecondary institution for at least two consecutive semesters. The third criterion was the development or maintenance of a friendship during the time in

which the individual was enrolled in college. The relationship may not have been developed within the college setting specifically, but it must be partially maintained during the time that the person is enrolled in college. This friendship must be sustained for a minimum of 6 months. Studies of typically developing college students have a length of acquaintance from 6-14 months (Blieszner & Adams, 1992). Although the nature of friendship phases for students with AS is unknown, the minimum period of six months may allow the friendship the opportunity to grow from initial formation to maintenance. The fourth criterion for inclusion in this study must be that the individual was willing to participate in a face-to-face interview. The fifth criterion for inclusion in this study is that the individual attended college within the past 10 years. There were two exceptions to this criterion. Ananda, age 48, graduated with her masters degree 18 years ago. She was included in this study due to the fact that she was the only woman in the study with a graduate study and therefore, her college experiences provided a diverse perspective. Daishi, age 19, was the only participant who did not meet the two semester requirement due to the fact that he had recently disenrolled from community college in the semester prior to data collection. At the time of the interview, it was unknown to the researcher that he did not meet the minimum two semester requirement. However, it was decided to include his interview due to the fact that during the time of data collection he was the only student who was not currently enrolled or graduated from college, thereby providing an additional perspective on retention issues related to individuals with AS. Daishi was also the only participant who identified a friendship with an individual outside of the institution.

Blieszner & Adams (1992) stressed that many complex variables and processes are involved in friendship processes and structure. These processes are complicated by individual characteristics and contextual variables that may be layered and extremely convoluted with special populations. For these reasons, I included participants who had a variety of college, living, and friendship experiences. These experiences included: individuals who resided away from home on a college campus, individuals who lived at home during college, individuals who attended a four year institution, individuals who attended a community college, and one individual who attended a technical school. It was not a requirement for participants to be currently enrolled in college or to have graduated from college as the primary intention of the study is to identify individuals who have had a college experience. As college friendships are often transient, it was not a requirement for participants to be currently involved in the same college friendship that they described in the interview.

Participants in the study were located primarily through snowball or chain sampling. This method of sampling consisted of locating other individuals who knew and recommended potential participants with Asperger's Syndrome. Patton described snowball sampling as "a way to identify cases of interest from sampling people who know people who know people who know what cases are information rich, that is, good examples for study, good interview participants" (2002, p. 243). For phenomenological research, Creswell (1998) indicates that information, typically in the form of in depth interviews, can be conducted with up to 10 individuals. With in-depth interviews lasting from one to two hours in length, a reasonable size of participants is 10. For the purposes

of this study, I initially expected to include a minimum of 5 individuals and a maximum

of 10 individuals. However, I was able to locate eleven participants total. I decided to

include the additional participant because I felt that her college experience was unique in

that she is a female participant who has attended graduate school.

Participants for this study were solicited in four ways. First, I contacted

participants through support groups for adults with Asperger's Syndrome. For the past 28

months, I have been attending a support group for adults with AS. The group is self run

by individuals with a diagnosis of AS who wish to meet to discuss topics related to living

with AS and as an outlet for social support and to encourage friendship building. As a

general rule of thumb, professionals and family members are not generally invited to the

meetings. I attended the meetings with the intention of refining my research questions by

spending time in the field. I also wanted to build rapport with individuals in the group

prior to interviewing with the purpose of increasing comfort levels and easing anxiety for

individuals who wanted to participate in this study. Prior to the research interviews, I

interacted with the participants through the group process, but did not discuss the

specifics of my study or solicit information related to the research topic.

After the study was approved by the College of William & Mary's Institutional

Review Board, I announced at monthly support group meetings the focus of my study

and the criteria for participation. Information on how to contact the researcher by phone

or email if the participant is willing to participate was verbally announced at the meeting.

In my announcement, I stated that participants were under no obligation to participate in

this study as stated on the informed consent form. I stressed that a participant's decision

to take part in this study will have no negative effects on my relationship with them or with the support group. This method was successful for locating 6 individuals.

Attempts to identify individuals who were currently enrolled in college were made by contacting disability service providers at five institutions of higher learning in the state of Virginia. Institutions contacted were a community college, two small public institutions, and two large public institutions. The purpose of including a variety of institutions was to capture participants who may have had diverse experiences in living away from home that had an impact on their friendship development. Disability services were contacted through email and asked to assist with the study by providing students with my contact information and information about the study. The packets contained information regarding the purpose and procedures, the informed consent form, and my contact information. The consent form explained that student participation was not required nor affect the relationship the student has with their disability service provider or their institution. Due to a lack of response from Disability service providers within traveling distance, this method was successful for locating one participant.

An additional method of contacting participants was through contacting individuals with AS whom the researcher knows through personal and professional contacts. Through my work as a School Psychologist, I have contact with students, educators, and parents who have been diagnosed with AS, have students with a diagnosis of AS, or have relatives with AS. I asked the individuals with whom I work to talk to their relation or student and provide the person with my contact information along with the packet of information containing the study purpose and procedures and the informed

consent form. I explained to the participant and family member that participation was voluntary and did not affect the relationship I currently have with the contact person. Furthermore, I explained that my involvement with the participants in this study was separate from my duties as a School Psychologist and not affiliated with my school division. This method was effective for locating four participants.

Data Collection

Data was collected through in depth face-to-face interviews, written responses, artifacts, and an on-line blog. For this phenomenological study, it was important to collect data from multiple sources in order to develop an in depth understanding of the phenomenon. In keeping with qualitative tradition, data collection was both interactive and humanistic while addressing the comfort level of the individual (Creswell, 1998).

Interviews

One-on-one interviews were conducted with each participant in order to give him or her the opportunity to be heard individually and privately. One interview with each participant was conducted. Interviews ranged from 17-58 minutes, within an average of 40 minutes per interview. A semi-structured open-ended interview format was used in order to gather of information about the phenomenon in a way that gave the participants flexibility to answer questions with a variety of responses that applied to their own personal experiences. This method allowed me to have some level of structure and control over the interview process. The interviews were taped for later data analysis. Interviews took place in a mutually agreed upon public setting with consideration for privacy and sensory needs. Interviews were conducted in private rooms in public libraries

and college buildings.

The intention of the semi-structured interview was to guide the participants' discussion. The interview began with broad based questions that gradually moved toward more specific questioning. The interview began with open ended statements or questions such as, "Tell me about a friendship that was important to you." Follow up questions were in the form of asking for specific details about the behavioral, cognitive, and affective process involved in specific relationships. For example, in reference to an affective process in a specific friendship, a follow up question might be "Would you mind telling more about you felt when your friends invited you to the ball game? "

Clarification through the form of statements ("Tell me more about that," or "So what you are saying is that…") and follow up questions ("Could you explain more about your activities with Joseph?") was used to better understand important thought. These questions supported the constructivist paradigm by allowing the participants' voices to be heard with clarity and depth. Appendix A includes a list of interview questions. These questions focused on behavioral, affective, and cognitive processes. Questions related to affective processes interweave cognitive and behavioral processes and the processes of social awareness, social facility, self-awareness, and self-management as depicted in my conceptual framework. These processes were interwoven to a degree that it was impossible to separate the underlying cognitive, affective, and behavioral processes as also depicted through my conceptual framework.

Prior to the interview, participants were verbally asked if they wanted to have a written copy of the interview questions either through paper format or through email.

Providing them with questions gave participants an opportunity to think about their responses prior to arrival and help to reduce the anxiety and the demands of face-to-face processing of information. Few participants wished to have a copy of the interview questions prior to the interview.

Upon arrival at the interview site, participants were asked to sign a written consent form for the interview. This consent form was previously provided through information packets via email explaining the nature of the study. I verbally explained the purpose of the study, the amount of time the interview will take, and the way the results from the interview will used (Creswell, 1998). Information about ethical safeguards, as described in the next section, including maintaining confidentiality, voluntary participation, member checking, and opportunities for withdrawal without penalty were verbally described to the participants. Participants were asked if they have any questions prior to interviewing.

In order to be respectful and cognizant of the difficulties that some individuals have with the demands of lengthy social encounters and sensitivity to sensory stimuli, attempts were made to make participants feel comfortable by controlling environmental elements in the room (lighting, temperature) as well as allowing for movement and breaks if needed. I checked for comfort (e.g., "Does that noise on the roof bother you?" and "Are you getting tired of talking?") and monitored nonverbal gestures for signs of fatigue. Opportunities for movement were also acknowledged and encouraged when I noticed that participants were becoming fatigued. Opportunities for rescheduling due to fatigue was an option but not necessary for any participants.

Throughout the interview, I observed and recorded participant's verbal and nonverbal gestures. I recorded these notes in a reflexive journal entry immediately following the interview. Behaviors noted included body posture, eye contact, voice tone, rate of speech, level of attentiveness, voice intonation, affect, intensity and frequency of movement, and facial expressions. Careful attention was given to changes in verbal or nonverbal gestures throughout the interview.

Member checking refers to the process of sharing information with participants to assure that I presented their ideas accurately (Glesne, 2006). Member checking was used to check for understanding of participant's statements in individual interviews. Member checking was be used to as a method of verifying if my understanding of the participant's message matched his or her intent. Member checking was also used to obtain participant's feedback on the statement of meaning via email. Members were emailed a copy of the statement of meaning of friendship and corresponding diagram found in Chapter 6. Five out of 11 participants responded positively via email that the statement was correct with no changes. One participant, Max Tarkian stated, "I think that the message looks great! I couldn't have said it better myself!" One participant, The Turk, agreed with most portions of the statement but also responded with his changes to the model and explanations for further development. His changes are also explained in detail in Chapter 6.

Written Responses

A second method of collecting data was in the form of written responses to open-ended interview questions (see Appendix B). Because of the stressors associated with

face-to-face interactions, the participants were given a second set of questions for written

response at the end of the first interview with a written set of directions and a self-

addressed, stamped envelope for them to send the responses back to me. My email

address was included on the written directions so that written responses could be mailed

or emailed to me. The inclusion of this method of inquiry gave participants the

opportunity to respond to questions at a leisurely pace and to compare verbal and written

responses for differences in length and depth of response. Written responses were

submitted following the interviews and received through email. Three participants, RJ,

David, and Olivia, did not respond to the written responses. Several emails were sent to

the participants encouraging a response; however, each participant indicated that personal

circumstances such as cross country moves and job demands interfered with having the

time to complete these portions.

<p style="text-align:center">Artifacts</p>

Phenomenological research also relies on the inclusion of artifacts that represent

the lived experience of an individual (Creswell, 2003). Artifacts can provide historical,

demographic, and personal information that may not otherwise be provided (Glesne,

2006). The inclusion of documents such as diaries, notes, letters, and photographs are

useful in raising questions for interviews and for providing thick description.

For the purposes of this study, the inclusion of an artifact was useful for gaining a

better understanding of what aspects of a friendship have meaning for the individual.

Participants were asked to bring any item that represents or depicts a friendship they had

during their college experience to the interview. This request was explained on the

consent form. Examples of these items varied widely but included photographs, jewelry, notes, and items of symbolic value. Participants were asked to describe the artifact, describe how the artifact represents the friendship, and describe what feelings they have when discussing the artifact.

<div align="center">Blogs</div>

With the invention of the World Wide Web, individuals with AS have found opportunities to share ideas, social network, and to gain social support from other individuals with AS. One avenue for sharing ideas, personal thoughts, commentaries, autobiographical information, and responses to other's questions is through websites called blogs. A blog is a website that contains an online personal journal with reflections, hyperlinks, and often hyperlinks provided by the writer (Merriam-Webster, 2009). Blogs also display the posting of one or more persons in chronological order.

I initiated a blog for participants of the study to use as a method of gaining in depth, detail rich reflections on the topic of friendship. Blogging allowed participants to access one another's comments in a forum that allows for deeper reflection than would be allowed through face-to-face contact such as a focus group. Furthermore, the initiation of a blog allowed me an opportunity to pose questions to the group and follow up with participants on topics that need further investigation or clarification as well as provide an additional data source for triangulation of data. Appendix C is the questions used on the blog.

After the face-to-face interviews were completed, I asked participants to log on once a week and provide at least one comment to either a topic or question I posted *or* to

post a response to another participant's comment. The blog was set up through the William and Mary blog website. The blog was restricted to prevent access by individuals outside of the study and each participant was provided an individual password. Participants posted responses to the website under their chosen pseudonyms to protect anonymity. Participants were emailed weekly to alert them of recent postings and encourage participation. Six individuals completed the blog questions. The other four individuals were sent emails gently reminding them to complete the blog. The blog was initially open for eight weeks, but due to the fact that several participants needed extra time the blog was extended by three weeks. Three of the individuals that did not respond to the blog also indicated that they had interfering life circumstances and loss of internet connection.

<div align="center">Data Analysis</div>

This phenomenological research focused on searching for meaning in participant's lives through an open-ended approach (Rossman & Rallis, 2003). For interview data, written responses, and blogs, broad categories were identified with subthemes that illustrated the meaning of the experience for participants. An effort was made to bracket the researcher's description of the experience of the phenomenon to reduce bias.

My first step outlined my previous experience of the phenomenon through a Researcher as Instrument Statement (Creswell, 1998). I included topics such as my experiences will children with AS, my opinion on friendships for individuals with AS, my college friendships, my views on empathy, and my expectations for findings.

The application of Creswell's (2007) model for phenomenological inquiry was also used to analyze the interviews, writing responses, and blogs from a holistic standpoint as depicted in Chapter 6. These steps are outlined in Figure 1.

Figure 1

Data Analysis Steps

Step 1.	Read through data sources for overall meaning
Step 2.	Identify important statements of meaning for each participant.
Step 3.	Categorize statements of meaning based on whether the statement was a thought, feeling, or behavior. (Example: "I felt like I fit in with her" was coded as a feeling.)
Step 4.	Label/code each thought, feeling, and behavior into categories. (Example: "I felt like I fit in with her" was coded as "fitting in.")
Step 5.	Codes were recorded and compared across participants for similarities.
Step 6.	Similar codes were grouped into themes. "Fitting in" became part of the theme of acceptance.
Step 7.	An overall statement of meaning was generated.
Step 8.	A statement of meaning was sent to participants for member checking

The first portion of the analysis was to read the transcripts, written responses, and blogs in their entirety and acquire an overall feeling for them (Creswell, 1998). The main objective of this step was to openly read the participant's responses "without the research focus in mind in order to grasp the participant's expression and meaning in the broadest context" (Wertz, 2005, p. 172). The third step was to find passages or statements on how the individuals experience the behavioral, cognitive, and affective processes involved in

friendships. This step involved reviewing the transcripts and pulling out passages that appear interesting or important for understanding each process (Rossman & Rallis, 2003). Statements that were redundant are eliminated. Statements were then analyzed for *meaning* and assigned codes. Coding was the process of organizing information, breaking it into chunks, and labeling those bits of information. Codes were organized and clustered into a small number of themes or categories. The themes were referred back to the original descriptions to check for inconsistencies or the emergence of additional meanings. Commonalities and differences across individuals were compared and contrasted for emergent themes. These themes were shaped into a general description of the phenomenon that describes the meaning or essence of college friendships for individuals with AS.

Using Goleman's model of Social Intelligence

For this portion of data analysis, I used my conceptual framework of two-person engagement to aid in the labeling and identification of information (Goleman, 2006). I used Goleman's model of Social Intelligence to identify the eight characteristics of Social Awareness and Social Facility through participant's accounts of an actual lived experience of friendship. I gathered evidence of each of eight constructs by reading through each interview and checking whether the participant demonstrated words, thoughts, or actions that matched the definition each construct. If a participant discussed a thought, feeling, or behavior towards a friend, I labeled the process as one of the eight constructs of social awareness or social facility. I placed these responses in table format that charted whether the participant indicated that the process was executed adequately or

if the participant indicated difficulties with that process. I also charted whether or not the participant mentioned the process in his or her definition of friendship. I then charted whether or not these processes occurred from friends towards participants and others. For guidance as I was reading through interviews, I used a question format that helped me evaluate each construct. For example, for primal empathy I asked myself, "Did the participant discuss his or her ability to read the nonverbal signals of others? The examination of these processes is included in Chapter 5.

Artifacts

Artifacts were analyzed first by physical characteristics (description, shape, color, and number) and recorded. Participants were asked to provide a description of the object and what value the object has to them within the context of friendship. Participants were also asked to describe what the object symbolizes to them. These responses were recorded and then labeled in terms of what behavioral, cognitive, and affective processes were depicted as well as those that were absent (Rossman & Rallis, 2003).

Data analysis of the artifacts consisted of combined comparing and contrasting codes and combining them into themes. Commonalities and differences across individuals were compared and contrasted for emergent themes. Themes identified in interviews, written responses, and blogs were compared to themes identified from artifacts for similarities and differences. These themes were shaped into a general description of the phenomenon that relates to the general essence of the college friendship.

Validity

Trustworthiness

Trustworthiness involves conforming to standards of acceptable practice and meeting standards of ethical conduct (Rossman & Rallis, 2003). This study attempted to understand the lived experiences of individuals by obtaining multiple data sources (triangulation) that provided a variety of in depth perspectives. Five dimensions of trustworthiness were considered in this study: transferability, credibility, dependability, confirmability, and fairness.

Transferability. Transferability refers to the degree to which the results of qualitative research could be generalized to other settings. To enhance transferability, purposive sampling was used to identify participants who have met clearly defined criteria. Thick description was also be used to describe the context, relationships, and researcher's perceptions. Background information on each participant was provided while maintaining confidentiality. Reflexive journaling was used to document the decision making process of determining codes and themes as well as observations and perceptions of the interview process.

Credibility. Credibility refers to the process of presenting the participants' truths accurately. It also refers to how well the findings of the study match the participants' perceptions. Credibility was achieved by including multiple sources of data and multiple methods of collecting data (triangulation) over time (Rossman & Rallis, 2003). These methods included interviews, artifacts, and written responses. Within the constructivist paradigm, it was important to minimize researcher bias. A reflexive journal was used to

record the decisions and reflections on the data collection process. By highlighting and addressing personal biases prior to data collection, neutrality was maintained (Patton, 2002). The reflexive journal helped ensure that the voices of the participants are their own, not the thoughts and ideas of this researcher. Member checking during the interviews and at the end of the study was implemented. Member checks was provided in the form as a summary of the general findings at the end of data analysis.

Dependability. Dependability occurs when a study can be replicated with similar results or whether or not a study's results might match those of a similar study. It occurs when a researcher gathers evidence and carefully documents a phenomenon. While the results of this study are highly dependent on contextual variables, dependability was addressed through a reflexive journal that could be reviewed for an audit trail. The reflexive journal included decision making process when moving from raw data to coding to theme development.

Confirmability. Confirmability refers to whether or not the interpretation of data can be traced to the focus of inquiry rather than the researcher's beliefs. In order to ensure that participants are not responding to leading or evaluative questions, careful choice of questions and monitoring of researcher and participants verbal and nonverbal behavior was important. This standard of trustworthiness was a way to minimize the influence of the researcher's judgment. Confirmability was addressed using a reflexive journal and a researcher as an instrument statement.

<p style="text-align:center">*Authenticity*</p>

Authenticity refers to the possibility of this research enacting social change.

Authenticity of fairness occurs when the researcher makes an effort to be conscientious when describing and recording the perspectives, interests, and realities of participants in the study. Member checking and debriefing are methods of addressing authenticity of fairness. Attempts to build an adequate rapport with participants were attempted prior to questioning so that participants were comfortable with the researcher. Being aware of verbal and nonverbal cues were also indicators that a participant was uncomfortable with questions and provided considerations for ensuring authenticity with this particular population.

It is my hope that individuals who participated in this study grew in their understanding of themselves (ontological authenticity) and in their understanding of others' perspectives (educative authenticity). It is also my hope that their decisions and actions were facilitated by participation in the study (catalytic authenticity) and that they are empowered to act based on the results of the study (tactical authenticity). However, authenticity cannot be guaranteed. Methods for increasing authenticity were prolonged engagement, member checking, and distribution of study results. Feedback from several participants indicated that the study assisted them in understanding social situations and how they feel and respond to them. One participant's participation in this study has prompted an interest in publishing a collection of memoirs of his and others life experiences as individuals with AS. A few other participants also expressed appreciation for the opportunity to participate in this study as they feel it furthers the public's overall awareness of the lifelong struggles associated with AS. Many have maintained contact with me to make me aware of their life struggles and success as it relates to their life

journeys. One participant, Rudy, was particularly thankful for the opportunity to participate in this study as he felt that it helped him with self-reflection. He states:

> Thank you for again for allowing me to share my personal experiences. Hopefully, [my reflections of my college experience] will have shed more light on my experiences of growing up with this disorder. I hope my experiences, education and understandings can serve as a positive role model for the students you work with. That you can share my story with the parents so they have hope for their child. That college is well within their grasp. The military and other successful jobs are possible with the right support network and understanding of their differences. If they learn and apply their differences they have unlimited potential.

Rudy was diagnosed with AS approximately one year prior to data collection and is continuing to develop his knowledge regarding his own strengths and weaknesses. Following the advice of his therapist, Rudy solicited feedback on my impressions of his body language and facial expressions. Rudy's growing awareness of how his verbal and nonverbal behaviors impact others as well as the emotional adjustment that arises from knowing that he has spent a lifetime of "not knowing why he is different from everybody else" are topics that will be discussed throughout the following chapters.

Another participant has offered suggestions for further research inquiry. With the permission of the participants in the study, I intend to present the results in a public forum such as a support group meeting to solicit feedback and possibly suggest ways of improving the college experience for individuals with AS.

Ethical Safeguards

Several ethical considerations are important for this study. First, identities of participants were protected by allowing each individual to choose an alias or pseudonym for the reporting of results (Creswell, 1998). Although disability service providers were asked to distribute packets of information to students with AS, they were unaware of which students decide to participate in the study. When descriptions of relationships and college experiences are given, a composite, rather than individual picture was provided to further protect the identity of those involved. Participants were also be informed verbally and in writing that there was no pressure to participate in the study. The purpose of the study and the method of reporting the results were conveyed in writing on the consent form and verbally to the participants at the beginning of the first interview. In addition to voluntary participation without coercion, participants were able to withdraw at any time. This information was be outlined on the written consent form and explained verbally. I explained that interviews were taped for later transcription on a digital voice recorder. The recordings and transcriptions were stored on my computer with password protection. The email account that was used for communication with participants was also password protected.

Possible ethical issues involved in this study involved the disclosure of potentially harmful information or information that is sensitive such as mental health concerns. In these cases, I was obligated to follow the ethical guidelines of my profession that fall under the "Duty to Protect" provision. The study protocol was also be reviewed and approved by the Institutional Review Board (IRB) at the College of William & Mary.

Contact information for me, my dissertation Chair, and an individual on the IRB was provided on the written consent form.

Benefits to participants in this study included the opportunity to contribute to a largely neglected body of literature on friendships of adults with AS. A second benefit to participants in this study was the opportunity to be heard and validated for their life journeys. Participants communicated their appreciation for being able to participate in this study. Many have maintained contact with me to make me aware of their life struggles and success as it relates to their life journeys.

Chapter Four

The Participants

The ultimate purpose of this study is to gain more of an understanding about the various needs of students who possess a diagnosis of Asperger's Syndrome to enable student services to provide assistance on campus. The qualitative nature of this study permits a more intimate look at the social and psychological needs of a small group of persons with this diagnosis through exploring the meaning, development, and sustainability of friendships that they have experienced in college and beyond. In order to introduce the group, this chapter provides background information about the demographic, psychological, and psychosocial, and social characteristics of the eleven participants in this study.

Demographic Characteristics

Ten of the 11 participants in this study are Caucasian. One male is African American. The seven males ranged in age from 19 to 31, whereas the four females were 21 to 48 years of age at the time of the interviews. Most of the participants were 21-31 years of age with the exception of the one male, age 19, and the one female who was 48 years old.

Seven of the 11 participants attended college between 1999 and 2008. Two participants were enrolled in a college program at the time of data collection. The youngest participant in the study left college one semester prior to data collection with indefinite plans of returning to school. He attributed his withdrawal from college to a recent romantic breakup as well as not being prepared for the academic demands without

the support of high school teachers through a special education program. Ananda, the oldest of the group, graduated from college with her bachelor's degree in 1987 and then returned to college for her master's degree from 1990-1992.

The group displays a wide range of academic interests and vocational aspirations. They have also excelled to varying levels in their accumulation of academic degrees. Six participants earned bachelor degrees between 2003 and 2008 in the fields of zoology, criminal justice, meteorology, music technology, media arts/journalism, communication/film, and philosophy. One participant earned an associate's degree in general studies in 2006 after dropping out of a bachelor's program in music. Two individuals also earned master's degrees in oceanography and meteorology, and one has attained a law degree. The two participants who were enrolled at the time of data collection were earning an associate's degree in medical administration and a bachelor's degree in Chinese language with plans to graduate in 2010 and 2011 respectively.

The institutions chosen by the group for their academic studies have been as diverse as their majors. Three female students and three male students elected to earn their baccalaureate degree while living on campuses within their home state. These universities included two small private institutions with approximately 1,500 students and four state-supported institutions with approximately 5,000-11,000 students. Although most of the group studied at institutions in the southeastern states, three individuals, one male and one female migrated to mid-western and southwestern states to earn their undergraduate degrees. Two of these individuals attended large public research universities with student bodies ranging from 11,000 to 37,000 students. One female

student attended and lived on the campus of a small Southwestern college with approximately 600 students. For his undergraduate degree, one male student also attended an Ivy League university. Two females and one male also attended a public community college with 9,000 students in their home state. Three individuals, one female and two male, also earned graduate degrees from large public out of state research universities ranging from 22,000 to 30,000 students.

Among the eight college graduates, four individuals are employed in full-time professional positions; two individuals are working part time in jobs that are unrelated to their majors; and two individuals are unemployed. One individual, Ananda, has been married two times. She has been married to her current husband for approximately 20 years.

Psychological Characteristics

Only nine out of 11 participants have been diagnosed with Asperger's Syndrome. The other two participants have been diagnosed with high functioning autism. Consistent with the fact that Asperger's Syndrome did not emerge as a diagnostic category in the United States until 1994, seven individuals in the study were diagnosed with Asperger's Syndrome within the past 10 years. Though the three youngest individuals in the study, ages 19, 21, and 24, were diagnosed during childhood and adolescence, the other participants were not diagnosed until adulthood. Many participants were diagnosed with anxiety disorders or depression prior to receiving a diagnosis of AS. Two males, ages 28 and 31, were diagnosed with AS within the past two years.

Prior to being diagnosed two years ago, The Turk, age 28, had self-diagnosed

Asperger's Syndrome after researching the disorder and gathering information from family members about social and behavior difficulties throughout his lifespan. Having a diagnosis served to confirm his suspicions that he did, indeed, have the disorder. Rudy was diagnosed following a suicidal attempt that required hospitalization. Even though he had a history of suicidal ideation and clinical depression throughout high school and college, he was not diagnosed with AS until age 31. Although Rudy had not known about AS prior to his hospitalization, he felt comfortable with the diagnosis. Since his diagnosis, Rudy has studied characteristics of the disorder and agreed that it is an accurate description of his lifelong social difficulties.

Joy also received a diagnosis of AS following a period of self-mutilation in the form of cutting during her college freshman year. Even though she had struggled with anxiety and depression, her deficits in socialization were not as pronounced as males with AS, thereby delaying the diagnosis of AS until adulthood. Emerging research with females with AS indicates that this is a common trend. The pervasive sentiment amongst members of this study is that obtaining a diagnosis that captures the essence of their lifelong social difficulties has been liberating.

David and Lindsey, the only two participants diagnosed with high functioning autism, were diagnosed during their developmental years. Both of these individuals received early intervention services during their preschool years. Another participant, Max Tarkian, who was diagnosed with AS about the age of eight, feels that the early intervention services he received helped him to improve his ability to "do pretty well with body signals to where I would be surprised if people said I had Asperger's." It is

unknown if any of the other individuals with AS received early intervention services to address social or communication delays.

Although David and Lindsey have been diagnosed with High Functioning Autism rather than Asperger's Syndrome, they were included in the study due to the fact that they share similar characteristics in social, communication, and repetitive behaviors with individuals with AS. They also had a college friendship experience and were able to add understanding to this study. David and Lindsey are the only participants who asked to be referred by their real names as they frequently participated in autism awareness presentations, magazine publications, and media broadcasts that gave them national notoriety. Further, they are in a romantic relationship.

Other participants in this study are referred to by self-selected pseudonyms. Selection of pseudonyms was deeply personal. Participant's personalities, accomplishments, interests, and self-concept are conveyed through pseudonym choices. Two female participants chose pseudonyms based on names they would give to their first-born female children. One of these participants had chosen not to have children because she fears passing Asperger's to her child. One female participant chose a pseudonym based on her middle name.

Three male participants chose names based on special areas of interest. For example, the pseudonyms, Max Tarkian and Chamillion reflected the names of the lead singers of favorite musical groups, *System of Down* and *Chamillion*. The name Daishi, an anime character, was also chosen by a young man who spends a significant amount of time each day engaged in gaming activities.

Two male participants chose the names, Rudy and The Turk, to personify their self-concept. Rudy chose his name based on the title character in the 1993 Sean Astin movie. He explained that his high school guidance counselors and teachers discouraged him from attending college based upon his struggles with learning disabilities. His parents also discouraged him from attending college, believing that he would not be able to pass college level classes. Although he felt others did not believe in him, he decided to enroll in college preparation courses and apply to college. He was accepted to college and was able to graduate with assistance through a program designed for students with learning disabilities. Much like the movie character, Rudy feels that he was successful with hard work and self-determination in the face of adversity when others did not believe in him.

The Turk chose his name to personify the struggles he has with conveying his emotions to the world. Turk explained that the name was given to a "chess machine" designed "back in the 17-1800s" that

> allegedly this robot could play chess very well and it had a figurine or mannequin of a guy in a turban and he would pick up and move the pieces like an automaton or whatever but there was actually a person on the inside controlling the machine in a very concealed way. Appearing like an automaton on the outside but actually humanized on the inside so I feel that's a pretty decent metaphor.

Many of the participants acknowledged difficulties with regulating emotional and behavioral responses to environmental stimuli such as excessive stress in college. Due to these additional emotional concerns, 10 of the 11 participants named a comorbid

diagnosis that interfered with daily life functioning during college. Their comorbid diagnoses included anxiety disorders, obsessive compulsive disorders, eating disorders, depression, schizoaffective disorder, bipolar disorder, ADHD, dissociative identity disorder, and Tourette's Syndrome. Three females had eating disorders (anorexia and binge eating) combined with mood disorders (anxiety/ depression and bipolar disorder). One woman also had also received diagnoses of anxiety disorder and schizoaffective disorder prior to receiving a diagnosis of AS. One male participant had diagnoses of ADHD and an anxiety disorder. With the exception of the male participant who is diagnosed with Tourette's Syndrome in addition to an autism spectrum disorder, it is suspected that these comorbid diagnoses are related to the central diagnosis of AS. However, the degree of influence that AS has on comorbid diagnoses cannot be fully examined within the scope of this study.

Related to the comorbid disorders, participants acknowledged engaging in a wide variety of self-destructive behaviors. These behaviors included: excessive worrying, social isolation, ritualistic behavior, obsessive/compulsive behaviors, cutting, emotional outbursts, moodiness, self-medication, and dissociation from reality. Although this study focused on social relationships during college, many participants discussed how their difficulties with Asperger's and the comorbid disorders impact all aspects of their psychosocial lives.

At the time of data collection, six participants had withdrawn from college, took time off, or enrolled in a different institution at some point in their academic career based upon their difficulties with comorbid disorders. The six found it difficult to attend class

and focus on their studies while simultaneously dealing with self-destructive behaviors. Two of these six students took medical withdrawals after deciding with their parents that their eating disorders presented life-threatening situations. With the exception of one man, who did not return to college, five of the six students eventually returned and attained a degree or are in the process of attaining a degree. In addition to these six students, one male participant also considered taking a medical withdrawal for suicidal ideation, but was able to receive psychological treatment that allowed him to remain in school.

Out of these seven participants who either withdrew or considered withdrawing, four explained that their connection with friends as the *most important* driving force for their reasons for either staying or returning to college. Friends provided a valuable source of *support* during times of crisis when participants struggled with symptoms of comorbid disorders (see chapter 5). Three individuals also indicated that they returned to college based on one of two factors: self-determination and parental encouragement and support. Six of the seven credit continuous parental support as a primary factor in their lifelong success.

The other four participants never considered withdrawing from college. Three enjoyed the freedom and independence of college life in addition to the benefits they received from the socialization they were receiving. Chamillion and David describe themselves as being well adjusted socially with many friends. The Turk believes that his relationship with his institution as well as the social and intellectual benefits he received from interacting with individuals who enjoyed discussing the same intellectual and moral

topics provided the most value. Ananda mentioned the freedom she experienced from being away from home as the driving force for remaining enrolled.

During the semester following data collection in spring of 2010, the two participants, Olivia and Max Tarkian, who were enrolled in college during data collection, withdrew from school. Both initiated follow up contact with me through written and electronic correspondence. Olivia, who was enrolled at a technical college, chose to withdraw due to stress. She plans to enter the work force. Max Tarkian, who was living on a residential campus, temporarily withdrew and moved back to his hometown in order to decide on a major and decide what he wants to do in life before returning to college. He plans to return to his college campus in the fall of 2010.

Those who graduated from college feel pride in their academic accomplishments. Their intellectual abilities have provided them with the ability to excel in an academic environment; however, their social difficulties have hindered them from developing romantic relationships and finding employment. The Turk, an Ivy League graduate, contrasted his intellectual abilities and his social skills:

> I am above average in some ways but I'm pretty far below average in others and there are... I maybe.... Well I haven't had it drilled in my head as much as I've drilled it into my own head from an early age that just because you have these intellectual capacities that other people don't have, it doesn't make you any morally better than they are. In some ways it makes you a worse person because you are always falling back and taking the easy way out rather than using these other ones that you don't have so well developed, you really need to be practicing

and improving upon. I mean some of the things that average people do on a daily basis I couldn't do to save my life.

With few exceptions, the participants were thoughtful and reflective regarding their social experiences demonstrating a high degree of self-awareness of their own strength and weaknesses. Many acknowledged that they experienced personal growth during college that was influenced by caring, supportive friendships. Almost all of the eleven know that they possess deficits in social communication, one of the defining characteristics of AS. They struggled with reading the nonverbal gestures of friends (primal empathy), understanding the thoughts, feelings, and intentions of friends (empathic accuracy), and comprehending social rules (social cognition). Collectively these difficulties are known as deficits in social awareness. Examples of difficulties in social awareness are difficulties in reading and interpreting facial gestures and expressions and social communication difficulties.

Participants also struggled with social facility, the ability to present themselves nonverbally and verbally; however, growth has been made over time with practice and feedback and support from family and friends. For example, RJ, Rudy, and Max Tarkian struggled with eye contact when talking with others during their elementary years. Through self-awareness and practice, these men have improved their ability to maintain eye contact. Max Tarkian speaks with pride about his improvements in self-presentation with the help of early intervention:

Talking about eye contact and reading faces and such that it's been a long time since I've had a problem with that so it's more of a focal problem because I think

I do pretty well with body signals to where I'd be surprised if people said I had

Asperger's. If I said I had Asperger's people would be pretty surprised I think.

Well they usually think everybody's like Rain Man.... I know some people who

definitely seem like they could be autistic because they go on about things that

interest them more than other people or more than others. I just think I'm glad

I'm not them or it could have been [me] without such intervention from my

mother and therapist. They are good people and they are good people and high

functioning enough to get in there but I can definitely see where they would have

more trouble than I do as far as relating.

The Turk explained that he struggles with misreading social situations causing

him to make inappropriate comments that can be interpreted as rudeness. He calls these

blunders "social gaffs." For example, The Turk related that he "visibly offended" a

woman by making an inappropriate comment about her hairstyle. Until this time, he "did

not realize how sensitive women are to their appearance." Making the comment, "I

crossed the line I didn't even know I'd be crossing right there." Over time, he has

learned the rules for specific social situations through a "trial and error" process so that

now he has "a pretty good eye for what sort of stuff will hurt a person's feelings and what

will not."

Furthermore, Ananda explained that in college she struggled with overly pedantic

speech: "Back then I sounded like I ate a dictionary or encyclopedia or both." She also

demonstrated "not much facial expression" or "lack of affect, but I've improved

tremendously since then." In social situations, Ananda also struggled with verbally

communicating her feelings, especially if she were uncomfortable or unhappy. During these times, she would let her body language communicate her feelings rather than using her words "mostly by being very silent by looking down and hiding behind my hair. The old autistic behaviors I used to do." Ananda, who was originally diagnosed with an anxiety disorder in college approximately 20 years before her diagnosis of AS, also picked at her hair when she became nervous. "Back then I would fidget with my hair. I'd take the ends and pick them off. There was an 11 inch difference [from one side to the other] and 13 inches in the back where I couldn't reach." Because she takes pride in having long hair that flows to her waistline, "it felt fairly traumatic actually" when she had to have a hairdresser "hack it off to a fairly even length every couple of years."

Participant's self-awareness of their social difficulties caused feelings that ranged between fearfulness, anxiety, stress, worry depression, and inhibition. Over time, fear of responding inappropriately coupled with past experiences of social isolation and embarrassment has increased a participant's level of anxiety. When anxiety increases, the ability to control emotional and behavioral responses diminishes. With diminished self-regulation, the chances of making a social blunder increase, reinforcing the feelings of fear and anxiety. These negative social experiences then reinforce withdrawal behaviors, creating a vicious cycle of social isolation. Thus, nearly all of the participants have developed comorbid disorders of anxiety and depression that are associated with this social anxiety and the fear of or experience with repeated social failure.

These aspects of socialization and empathy are natural for the general population. However for participants to demonstrate the same behaviors and feelings requires

conscious effort and hard work. Yet, all participants demonstrated empathic concern for the needs of their friends. Lindsey explains her efforts to express empathy:

> While it's true that individuals with Asperger's often have difficulty expressing their feelings of empathy for others, that does not mean we don't have the ability to actually feel empathetic. In fact, we often feel it but the problem is that we have trouble communicating that to a level where others are able to understand. Feeling empathy requires a lot of energy, and we may just be too emotionally exhausted to express it. The ability to feel empathy and express that towards others requires training and discipline. It requires us to open up our emotional vulnerability and that in itself can frighten us. Often, it requires hard experiences to trigger our interest in training ourselves. And for some, learning those skills can be so overwhelming that it gets to the point where they give up trying to express empathy for others. It requires practice and consistency. My thought is, we definitely have difficulty, but it's important for people to know that it doesn't mean we don't feel that empathy for others or are disinterested in making friends.

Similar to Lindsey, Max Tarkian also explains his difficulties with self-presentation:

> On many occasions, I don't feel that I know how to react to strong emotion, other than to put on a face of deep concern and hope that the words would sink in so that I would be on the same wavelength of feeling as everyone else. It's difficult, though. Really serious events take time to sink in, I think. I think there's a fear of feeling such disorganized emotion taking hold of oneself in AS people, so the usual method of dealing with it is to bottle it all up. Of course, that does nothing

to help....

Improvement takes years of practice and an ability to learn from repeated mistakes. Participants also learned these social skills from friends who were willing to provide honest, direct feedback without judgment. While discussed briefly in this section, these processes and the value of friendships in developing these skills will be analyzed in greater detail in Chapters 5 and 6.

Psychosocial Characteristics

One of the primary characteristics of AS is pervasive difficulties in building social relationships. Participants discussed a lifelong history of difficulties "fitting in" socially. The problems began in elementary school and peaked in middle school and high school. Teasing and bullying was pervasive. Feelings of social isolation in high school were also painful. Rudy explained: "Everybody left me in high school, after ninth grade, everybody left me. Nobody ever talked to me. I'd go home. I'd go to school. I'd go home. I'd go to school."

In contrast to high school, most participants found that they were able to develop numerous college friendships. Similar to other participants, Chamillion described his high school friendships as being either nonexistent or few in number, "I had a couple of friends from high school, but in college I made more and that was on my own." Because some participants found that peers in college were more accepting of individual differences, they experienced feelings of acceptance for the first time. In college, participants were able to find friends who, as David indicated, "accepted them for themselves". Participants valued these friendships because they felt comfortable being

themselves without worrying about being judged or bullied as in previous school experiences. Max Tarkian contrasted the difference between the behaviors of his college friend versus earlier school friends: "[My college friend] doesn't put people down and I think there are some friendships that when I was in elementary school that some of my friends were pretty put-downish I think at that time. It slowly made me get away from them."

Because college friendships have tended to be more mature and held more depth than earlier relationships, they held more value than previous friendships. Lindsey contrasted her friendship experiences from high school to college:

Well, I had a lot less friends in high school or middle school absolutely. At least a lot less friends I was able to trust and be...I was, I was not...I had a lot more bullying going on in middle school and high school—a lot. I discovered friends, a lot more people I couldn't, were just not, I couldn't really trust.... I felt very grateful that I even had them [as friends] because it was very different than high school where I was trying to keep or maintain friends and kept losing them.... [In college,] I can confidently say that I had a lot of friends from a lot of different social groups on campus. Not everyone had that at my college, but I was able to expand myself to be able to hang out with more than one social group, something I never did in high school.

Similar to Lindsey, participants benefited from being exposed to college peer groups that were qualitatively more diverse than their high school friends. The possibility of making friends was more accessible through common interests and shared

activities. On college campuses, participants had more freedom to access larger groups of people who shared the same interests, increasing the chances of developing friendships. Ananda explained the differences between high school and college: "Well, for starters, I had more than one friend [in college]. I usually would have a sequence of friends with dry spells in between [in high school]. I came in contact with more people, more diverse."

The diversity in people as well as the diversity in activities of interests at college appealed to participants in this study. One of the defining characteristics of Asperger's Syndrome is a restricted pattern of personal interests. Individuals in this study found that they were able to develop friendships by having greater access to their own personal special interests and activities.

For *all* participants, shared interests were a characteristic that was essential to the foundation of the friendship. In all cases, shared interests were either the impetus for starting the relationship or the main activity for perpetuating the relationship. Although some participants were able to transfer the structure of the relationship outside of the confines of the shared activity, other relationships were initiated and maintained solely for the purpose of engaging in the shared activity, much like parallel play of young children. With the exception of two participants who commuted to community and technical colleges, all other participants who lived on campus engaged in extracurricular activities such as clubs, religious events, or special programs held on campus. These special interests included: music productions, video gaming clubs, sporting events, environmental clubs, summer institutes, online networking, science fiction clubs,

religious events, community volunteering activities, and special interest groups. Some were extremely passionate about their interests, such as in civil rights and environmental preservation. Two have a deep knowledge of foreign policy and Asian culture. Daishi holds a fascination with gaming characters. Lindsey, who possesses talents in singing and piano playing, finds these outlets as a way to express her feelings and communicate socially.

> I've always loved performing ever since I was little. That was one thing I felt confident enough to say that I was really good at. If I was really awful at socializing I was really good at playing music. The piano was a way for me to communicate, um, accurately to the audience my emotions. I was better able to communicate to play music than I was to verbally communicate. So that's where my soul came out. So I was missing that when I wasn't performing in front of people. People received it quite well. So I loved that, I loved that if I was in a situation where I was able to express myself to someone and someone got what I was communicating to them about. Because I think a lot of us on the spectrum really desire to, if we try to communicate to the world, we really want them to understand us so when we get that indication that they understand us or they feel that feeling with us. It's a tremendous accomplishment.

The value of shared interests in accessing and maintaining friendships will be discussed in Chapter 5.

Some participants spend several hours each day engaged in special interests. Activities such as online gaming societies, social networking websites, surfing the web,

and online dating became all consuming. For four participants, excessive engagement in these activities became destructive and interfered with their ability to take care of their daily needs such as feeding and grooming, to attend class, and to interact socially. One participant, Max Tarkian, discussed how his involvement with Facebook helped him to initiate social interaction, but impacted his coursework when he became consumed with it.

> It's just that, um, doing stuff about, um—I'm disorganized about doing stuff with friends. If it's not over dinner, or over a club or something, it's a lot harder to do without Facebook. For me, Facebook or if there's more of a wall separation, it feels more uncomfortable than just randomly going to dinner where you've got an activity you are doing already.

Max Tarkian did reach out to his friend and family members when his Facebook obsession began to get out of control.

RJ also had similar periods during his college experience in which he became "immersed" in the World Wide Web, "closing up and staying in his apartment during those times" rather than going to class. At one point, RJ's mother intervened and shut off his internet access. Olivia also explained how her friend and her mother have supported her when she became too involved with online dating and networking sites. She had "lost control" and was "double booking, [seeing] two guys in the same day almost."

Daishi reported spending 5-6 hours a day engaged in playing video games with his friend. These interests appeared to impact significantly his ability to attend class and maintain employment. These interests also appear to be the nucleus of the friendship

relationship as his description of his time with his friend revolved around access to and in engagement in Pokémon card games and video games.

For many participants, engagement in activities with friends diminished the feelings of isolation and loneliness felt during high school years. Others engaged in college friendships during college but as The Turk explained, he had difficulty "continuing beyond the duration of the structured activity." The Turk expressed feelings of "isolation plus an awareness of the discrepancy" while he generally had a "feeling of being on the outside looking in." Autobiographical accounts of individuals with AS, such as those authored by Temple Grandin (2006), Linda Holliday-Willey (1999), and Dawn Prince-Hughes (2004) describe similar lifelong feelings of pretending to be normal and belonging to a separate culture.

Social Characteristics

With the exception of David, all participants had a friendship in college with a member of the same sex. David identified a girlfriend he had in college. Ten of the participants enjoyed two or more friends in college. Participants met friends through proximity or engagement in shared activities. Five participants met friends by living in close proximity to them, either through being roommates, hall mates, or neighbors. Four participants met friends through class or on campus. Two participants met friends through clubs. Regardless of how the participants initially met the friends, all engaged in shared interests with the friend after the initial contact.

Six individuals no longer maintain a relationship with the friend described in the interviews. Four of the six individuals expressed regret losing contact with their friends.

Typically, the relationships dissolved through lack of contact or transiency typically in the form of moving to another location. David was the only one to choose deliberately to end the relationship with his friend; he and his girlfriend broke up. Five participants currently maintain their college friendship—at least at a distance, but desire to have more face-to-face contact.

Many participants expressed feelings of relief, appreciation, and gratitude for the opportunity to have had friends in college as opposed to feelings of rejection during the middle school and high school years. By feeling accepted by friends, participants were able to develop *trust*. The interaction of trust, support, and shared interests contributed to feelings of connection for participants. These friendship values are the subject of Chapter 6.

Chapter Five

Social Intelligence

In order to gain a better understanding of the friendship processes for college students with AS it is helpful to describe the behavioral exchanges between friends. This chapter delineates participants' strengths and weaknesses in terms of social skills. Understanding the challenges that individuals with AS face in social situations helps to lay a foundation for understanding the extraordinary value of friendships to them. Daniel Goleman's (2006) eight components of social awareness and social facility are used as a guideline for conceptualizing reciprocal social exchange between friends.

Daniel Goleman outlined the components necessary for successful interpersonal engagement in his theory of Social Intelligence (Goleman, 2006). In order to execute successful social interactions one must be competent in Social Awareness and Social Facility. Goleman explains that individuals who are more attuned to what other's need and adept at demonstrating that knowledge in social situations have more success in interpersonal relationships.

As discussed in Chapter 3, individuals with AS struggle with applying perspective-taking skills, known as Theory of Mind, in various degrees. While some individuals can apply Theory of Mind skills to contrived situations, they have difficulty applying these skills during real life situations or in novel face-to-face situations. The term "empathy" has been used synonymously with Theory of Mind; some authors propose that individuals who cannot demonstrate perspective-taking skills also have difficulty demonstrating empathy (Baron-Cohen & Wheelwright, 2004). Empathy is

described by Goleman (1995) as the understanding of other people's wants, needs, and intentions. Goleman uses the term empathic accuracy to describe the skills required for demonstrating empathy. Therefore, the definitions of empathy and empathic accuracy are similar. However, as Goleman explains, the demonstration of empathy as a part of successful interpersonal relationships requires not only understanding but also execution. It is the marriage of the cognitive portions of understanding plus the execution in social skills that makes socialization possible. The cognitive portions of social interaction are called Social Awareness. The behavioral portions of social interaction are called Social Facility. Goleman (1995) stresses that emotions are often "shortsighted" when it comes to understanding interpersonal relationships. Goleman explains that affective processes play a powerful role in "shaping our decisions and action" and "when it comes to shaping our decisions and our actions, feeling counts every bit as much-and often more-than thought (p.4)." For these reasons, the cognitive, affective, and behavioral aspects of participant's accounts of their friendship experience are interwoven. In other words, participant's behavior was affected by thought and feeling as evidenced through their words in the following two chapters. As with neurotypicals, the reasons behind why we act occurs at the subconscious level or the low road, as described by Goleman (2006), and are unknown even to us. Therefore, the following explanation is not intended to necessarily provide the reasons why individuals behaved in a certain way unless it was specifically communicated to me by the participant.

Applying Goleman's Theory of Social Intelligence

One purpose of this study was to shed light on the cognitive, affective, and

behavioral processes involved in social interactions. For the following discussion I used Goleman's model of Social Intelligence to identify the eight characteristics of Social Awareness and Social Facility through participant's accounts of an actual lived experience of friendship. I gathered evidence of each of eight constructs by reading through each interview and checking whether or not the participant demonstrated words, thoughts, or actions that matched the definition each construct. I used a question format that helped me evaluate each construct. For example, for primal empathy I asked myself, "Did the participant discuss his or her ability to read the nonverbal signals of others?" I checked to see if the participant demonstrated the behavior through a description of situation with a friend or if they described the construct as being one that they valued in terms of their friendship definitions. Participants' explanations of their difficulties with demonstrating these constructs were also marked on the following tables. After I read through each interview looking for participant behaviors, I then marked behaviors of friends towards participants in the same manner. While the parameters of this study do not allow me to actually verify if those behaviors occurred, it was important to note participant perspectives of friend behaviors because these behaviors impacted friendship development. Identifying the interpersonal processes involved in social awareness and social facility from participant to friend and friend to participant helped to understanding the major qualities of friendship, trust, support, and connection, described in Chapter 6.

Processes of Social Intelligence

Social Intelligence has two processes, social awareness and social facility. Social awareness is the intuition we have about others (Goleman 2006). Social facility is the

behaviors we execute with that intuition. Social awareness, essentially the cognitive portions of social intelligence, is the prerequisites needed for effective social facility. The elements of social awareness in terms of participant toward friend followed by the elements of social facility will be discussed below.

Social Awareness

According to Goleman (2006), social awareness has four components: primal empathy, attunement, empathic accuracy, and social cognition. The definitions of each of these constructs is listed in Figure 1 and will be described in further detail under the sections describing each construct.

Figure 1. Social awareness components

Primal Empathy	Reading non-verbal communication
Attunement	Listening to the friend
Empathetic Accuracy	Interpreting accurately the friend's thoughts, feelings, or intentions
Social Cognition	Understanding how the social world works

Table 1 provides information regarding components of social awareness of participants to friends. Participants demonstrated a wide variety of strengths and weaknesses within the realm of social awareness. Although not all participants demonstrated difficulties with the same components, most participants had a higher degree of social awareness than I expected. This was evidenced in the fact that most participants were forthcoming in their explanation of their deficits and how those deficits impacted their daily social relationships. Participants mentioned feeling some control over processes that they felt they could practice such as primal empathy and empathic

accuracy. For these reasons, participants discussed their concerted efforts to practice

social skills within their interpersonal relationships and friendships. Participants

admittedly struggled with most with social cognition, knowing the rules for social

situations.

Table 1

Social Awareness of Participant to Friend

Participant	Primal empathy	Attunement	Empathic Accuracy	Social Cognition
Ananda	X	0	*X	X
Chamillion	O	X	*X	X
Daishi	✓	0	*✓	0
David	✓	✓	*✓	0
Joy	X	*✓	*✓	X
Lindsey	*X	*✓	*X	X
Max Tarkian	X	✓	*✓	X
Olivia	✓	0	*✓	X
Rudy	X	0	*X	X
RJ	X	✓	* ✓	X
The Turk	X	0	*X	X

Key:
X –this behavior presents difficulty for the participant
0 –no mention of this behavior in interview
✓ - this behavior is adequate from the participant's perspective
* - this process was described in their definition of friendship

Primal Empathy

Primal empathy involves sensing other's nonverbal emotional signals. Although

the majority of these processes occur on the unconscious level, participants openly

acknowledged that they have difficulties in reading other's nonverbal signals. This open

acknowledgement is a testament to the fact that for this population the reading of nonverbal signals is not a natural act as it is with neurotypicals. For neurotypicals, the act of reading nonverbal gestures and body language is a subtle act that occurs on the subconscious level. Goleman (2006) explains that reading nonverbal clues occurs through the low road as a rapid and spontaneous process for neurotypicals. Neurotypicals learn to read nonverbal language from a young age through natural development. Examples of primal empathy include being able to interpret meaning from another person's tone of voice, body language, and facial expressions (Goleman 2006). As a general rule of thumb, reading the nonverbal signals of others takes conscious effort and practice that does not come naturally for people with AS. Therefore, the process is effortful, must be practiced, and often is tiring for people with AS as it occurs during social interactions. Once they identify specific skill deficits, individuals with AS can improve upon their ability to read the nonverbal signals of others, but it is often a labor intensive process that requires constant effort, practice, refinement, and revision. The process has often been compared to that of learning a new language or being a tourist in a foreign country trying to fit in. Individuals with AS depend upon the feedback from those they trust to help them practice and revise their social skills.

In addition to having difficulties with understanding the nonverbal communication of others, the majority of participants acknowledged problems maintaining eye contact, reading facial expressions, and reading body expressions at some point in their lives. Because reading emotions occurs for neurotypicals through facial expressions, specifically through eye contact, individuals with AS who have

difficulties maintaining eye contact have difficulties with this skill. Simon Baron-Cohen, et al. (2001) found that individuals with autism score poorly on the *Reading the Mind in the Eyes Test*, a test designed to measure primal empathy. Subjects are expected to identify the emotion communicated through each pair of eyes. Simon Baron-Cohen et al. (2002) also found that individuals with AS have difficulty understanding mental states from vocalizations on the *Reading the Mind in the Voice Test*. Rudy, The Turk, Ananda, Lindsey, and Max Tarkian all described how their ability to read facial expressions continues to present challenges. Rudy explained, "I'm uh, not good with facial expressions. It's hard to read people where, you know, whether they like you or not. I know it's funny but it's a difficult thing."

Most participants reflected upon how their ability to read the nonverbal communication of others has played a role in misunderstanding a social exchange between friends, which then led to deficits in social presentation and caused a social blunder. However, with education, time, and practice in various social settings, participants have learned to improve upon their social skills. With pride, Max Tarkian attributed his improvements in reading body language and his ability to "do pretty well with body signals" to the early "intervention from his mother and therapist." RJ also pointed out how his "eye contact [is] a lot better than other [people with AS]" due to the practice with these skills he gained from his college friend. His acknowledgement that he practiced eye contact because he knows it is an important part of improving his social interactions is an indicator of RJ's social awareness.

The process of reading others' nonverbal signals is an effortful and sometimes

analytical process that requires conscious thinking that neurotypicals take for granted. In addition to having to learn to read nonverbal signals, the process of reading social situations is also more analytical in nature than for neurotypicals. When an individual with AS encounters a new social situation, they may try to fit the situation within the context of previous experiences in an attempt to match it with an existing cognitive representation for expected reactions. These cognitive representations, also called schemas, are stored memories of all the activities, thoughts, feelings, conditions, and behaviors that surrounded that experience. Existing schemas depend on previously rehearsed experiences. When the social situation is novel the individual with AS can experience anxiety and choose an incorrect response either through over-reaction or under-reaction, especially if they are not able to match the novel situation with an existing schema. Over time, many individuals with AS learn through a trial and error process that involves constantly reshaping and relearning how to match their own reactions with a specific social situation. This process occurs for neurotypicals as well, but individuals with AS have a tendency to search for past experiences that match exactly to the given experience; whereas neurotypicals are able to see the similarities between social situations without every data point having to match to such a high degree of specificity.

This propensity for such a high degree of specificity can produce a higher rate of error in executing the appropriate social response if the individual is not able precisely to match a current experience with a past experience. With individuals with AS, this process tends to occur on a much more conscious level than it does with neurotypical individuals.

People with AS have a tendency to analyze their social responses in a much more methodical manner than neurotypicals. Therefore, social responses, as discussed through the section on social facility, may also occur at a slower rate than with neurotypical individuals. This slow response speed can cause the individual to miss the appropriate moment of response making interactions delayed and awkward.

Max Tarkian provides an example of a social experience in college in which he struggled with reading the facial expressions of his friends in a novel situation. Through his method of "going with the flow," Max Tarkian's choice of mimicking the actions of his friend when he was unsure of how to comfort his college roommate proved to be a good choice.

> I once walked in on my roommate crying and it was something he couldn't tell me about at the time. Then later on, he and my friend, they were holding hands in sort of like a prayer circle. And I wasn't into like the prayer. And I realized it was something that I needed to get involved in just as sort of a solidarity. So I went over in and joined in. It was something I realized they were being very quiet, head down sort of thing. It was something serious going on.

Sometimes, however, mimicking can be disadvantageous if used inappropriately. The Turk explains how his difficulties in forming relationships are a two-fold problem that involves difficulties in primal empathy and self-presentation in the form of mimicking:

> My experience with Asperger's – in which it is accompanied by a healthy dose of nonverbal learning disorder, which may be a confounding factor – has featured

countless instances in which I want to want to express empathy nonverbally but 1) fail to get the point across, or at least fail to observe the other person's nonverbal cues that s/he has gotten the point or 2) feel that even to the extent that I do get the point across, I'm doing a bad job of it, accomplishing only a crude, cartoonish "monkey see monkey do" approximation of what I've seen other people do.

The Turk also explains how reading social situations in general can be an effortful, analytical process:

I've got a pretty good eye for what sort of stuff will hurt a person's feelings and what will not. You know, again, a couple of instances of what's fair game and what I need to stay away from at minimal cost. Again, the question is not what to mention to some degree, the question is how much is too much? It's trial and error and you gotta find the trilogy that best fits the data points you have so far, and you know you can't always be sure. It's always going to be underdetermined to some degree. But the first few times when you inadvertently tested the water so to speak, yeah, that can hurt.

Because individuals with AS have to work hard at perfecting their skills at reading other's nonverbal cues, some may actually be more attentive to the body language of their friends. Individuals with AS, who are making a conscious effort to refine their social skills, may actually be more attentive—or less automatic in their response—to the body language of others than the majority of the population. Daishi, David, and Olivia indicated that their primary means of interpreting friend's emotions was through body language, voice tone, conversational speech patterns, and facial

expressions in addition to verbal expressions. Unlike other participants, these three did not reflect on any difficulties with primal empathy. David, for example, was able to tell if his girlfriend was happy because "she told me. 'I'm happy with the way things are going' and she's very jubilant and whimsical." Likewise, Daishi can read his friend's moods through "body expressions and tone of voice", which is at times markedly different than his usual "spontaneous" personality. Olivia also reads her friend's emotions by her "tone of voice."

For Lindsey, the capacity for friends to understand each other's nonverbal signals was an essential element in her *definition* of friendship. "Maybe that's the definition of a close friendship, but the ultimate goal of [friendship is] knowing each other enough to say if I couldn't communicate it to you verbally, you would be able to understand through my nonverbal communication how I was feeling." Because individuals with AS demonstrate difficulties with social communication, it can be a source of relief to be understood by friends without having to explain one's feeling in detail. The appreciations for friend's abilities to understand the participant's needs and know how to support them are qualities that are valued by participants. This ability to be understood by friends and to understand them in return leads to feelings of connection. These qualities of friendship will be discussed in Chapter 6.

Attunement

Attunement involves listening to the needs of others. For five participants listening to their friends is important. Interestingly, most participants felt it was important to be listened to by friends, but only the five mentioned reciprocally listening

to friend's needs. Being listened to by friends was an important indicator of a friend's support toward the participant and will be discussed in greater detail in the next chapter.

For the five participants who indicated possessing listening skills towards friends, several described how the process of listening was a learned and practiced skill. Lindsey, for example, explained how she educated herself on how to be a good listener and then consciously implemented this strategy when listening to her friend's needs:

> Well, um, I had learned a lot from reading Dale Carnegie books years beforehand. And um, I remember learning about how if there were things that were nice to say to somebody or you know trying to, or a way for someone to really bond with you is if you take the time to listen to them. So if they had or whether it was an upsetting experience that she wanted to share with me or a very happy experience that she wanted to share with me. And she wanted to tell me the story about it, she may have had all these details I may not remember at the time, I would listen to her because that was one indication or a very strong indicator of, you know, "I'm interested in being your friend. I actually care about you. You know. I'm happy for you when you're happy and I will you know be a support to you and I will be upset for you when you have a day that is not treating you well...." So, I was good at, always, not always, but I consider myself to be a very good listener. Um, even though I may not be the best at verbally communicating where people may not get me in the right context or things like that.

As discussed above, Max Tarkian also has to make a conscious effort to empathize with friends who experience strong emotions. However, he finds it rewarding

to listen and empathize with friends despite the challenges it presents for him personally: "However, I try hard to imagine what I feel like in that situation, and things usually work out. Actually, I notice a lot of people come talk to me because I will simply listen to them."

Similarly, Joy found that her relationship with her friend grew through attuning to her friend's needs:

> Friendship for me is something when not only is it one sided, but maybe it is that way at first but over time you get to know the person and you bring something to the table. Even if you don't have anything at first and you get to know them and you offer advise and you comfort them when they need comforting. You cry with them. You really intently listen whenever they have something to say, back and forth type of thing. [That's what] true friendship is.

The feelings resulting from reciprocal listening—being valued and appreciated for one's unique qualities—contributes to building trust, support, and connection. The value of listening as it relates to trust, support, and connection will be discussed in greater detail in the next chapter.

Empathic Accuracy

Empathic accuracy involves insight into reading friend's emotions. Empathic accuracy builds on primal empathy and attunement but it also requires an "explicit understanding of what someone else feels and thinks" (Goleman, 2006, p. 89). Therefore, reading emotions of others will be challenging if one cannot master the prerequisite skills of primal empathy and attunement. Participants communicated

empathic accuracy by identifying a thought or feeling of the friend in relationship to a specific social situation.

Six of the 11 participants indicated they were able to understand a friend's intentions, thoughts, or feelings. However, the methods in which they understood the friend's feelings tended to be more explicit than that of neurotypical individuals. Participants relied on direct verbal communication as a primary indicator of empathic accuracy. Although most neurotypicals use primal empathy to aid their interpretation of another's feelings, participants relied more on direct verbal communication. Friends communicated their thoughts and feelings by verbally communicating their feelings. If they were happy or uncomfortable with a situation, they told the participant directly, leaving no room for misunderstanding or misreading of the situation on behalf of the participant. These six participants appreciated that their friends were honest with them in sharing their emotions because friends communicated in a timely manner that was open and direct before the situation became too emotional or overwhelming.

Five participants indicated they continue to struggle with identifying friend's needs and feelings. Regardless of whether or not participant's struggled with the actual process of identifying a friend's feelings, all participants communicated the importance of mutual understanding in their definition of friendships.

As with other skills, such as reading nonverbal cues and developing listening skills, individuals in this study also learned over time and from failed experiences how to improve their empathic accuracy. Similar to other skills, empathic accuracy takes conscious effort and a willingness to receive feedback from others. Most neurotypicals

use a combination of primal empathy, attunement, and empathic accuracy to understand

the emotions of others, rather than relying as much on direct verbal communication.

Individuals with AS rely more heavily on direct verbal communication, which means that

they may miss the other nonverbal cues that are necessary for interpreting social

interactions. Without direct communication, participants were left guessing if they made

an accurate assumption regarding a friend's intention. The Turk discussed how having

other's tell him directly if he made a social mistake saved him from guessing if he

handled a situation correctly:

> Sometimes people would tell me, you know, discretely take me aside and tell me.
>
> Sometimes I'd kind of know, you know, this was a goof or a gaff. And I wouldn't
>
> need to be told if I knew it to begin with. If I did something wrong, I'd
>
> acknowledge it and apologize to the person. But when, I guess, if I alienated a
>
> certain person then he or she wouldn't want to spend any time with me anymore.
>
> And the certain person was interacting with me less and I couldn't think of an
>
> explanation that was a cue to maybe I did something to maybe recognize the
>
> effects of that.

RJ, Ananda, Olivia, Lindsey, David, and Joy all indicated that they appreciated

friends who would "just tell them" how they felt through "constructive criticism."

Similar to The Turk, Ananda explained how she has learned to value direct social

communication, much like her mother provided for her when she was a little girl.

> That's how I was raised. I don't know how to do things because there's a trick to
>
> it that I don't know. My mother would show me the trick to it. I'm still waiting

for that too.... The trick that would allow me to do things competently, which is

what got me in trouble at [recent job I was fired from]. Because I was always

asking [questions], um, "well what should I be doing?" And it got on people's

nerves. I mean the people closest to me didn't seem to mind. I stopped asking

the ones that did seem to mind. But those that didn't seem to mind became my

friends. I told them about my problems with AS and they seemed to accept that.

Ananda's difficulty with knowing how and when to ask questions is an illustration

of her lifelong problems with empathic accuracy and social cognition. Other participants

described how they struggled with understanding the intentions of friends when they first

met them. Lindsey relied on her friend's direct verbal communication of "saying nice

things to me" as well as nonverbal gestures "helping me out" and "giving hugs" as

indicator of her friend's intentions. As seen here, her method of understanding her

friend's intentions is much more methodical than that that of a neurotypical who would

have a "gut" feeling about the desires of others:

Sometimes I wouldn't really know [if friends wanted to be friends]. And

especially if I wait, I have to really know someone to know if they are really, what

their intent is I guess. If they say something to me, do they really mean it?

Before college like in high school and stuff I was quite naïve so I didn't really

know, I kind of would mistake some people if they made some comments to me I

thought was sincere turned out really not to be so sincere. Or if it was something

they just said I would easily forget it if they said something nice to me. Um so I

was a little bit more cautious with that with college, just learning how to trust

people more easily. Um, so at first, um you know, with other people I was like it's very nice that she saying some nice things to me and that she's being friendly with me and saying hello and everything back. But I was kind of like, a little hesitant. I am still nice to people but I'm just sort of still cautious about that. Um, I think when she has said some very very touching things to me about my music and about my performing um and when I had performed at some of these shows she would be happy to help me out if I had to get ready that seemed to be a strong indicator. Um, you know, she would give hugs a lot and I thought that was a strong indicator.

The difficulties that individuals with AS have with empathetic accuracy often have additional ramifications for them. Sometimes others take advantage of individuals with AS due to the fact that they have difficulties reading the intentions of others. Max Tarkian and Chamillion explained how their difficulties with understanding other's intentions have led to their "gullibility." When Chamillion allowed people to take advantage of him in college by using him for transportation, he learned a valuable lesson about trusting people's intentions. His friend tried to protect him from these pitfalls, but Chamillion did not listen to his friend at the time. By "dissing" his friend to spend time with people who were not true friends, Chamillion lost the support of his friend who "looked out for him" and was "down to earth, caring, and strong." He mourns that loss. With regret over his gullibility and poor choices in "friends", he explained: "Young adults with Asperger's don't understand when they're being taken advantage of and they want everyone to be their friend. Like they say, "Everyone is a friend, until they prove

otherwise."

Social Cognition

Social cognition involves understanding how the social world works. It involves understanding the rules for typical social behavior. Eight of the 11 participants described how they had broken a social rule during a past or present relationship. For individuals with AS, understanding social rules for specific situations is a skill that does not come through a combination of natural intuition and social learning as it does for most neurotypicals. The understanding of social rules must be explicitly taught, practiced, and perfected throughout the lifespan. Part of the reason for this is because individuals with AS struggle with noticing nonverbal cues, analyzing those cues during social interactions, and responding appropriately on the spot. In other words, putting all the individual pieces together to form a "rule book" of appropriate social behavior is extremely challenging and methodical. Many individuals with AS can give an appropriate response in a specific social situation, but struggle with extrapolating similarities across social situations.

When a person with AS encounters a novel situation or a situation with intense emotions for which he or she is unprepared, anxiety can also interfere with understanding the social rule for a given situation. This anxiety can also impact or impede the way an individual with AS responds to the situation. If an individual over-reacts or under-reacts to a given situation, he or she may come across as either aloof or too intense. Either way, these over- or under-reactions to social situations tend to be misinterpreted as uncaring by people who do not understand the individual with AS.

RJ gives an example of how his difficulties with understanding social rules impact his ability to develop friendships:

> When a person says they're fine, usually it's left as that. I feel a bit self-conscious trying to prod and poke those I consider friends to open up to me. There seems to be a level of expectation already set once a friendship is made, and as such, there are certain boundaries that you can and cannot cross. Many of these boundaries are only discovered once you cross them, and only when the relationship is over. It is all these unspoken social rules I fear to break that are the main stumbling block for me more than my 'lack" of emotion.

The notion that individuals with AS do not have feelings for others is complicated by the fact that they report that they do have feelings for others and want to make a connection, as discussed in Chapter 6, but the execution of these skills is challenging for them. The execution of the skills needed to successfully orchestrate social interactions is called Social Facility.

Social Facility

Social facility involves four components: synchrony, self-presentation, influence, and concern (Goleman 2006). The definitions of each of these constructs is listed in Figure 2 and will be described in further detail under the sections describing each construct.

Figure 2. Social Facility Components

Synchrony	Interacting smoothly at the nonverbal level
Self-Presentation	Presenting oneself effectively
Influence	Influencing a social situation
Concern	Showing concerns for friend's needs and act

Table 2 provides information regarding components of social facility of participants to friends. As demonstrated below, participants demonstrated the most difficulties in the areas of synchrony and self-presentation. In terms of influence, participants acknowledged how they were aware that their social difficulties negatively impacted social situations but continue to struggle with how to correct these deficits to have positive outcomes. All participants demonstrated that they have concerns for friends well being either through action or thought. The difficulty at times lies in behaviorally executing thoughts and feelings into appropriate demonstrations of affection. Other researchers have also found that individuals with AS demonstrate individuals with AS demonstrate difficulties with cognitive empathy, but no differences compared to matched controls on scales that measure empathic concern, as defined by the ability to feel warmth, compassion, and concern for others (Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006). These demonstrations of concern through thought or action contribute to feelings of connection with friends and will be discussed in Chapter 6.

Table 2

Social Facility of Participant to Friend

Participant	Synchrony	Self-Presentation	Influence	Concern
Ananda	X	X	✓	*
Chamillion	0	X	X	*✓
Daishi	X	X	✓	*✓
David	✓	X	✓	*✓
Joy	*X	*✓	*✓	*✓
Lindsey	*X	*X	*X	*✓
Max Tarkian	✓	✓	✓	*✓
Olivia	X	X	✓	*✓
Rudy	X	X	X	*
RJ	X	*✓	X	✓
The Turk	X	X	X	*

Key:
X –this behavior presents difficulty for the participant
0 –no mention of this behavior in interview
✓ - this behavior is adequate from the participant's perspective
* - this process was described in their definition of friendship

Synchrony

Synchrony involves the participant's ability to "glide gracefully through a

nonverbal dance with another person" (Goleman, 2006, p. 91). It is the foundation of

social facility. As with primal empathy, those who are adept at reading nonverbal cues

and reacting to them appropriately generally do so at the subconscious level. These

interactions are rapid and occur spontaneously. They may include smiling and nodding at

the appropriate time in a conversation, opening oneself up with an appropriate nonverbal

stance or distancing oneself appropriately (Goleman 2006). Those who struggle with

synchrony tend to have awkward gestures or "fidget nervously, freeze, or simply be

oblivious to their failure to keep step in the nonverbal duet" (Goleman, 2006, p. 91).

These missteps make interactions with others uncomfortable and tend to put others off. Goleman explains that individuals with AS have neurological deficits that contribute to difficulties with synchrony. Though explicit teaching of these skills can improve one's ability to read social signals and respond appropriately, "self-conscious attempts to control them can impede their smooth operation" (Goleman, 2006, p. 93). Individuals in this study who have had explicit teaching of skills associated with social facility have conveyed the tendency to "overthink" social situations which naturally increases social anxiety. As discussed in the earlier section, this process also becomes extremely labor intensive for the individual with AS which slows down processing speed and response rate causing a cycle of social interaction that can be very anxiety producing.

This cycle tends to work in the following way. Participants' self-awareness of their social difficulties caused feelings that ranged among fearfulness, anxiety, stress, worry depression, and inhibition. Over time, fear of responding inappropriately coupled with past experiences of social isolation and embarrassment has increased participants' levels of anxiety. When anxiety increases, the ability to control emotional and behavioral responses tends to be diminished. With diminished self-regulation, the chances of making a social blunder are also increased, reinforcing the feelings of fear and anxiety. These negative social experiences reinforce withdrawal behaviors, creating a vicious cycle of social isolation. Participants developed comorbid disorders of anxiety and depression that were associated with this social anxiety and the fear of or experience with repeated social failure.

Eight out of 11 participants indicated that they had difficulties with synchronizing

nonverbal behaviors to match the needs of a social interaction. These difficulties involved not only reading other's nonverbal behavior incorrectly but also responding incorrectly through nonverbal communication including executing appropriate eye contact, demonstrating a flat affect, or appropriate body language. The most common difficulty noted by participants was maintaining eye contact. RJ and Max Tarkian both spoke with pride about how they had improved over time with practice in sustaining eye contact. Following the interview, Rudy also mentioned the difficulty he has with sustaining eye contact and demonstrating facial expressions that match the mood of the conversation. When he is nervous, Rudy has a tendency to smile at inappropriate times during a serious conversation; thus, he worries about offending people. As he was consciously aware that he smiled frequently during the interview at inappropriate times, he solicited my feedback on his facial gestures following the interview.

Ananda also commented on the fact that she is "still fidgeting" in social situations (as was true during our interview), but she has "calmed down immeasurably" since college. During her college days, Ananda would "hide behind her hair" in social situations, letting her friend do most of the talking while she engaged in her "old autistic behaviors." This behavior especially exhibits when she was anxious. A characteristic sign of anxiety, Ananda also picked the ends of one side of her long hair until there was an 11 inch difference from one side to the next. Additionally, Ananda mentioned having a flat affect. Ananda explained that when she feels comfortable in social situations like when she was alone with her friend, her social skills would improve. "I'd make eye contact, actually smile and not hide behind my hair." She credits her improvements to

both friends in college and to receiving long-term help from therapists.

As mentioned above regarding primal empathy skills, The Turk and Max Tarkian discussed the benefits and pitfalls of social mimicking behaviors. Both men admit that when they have misread the nonverbal gestures of others in highly stressful situations, the chances of presenting themselves poorly in nonverbal communication is increased. Max Tarkian reflected that really intense emotions take awhile to "sink in" and until they do he relies on social mimicry. However, there is always the risk that his nonverbal behaviors may not be appropriate for the intensity of the moment. The Turk has found that mimicking others comes across as a "monkey see monkey do" approach that appears awkward and somewhat phony. Again, The Turk understands that his behavior is echolalic and awkward, but does not always know how to solve the problem so that he presents himself in a different manner.

During the interviews, many participants struggled with matching their nonverbal gestures to the content of the dialogue. Although participants demonstrated appropriate eye contact, most continued to struggle with demonstrating an overly flat affect that does not match the emotions of their words. The Turk, RJ, Olivia, Chamillion, Daishi, and David demonstrated rigidity in their facial expressions or a flat affect that appeared to fluctuate little when speaking of happy or sad social events. On the other hand, Rudy and Ananda demonstrated affect that appeared exaggerated or unmatched to the conversation topic (i.e., smiling when discussing painful social rejection). Joy, Lindsey, and Max Tarkian did not appear to have difficulties with synchrony, but all three commented on how they continually practice these and other social skills.

One characteristic of AS is pedantic or robotic speech that sounds very formal with little inflection in tone. Ananda described how she knew that she appeared socially awkward in college because she "sounded like I ate a dictionary." Although other participants did not acknowledge their use of precise or pedantic speech, eight of the 11 participants were observed to use pedantic speech that had little inflection during the interview. Participants were also noted to increase their rate of speech when talking about topics of special topics of interest. Daishi, for example, noted that when he in a happy mood, such as when he is engaged in playing his favorite video games, he "talks loud" and his friend "has to ask me to slow down my voice." When speaking about his video games and Pokémon cards during the interview Daishi also talked rapidly, running his words together, and raised his voice volume.

Self-Presentation

Self-presentation refers to a person's capability to "present oneself in a way that makes a desired impression" (Goleman, 2006, p. 93). The ability to "control and mask" emotions in social situations leads to influencing other's opinions. Those who are adept at self-presentation are generally seen as charismatic leaders. Self-presentation requires being able to read social situations as well as the ability to deliver the appropriate amount of emotion for the given situation. People who do not match their delivery of emotions with the social setting are seen as either aloof, awkward, or eccentric.

Again, eight out of 11 participants described difficulties with self-presentation in the form of verbal communication. Participants described a variety of difficulties with verbal communication. The most common difficulty involved not knowing what to say

in a social situation to convey one's thoughts or emotions appropriately. Several participants had difficulty coming up with an answer when asked how they demonstrated to their friends that they wanted to maintain the relationship. Participants were most likely to use an example that demonstrated a behavior towards a friend like "continuing to hang out with her," rather than explain how he or she would use a verbalization to show an attachment towards friends. The Turk illustrates the awkwardness he experienced in verbalizing his desire to be friends:

> I actually have some trouble with this one, you know. How do I do something without looking lame or coming across as being overly interested in him or her? I was worried about looking weird and I, uh, that mostly involved finding a time that wasn't terribly inappropriate and telling him or her that "I admire so and so about you. I think it's really good that you do this. I learned a lot from you." You know that's a very interesting, personal thing to say to somebody. So you know, you can't take it lightly too much, but just finding a time to sit where it will be comprehended and yet it won't be anything really ominous about it. In other words, I expressed admiration for those people by telling them. There weren't all that many opportunities, but I did find some. Yes.

As participants mentioned above, the chances of presenting oneself inappropriately increase if the situation is novel or stressful. As anxiety increases, emotional regulation goes down. In general, participants acknowledged that they struggled with self-presentation throughout their lives in larger social contexts. Self-presentation in large group settings or with people one is less familiar is also

compounded by stress.

Olivia provided an example of how she had difficulty presenting herself effectively when coping with extreme anxiety in the classroom setting. Her emotional outburst resulted in feelings of embarrassment that had long lasting effects on her relationships at college:

Well, I'd have these episodes where I'd be in classes and I'd get really nervous

and I'd start crying in the hallway and it was just very uncomfortable for me.

And that's when I started to dread even going back to college was facing those

people because I had problems embarrassing myself in front of those people.

Like I cried a lot and I left classes a lot. I'd be in class and the teacher said "You

just don't seem to understand." So that's why I ended up leaving [that institution

to take time off].

Likewise, Max Tarkian, Ananda, and Lindsey mentioned social situations outside the context of close friendships, such as large social events or business relationships, in which they tended to withdraw or remain quiet rather than confront others who had upset them. Ananda, as noted, tended to "hide behind her hair" rather than talk to people she did not know well. Lindsey explains how she chose to avoid difficult situations when she knew something needed to be said but didn't know how exactly what to say:

So for someone that I had an issue with, I was not one that was very good at

confronting people. So it would, sometimes I would allow it to keep bothering

me because I was so, I didn't quite know how to confront people. I would almost

sort of let, you know, um, at first I guess certain things that were bothering me I

would let, I would think well, you know, maybe it's my fault or maybe it's things that I shouldn't be bothered with. But once I got to the point of identifying it as something that really they should be the ones to change this behavior or if they keep saying things that are offensive, then no, that's not right. Once I eventually would identify that then I would try to confront them but I wasn't always the best at getting my point across to them. So either I wouldn't get my point across because either my verbal, my communication skills would shut down and so they wouldn't quite often get what my point was when I'd try to talk to them. Or if I did it was come across as accusatory because I didn't know at that point it was accusatory.

During the time I was at college, I would often be incredibly frightened by confrontations. So when there initially was a disagreement with a friend, I would shut myself off and spend a good few days avoiding as much contact with other peers as possible. This was because I often mistaken disagreement with anger, and I would mistake anger for hatred towards me. After a few days of reflecting, I would be able to talk more sense into myself, and then I was ready to confront the particular individual for a civil conversation. In most cases, the situations were resolved.

Likewise, participants acknowledged that when stress levels were lower and they were happy and comfortable within the context of their friendships, they could engage in conversation more and make more eye contact. David explained that when he was comfortable or happy with his girlfriend he would talk more and kiss her more, but when

he was feeling uncomfortable he would withdraw or "spend more time to himself."

Overall, the presentation of self becomes a problem for individuals with AS as they tend to either over-react or under-react to a given situation. Thus, they come across as either stilted, insincere, aloof, or overly excitable, making self-presentation awkward during social relationships. While neurotypicals may also struggle with presenting themselves effectively during stressful situations, neurotypicals typically have skills in social awareness and social cognition that help guide them toward understanding how to correct or improve the behavior. Individuals with AS don't have these skills or have difficulty understanding how to apply skills they have learned from one social situation to another.

Influence

Influence relates to the impact a person has on shaping a social interaction. Influence requires prerequisite skills of self-control, empathic accuracy, and social cognition (Goleman, 2006). Social cognition plays a significant role in influence because individuals must first understand how the social world works before they can understand how to make their behavior conform to the expectations of the norm group. Participants who were able to describe how they broke a certain social rule were also able to describe how they changed that behavior in the situation to influence a future outcome. In other words, most participants learned from past mistakes made through trial and error, especially when their friends explained the error to them in a straightforward manner.

The mere fact that participants could reflect upon their social difficulties is evidence that they conceptualize how their behavior impacts the behavior of others,

people's opinion of them, or society's opinion in general. Furthermore, the fact that participants admit that they are cautious about their social interactions in public and fearful of making a mistake or upsetting others is evidence that they understand how their behavior influences others.

Rudy reflected on how his social communication deficits influence other people's opinions of him and have a negative impact on his ability to develop multiple friendships:

I wish I could communicate my feelings better. Socially, I'm very far behind from my peers. I have an advanced vocabulary and sometimes people put higher expectations than I can deliver on. It's hard to practice something which most people are innately born with that skill. They cannot understand you do not have any clue on the natural progression of a conversation. You are forced to be put on trial. In other words, each conversation or interaction teaches you something. I have had to review every conversation and learn what is appropriate and what does not work. There are some people who are not as good with accepting your mistakes and label you and put you in a box. It's hard to recover and break that mold. I have never been able to do it. I still do not have that many friends or relationships. The ones I do have are strong like the roots of an old oak tree. I'm always afraid that today is the day that I'm going to wake up and have no friends. I really worry about dying alone. Fortunately, I have always had a guardian angel to help through the darkest times.

Rudy's "angel" refers to a friend he made in college that provided reassurance and direct feedback on his behavior. Like Rudy contrasted his true friends with others

that rejected him, other participants also made the same distinction between how they were able to communicate with friends versus other people. With friends versus other people in general, participants had a greater influence over social situations. Again, with friends participants were able to communicate more directly having a easier time of resolving conflicts than with other people.

Concern

Concern involves the ability to feel empathy and act upon those feelings. Individuals who show concern are adept at feeling empathy and acting upon those feelings to meet the needs of others. Empathy alone matters little if a person fails to act upon those feelings to demonstrate that concern for others (Goleman, 2006). All participants told me about a behavior that showed a thoughtful caring gesture or described their value for their care and concern for their friends within their definition of friendship. Men tended to show care and concern through behavioral gestures that illustrated that they were "there for" friends; whereas women demonstrated that emotional support for friends such as spending time with them, talking to friends, and listening to them. These differences will be discussed in greater detail in the next chapter as it relates to connection.

Feeling and Demonstrating Empathy

Participants were asked through a blog posting about the capacity for individuals with AS to feel empathy for others. Participants indicated that they outwardly have difficulties *expressing* their feelings of empathy for others, but they have the ability to *feel* empathy. The difficulties encompassed sending and receiving appropriate social

signals in the form of social awareness and social facility as discussed above. Participants discussed difficulties with *sending* behaviors such as expressing themselves accurately through verbal means and displaying appropriate expressions. *Receiving* signals include reading the emotions of others appropriately, and understanding body language and tonal inflection during face-to-face interactions.

Lindsey disagreed with the notion that individuals with AS cannot have empathy as is sometimes reported in the literature (Baron-Cohen & Wheelwright, 2004). She illustrated the difference between feeling empathy and showing empathy:

> While it's true that individuals with Asperger's often have difficulty expressing their feelings of empathy for others, that does not mean we don't have the ability to actually feel empathetic. In fact, we often feel it but the problem is that we have trouble communicating that to a level where others are able to understand. Feeling empathy requires a lot of energy, and we may just be too emotionally exhausted to express it. The ability to feel empathy and express that towards others requires training and discipline. It requires us to open up our emotional vulnerability and that in itself can frighten us. Often, it requires hard experiences to trigger our interest in training ourselves. And for some, learning those skills can be so overwhelming that it gets to the point where they give up trying to express empathy for others. It requires practice and consistency. My thought is, we definitely have difficulty, but it's important for people to know that it doesn't mean we don't feel that empathy for others or are disinterested in making friends. I value the opportunity to care and reach out to others, which is a part of

friendship. I love helping other friends to the best of my ability, and I love to make others happy.

The Turk also agreed that he can feel empathy but has difficulty with "expressing empathy in the same way that way that people without Asperger's do." These difficulties impact his ability to "form meaningful friendships." He characterized his difficulties with expressing empathy appropriately in the following way:

As for verbal expressions of empathy, although I'm pretty good at formalizing them, I experience anxiety over and inhibitions against actually communicating the verbal formalizations I come up with. The difficulty is not with the expression itself but rather with whether the expression, however accurate, is appropriate. The worry, "Should I really say this?" manifests itself in more specific questions including: Will this person think my expression is insincere because I'm saying what I mean rather than somehow showing it? Is my relationship with this person too distant for a direct verbal description of how I feel, such that verbalizing my feelings would be too intimate or personal and only a more subtle oblique gesture or demonstration is appropriate? Will this person think I'm strange or creepy for choosing this non-typical means of expression? Will s/he figure out that I can't do it the normal way and look down on me as the result?

Participants also indicated that while empathy continues to be a difficult skill that requires significant practice, over time their social skills have improved through practiced socialization and through learning from their mistakes. By interacting with friends who

had strengths in social skills, participants have had an opportunity to practice and refine their own weaknesses. As The Turk explained, individuals with AS value the opportunity to build upon their social skills with people who "won't be creeped out with my communication style." Lindsey also "value(s) the lessons I learn from social skill building. The more friends I make, the more advanced my social skills become." In addition to building social skills, she also "value(s) the benefits of great friendships. These benefits include acceptance, support, honesty, constructive criticism, and encouragement." These benefits will be discussed in greater detail in the next chapter.

Social skills building for participants was influenced by the constructive criticism and modeling they received from friends. This section illustrates the processes that were demonstrated from friends to participants.

Friend towards Participant

In order to understand the ways in which participants benefited from the exposure to friends, the processes of Social Awareness and Social Facility from friends towards participants must be dissected. Illustrating the skill strengths of friends from the perspective of participants assists in understanding what friend qualities participants find personally valuable. Furthermore, illustrating the interaction between friends and participants assists with further understanding the dyadic engagement that occurs between friends. Due to the fact that the data collection process was designed to shed light on participant's perspectives rather than those of friends, evidence is not available about the actual social awareness and social facility of friends from the friends themselves. However, by recognizing that friends can read the moods of participants

through the body language and vocalizations of the participants is evidence that participants demonstrated characteristics of Theory of Mind (ToM) and perspective-taking skills. Thus, the same processes outlined by Goleman (2006) and discussed above, although still viewed through the eyes of the participants, illustrate the "I-know-that-you-know-that I know- that you-know" type of perspective taking discussed by Hobson (2007) in his discussion of dyadic mutual interpersonal engagement. In other words, the reflections discussed here represent the participants' reading of their friends' reactive behaviors toward them.

Social Awareness

Social awareness describes a friend's capacity for sensing about others. The processes range from sensing nonverbal signals (primal empathy) to understanding how the social world works (social cognition). Data were analyzed in a similar way as the method used above to describe the participants towards friends interactions. Interviews were reviewed to check for participant's discussion of friend's behaviors, thoughts, and feelings that represented the four components of social awareness. I used a question format that helped me evaluate each construct similar to the process used above. For example, for self-presentation I asked if the friend conveyed his/her thoughts, feelings, and emotions accurately to others? Because social situations do not occur in a vacuum, the participant may have witnessed the friend exhibiting positive social behaviors towards others within his or her social network. Figure 3 provides a description of the four processes that characterize social awareness from friend towards participants.

Figure 3. Social awareness components

Primal Empathy	Reading non-verbal communication of participant or others
Attunement	Listening to the participant or others
Empathetic Accuracy	Interpreting accurately the participant's thoughts, feelings, or intentions
Social Cognition	Understanding how the social world works

Table 3 provides information regarding the social awareness of friend's towards participants and possibly others within the friend's social network. The data below suggests that friend's demonstrate many prosocial behaviors that participants recognize as being positive. Participants indicated that friends were not only "good people" in terms of how they treated others, but that they also learned prosocial behaviors by watching friends interact with others.

Table 3

Social Awareness of Friend

Participant	Primal empathy	Attunement	Empathic Accuracy	Social Cognition
Ananda	✓	✓	✓	✓
Chamillion	0	✓	*✓	✓
Daishi	✓	✓	*✓	✓
David	✓	X	*X	✓
Joy	✓	*✓	*✓	✓
Lindsey	✓	✓	*✓	✓
Max Tarkian	✓	✓	*✓	✓
Olivia	✓	✓	*✓	✓
Rudy	0	0	*0	✓
RJ	✓	✓	✓	✓
The Turk	0	0	*0	✓

Key:
X –this behavior presents difficulty for the friend
0 –no mention of this behavior in interview

✓ - this friend's behavior is adequate from the participant's perspective
* - this process was described in their definition of friendship

Primal Empathy

Primal empathy was indicated to participants by a friend's ability to recognize and correctly interpret the participant's nonverbal communication. Most participants indicated that their friends were able to interpret their feelings, thoughts, or intentions by reading the participants' body language, lack of eye contact, and facial expressions. Participants acknowledged that friends were adept at reading their moods by observing their body gestures, especially those observed during negative emotions such as unhappiness. Thus, friends demonstrated their primal empathy skills by first observing the nonverbal gestures of participants and then responding with a supportive gesture or words of encouragement.

For example, Daishi explains that his friend has learned when his "mood changes" by watching his body language. Daishi explains that when he is unhappy he has a tendency to "just be staring at the wall." His friend then responded by "asking me what's wrong." Likewise, David had a tendency to withdraw rather than verbalize his feelings when he was unhappy in his relationship with his girlfriend:

I would get very quiet. I would not have much to say or I'd say I have to go home right now. I have some things I have to do. Very unusual, very seldom that I would actually confront them, I wouldn't say "I'm not happy with how you're treating me".

His girlfriend responded to his withdrawal with an email asking him what was

wrong. David preferred this method of non-confrontational discussion. When he was happy, he tended to demonstrate more positive nonverbal behaviors such as being more affectionate with his partner, "kissing her more." In return, his girlfriend responded with verbal affirmation of her happiness with "the way things are going." Ananda also found that her friend could read her moods by her lack of or engagement in eye contact as well as her lack of or engagement in hiding behind her hair. Similarly, Olivia's friend knows when she is upset by her body language and withdrawal from class, "If I go to the bathroom, if I run out of the room crying, she'll come check on me." Both Olivia's and Ananda's friends showed support when they tended to withdraw by checking on them, asking what's wrong, and listening to their concerns.

Attunement

Participants indicated that their friends also made an extra effort to listen to their needs. They expressed appreciation for friends support during times of crisis as well as support during periods of stress. One participant, Lindsey, actually used the terminology "attuning" when describing the connection involved in friendship:

> Um, a friendship to me is unconditional love, unconditional um, you know, my door's open for you if you ever needed a place to go kind of thing. Maybe that's the definition of a close friendship, but the ultimate goal of that knowing each other enough to say if I couldn't communicate it to you verbally, you would be able to understand through my nonverbal communication how I was feeling. Sort of *attuning* to each other's needs, um, praising each other's accomplishments and talents. Yet at the same time, if something was bothering you being able to

address them and be open about it in a constructive way.

Attunement or listening, as part of support, is a quality of friendship that participants value. Support is discussed in greater detail in the next chapter.

Empathic Accuracy

Empathic accuracy describes a friend's ability to understand participant's thoughts, feelings, and intentions. Participants also explained that friends demonstrated accuracy in reading the participant's emotions. Participants conveyed their emotions to friends through verbal and nonverbal gestures as explained in the sections above. Evidence for friend's ability to read these gestures appropriately was found through friend's responses to provide support in response to participant's emotional difficulties. Therefore, a friend's ability to accurately read a participant's emotions is dependent to some degree upon a participant's ability to convey those emotions. When participants are overrun with emotions, there may be moments when they struggle with verbally conveying their feelings, as Lindsey explains above. Eight out of 11 participants indicated that they let their friends know how they were feeling by combinations of body language and verbal communication and in return friends convey their feelings in similar ways. However, friends are more adept at using nonverbal and verbal communication effectively to communicate their feelings; whereas participants are aware that they personally struggle with sending mixed signals or making awkward gestures. In other words, participants are much more likely to send the wrong message to friends; whereas friends have an easier time of conveying the correct message. Max Tarkian explains how his friend can read his emotions through his eye contact [or lack thereof]. When Max

Tarkian is happy, for example, his friend knows because we "laugh and joke, um, feel more energetic, look at [him] I suppose." Likewise, Max Tarkian's friend conveys his emotions "by wearing his heart on his sleeve" and so if he was unhappy "I think he would tell me or he wouldn't be smiling."

David, who is the only participant who used a romantic relationship as an example of friendship, described having difficulties making his girlfriend understand that he was not ready for marriage without hurting her feelings. Eventually, the relationship was terminated because "she wanted to push the issue of marriage and I wasn't into marriage." While the pair had different long term needs, he had difficulty making her understand his emotional needs while he was involved in the relationship. Therefore, in this case, it was the boundaries of relationship in which the individuals had competing interests that put stress on the friend's ability to demonstrate empathic accuracy. David conveyed that at the early stages of the relationship the pair enjoyed one another's company and met one another's needs. Along these lines, most participants indicated that they rarely experienced conflict or feelings of unhappiness within their friendships. When conflicts did occur, friends communicated their feelings directly so that there would be no room for misinterpretation on the behalf of the participant. Therefore, it seems that when there are no competing interests at play, empathic accuracy is heightened.

As Max Tarkian conveys above, the reading and interpreting emotions is an interwoven social exchange that occurs during throughout social interactions. Joy calls friendship a "back and forth" type of thing in which we "comfort each other." For

individuals with AS who struggle with this type of communication, value is placed on friends who are able to execute these skills well as discussed under self presentation. This value was conveyed through participant's definitions of friendships. Definitions of friendship that involved empathic accuracy were those that revolved around the notion that friends demonstrate an understanding of the participant or a connection to the participant that involves understanding a participant's needs even when they are the most vulnerable. Rudy explains that friendship is "complete acceptance of your deficiencies and limitations." Ananda also describes friendship as "knowing everything about each other and still liking them." Likewise, Lindsey says that friendship consists of "unconditional love." Daishi and The Turk also describe friendship as a "partnership" between two people built on mutual trust, respect, and understanding. Without empathic accuracy coupled with genuine concern for participant's needs, a feeling of mutual understanding as conveyed through these definitions of friendship could not have developed between friends.

Social Cognition

Participants expressed their admiration of a friend's willingness to explain social blunders to them in a straightforward manner. Friends helped participants understand when they were making social mistakes or when they were being taken advantage of by others. By discussing their lifelong difficulties with gullibility, social blunders, and naïveté, participants acknowledged that society in general, including their friends, demonstrate a higher level understanding of the ways that the social world operates in comparison to their own knowledge base. As an example of this knowledge, The Turk

contrasts his difficulties with college adjustment to that of other freshman who did not have Asperger's Syndrome:

> I had an extremely difficult time adjusting to the close quarters and lack of adult direction/supervision/explanation that characterized my freshman year of college. It seemed at times that every action I took, physically or socially, had effects on numerous other people, and I just wasn't able to figure out what they were. Actually, that's a twofold problem. Not only did I have to figure it out in the first place, as opposed to having some sort of instinct or intuition for it, but for that matter I wasn't any good at anticipating or figuring out the effects. In terms of figuring out what actions had what effects, I had few instincts for what aspects of my actions were the relevant ones causing one consequence, as opposed to another, to occur. In other words, I had few intuitions about what variables I should isolate and examine when trying to figure out what I was doing wrong. As a result, it took a lot more data points. A lot more miscues, a lot more whatever the plural of *faux pas* is, a lot more embarrassments, and a lot more arguments before I got a decent idea of how to live alongside other people, in particular those who hadn't gotten accustomed to explaining everything to me as my parents had.

The Turk's description of his difficulties and his ability to contrast his experiences with typically developing college students is evidence that he understands that neurotypicals have an intuitive sense of social cognition whereas his social cognition skills require consistent analysis that require specific learning and then trial and error analysis. The Turk explains how he looked to others within his social network for

modeling of those social skills he did not have as a way to gain better understanding of social rules:

> I looked up to them for example quite a bit because they were able to exhibit many of my strengths without the corresponding weaknesses and I often would look to them for cues on examples of how to do that. The people who were smart and friendly but not awkward about it [I would look up to]. Friendly, but not envious, [I didn't want to be] you know the puppy looking at you desperately wanting to be your friend, [I didn't want to come across] so effortful. For me, it's always got to be so effortful. And the people who had the skills and the practice or whatever of either engaging in that effort or just making it easy at my level I couldn't tell the difference but how they all managed to pull it off or at least appear to do so I looked for examples of how to do that.

The Turk's description here of how he was in awe of people within his club had high intellectual skills coupled with effortless social skills overlaps with friend's capabilities for self-presentation. However, in The Turk's description he specifies that he not only watched his friends for clues on self-presentation but also for the rules on how to behave in specific social situations which overlaps with social cognition. The Turk, Lindsey, and Joy, discussed the benefits from learning pro-social skills and social rules from watching friend's interactions and modeling themselves after them.

Social Facility

Social facility is the successful execution of social skills. It builds on social awareness to allow effective socialization. Social facility ranges from synchrony to

concern. Due to the fact that participants observed friends interact in a variety of social situations in addition to their dyadic interactions, this section also includes components of social facility that friends exhibited towards other college friends. Figure 4 explains the components of social facility.

Figure 4. Social Facility Components

Synchrony	Interacting smoothly at the nonverbal level
Self-Presentation	Presenting oneself effectively with participants
Influence	Influencing a social situation
Concern	Showing concerns for participant's needs and act

Table 4 provides information regarding components of social facility of friends. In the eyes of the participants, friends demonstrate skills in synchrony, self-presentation, influence, and concern.

Table 4

Social Facility of Friend

Participant	Synchrony	Self-Presentation	Influence	Concern
Ananda	✓	✓	✓	*✓
Chamillion	✓	✓	✓	*
Daishi	✓	✓	0	*✓
David	✓	✓	✓	*✓
Joy	✓	✓	✓	*✓
Lindsey	✓	✓	✓	*✓
Max Tarkian	✓	✓	✓	*✓
Olivia	✓	✓	✓	*✓
Rudy	0	✓	✓	*✓
RJ	✓	✓	✓	*✓
The Turk	0	✓	✓	*✓

Key:
  X – this behavior presents difficulty for the friend
  0 – no mention of this behavior in interview
  ✓ – this behavior is adequate from the participant's perspective
  * – this process was described in their definition of friendship

Synchrony

Most participants also indicated that their friends were able to interact smoothly at the nonverbal level. Friends were given credit for being able to read social situations and respond accordingly to meet the needs of others. Participants described their friends as being outgoing, kindhearted individuals who reached out to meet the needs of others. The most often used methods of nonverbal communication between friends were eye contact, smiling, and displays of physical affection. Olivia, Ananda, Lindsey, Joy, and David all indicated that friends communicated their feelings through physical affection in the form of hugs. Max Tarkian, Chamillion, Daishi, Rudy also explained that friends demonstrated their happiness and willingness to interact through facial expressions, smiling, and sustained eye contact which in turn, indicates that participants were also using eye contact to catch these signals. Displaying a positive affect communicated to participants that friends wanted to engage in a friendship with them. For example, Rudy felt welcomed by his friends because their "personalities [were] outgoing and social and funny and they'd always smile when they see you and they'd laugh. They made me feel welcome and uh, invited you to places and things. Well, if they didn't care about you, they wouldn't take the time to invite you and talk."

Self-Presentation

Self-presentation is the ability to make one's emotions known to others and the ability to control one's emotions. Goleman (2006) describes people who are adept at self-presentation as those who have charisma as well as an ability to "control and mask" emotions. People who have charisma "have a flair for expressivity that engages others to

come into synchrony with their rhythm and catch their feelings" (p.93). People who are adept at self-presentation also know when and where to release specific emotions. As The Turk describes above, he was "drawn to" his friend because of her ability to present herself well and the ability to move with ease between various social groups. *All* participants spoke about the *charismatic* qualities of friends. They were drawn to friends who were extremely outgoing, but yet sensitive to their needs. Chamillion for example, described his friend as social yet caring, loyal, and trustworthy. Likewise, Max Tarkian and Rudy stress their friends are extremely outgoing, yet kind and dependable companions. The women also described friends who very popular amongst many social groups, but who also took the time to listen to their needs and give them individual attention when they needed it. Friends demonstrated their ability to convey their emotions to participants through direct and indirect communication methods.

Direct communication. Participants admired their friend's ability to present themselves verbally. They also preferred their friend's direct and open style of communication that eliminated the guesswork involved in understanding social rules. RJ explains how his friend communicated with him in a style helped him build his conversational skills.

> Let's see. It all came down to, I think, he was more straightforward than some of the other people. He would let you know if he wanted to change the subject or something like that. I think, you know, *communicating with him maybe improved my communication as well...and my communication skills in general* just trying to keep the conversation going. Since he was so straightforward with

me I was straightforward with him.

RJ also commented that his eye contact improved as a result of practicing these skills with his friend.

The most common way that friend's expressed their feelings was simply by "telling me." Joy explains how her friend provided direct and helpful communication:

She knew that I had trouble picking up on certain [social cues] so she would just outright tell me. Not like blatantly tell me, but not hint either, but she would just tell me in a kind way that something was bothering her. Like if I was, for example, if I had [engaged in self-injurious behavior] and it had bothered her and she would let me know. And uh, she would ask why and try to figure out what was going on, what she could do to help. And that's how she would let me know something was bothering her.

Indirect communication. Three participants, Ananda, The Turk, and Rudy, discussed how they have experienced social situations in which friends whom they did not know well chose to withdraw from them because of a social mistake. These withdrawals can be extremely painful experience. Ananda explains how her friend would "distance herself" by being "busy with something else" at the beginning of the relationship when she was "too clingy." These experiences diminished as her relationship grew stronger and as Ananda learned how to recognize when her behavior was offensive.

The Turk also contrasted how various friends handled self-presentation in ways that were either helpful or detrimental to his social skill development and knowledge of

social rules:

> Sometimes people would tell me, you know discretely take me aside and tell me. Sometimes I'd kind of know, you know, this was a goof or a gaff and I wouldn't need to be told. If I knew it to begin with, if I'd do something wrong, I'd acknowledge it and apologize to the person. But when I guess if I alienated a certain person and then he or she wouldn't want to spend any time with me anymore and the certain person was interacting with me less and I couldn't think of an explanation that was a cue to maybe I did something to recognize the effects of that.

Being able to have confidence in a friend's capacity to present themselves through a consistent and open style of communication contributes to building a sense of trust, support, and connection. Because individuals with AS have a difficult time with change, the fact that close friends will make an effort to present themselves consistently is a valuable quality that will be discussed in the next chapter.

Influence

Influence describes a friend's ability to have control over a social situation to achieve a desired outcome. Influence also involves knowing what emotions to display in certain settings in order to attain a desired effect. Participants describe their friends with admiration for their adeptness in social situations and leadership skills, particularly in areas of moral character and intellectual skills. Therefore, for the purposes of this analysis, influence will be discussed in terms of the impact that friend's had on participant's social and moral development.

Impact on Social Development. All participants indicated friendship provided value in terms of personal and social growth and development. Friends were the source of social involvement through a wide variety of shared activities. Through social interaction, friends assisted participants in developing social skills that could be translated into other settings, such as reading nonverbal gestures and communicating clearly. Friends provided a clear, open, and consistent model of how to communicate effectively. Many participants could describe their growth in social skills over time by describing differences between previous and current behaviors. Several admired and appreciated their college friend's willingness to tolerate their poor social skills and to explain to them without judgment when they made social mistakes as well as how to improve their skills. In addition to providing social benefits, interacting with friends who were accepting, trustworthy, and supportive made them feel connected. The positive feelings associated with connection likely perpetuated the participant's desires to become more socially involved.

Participants also expressed that being involved with a particular friend or set of friends provided a bridge to social interaction with other people. Nine of the participants identified having an association to two or more friends. Friends who were active and outgoing encouraged participants to accompany them to social functions and likely involved them in activities and friends that they would not have had exposure to if they were on their own. Ananda, for example, accompanied her friend to science fiction conventions because her friend was very involved in that culture and could expose her to new friends. By having a friend who was outgoing, the pressure of social interaction was

reduced. The friend was able to introduce the participant to other individuals who accepted the participant as being part of the group because they were already accepted by the friend. Lindsey explained.

I think by feeling accepted by someone who was quite popular—in my mind, she's not about [being popular] herself—but I felt like since I was accepted by her I felt, um, not as nervous to approach other people as I would if I wasn't close with her. Like her friends would definitely accept me if she accepted me, kind of thing.

Similarly, Rudy showed that being in the presence of friends who are outgoing and social, influenced his ability to join larger social networks. "It certainly makes things a little bit easier when you're with people that can, you know, introduce you with other people and can.... You don't have the reliance on being the one that has to do all the talking."

For participants with AS who tend to be timid in social interactions, being with the friend also gave them confidence to join in group activities while also providing some reprieve from having to initiate the interaction alone. By not feeling on the spot in large social situations, social anxiety was also reduced, giving participants the chance to enjoy social interactions without the pressure of having to perform alone.

Impact on Character, Moral, and Intellectual Development. Three participants specifically discussed how their friendships contributed to their moral and intellectual development. For these participants, friends served as social and moral models for positive living based upon how they demonstrated acts of kindness towards

others. Joy indicated how her friend assisted her in seeing how "the glass was half empty rather than half full" by providing a positive perspective on life. Joy reflects with admiration, her friend also "reminded me of what my identity in Christ was and helped me to find who I was in Christ" by quoting inspirational scripture but also by helping her get involved in volunteer activities "helping me to appreciate what I did have." Joy also reflected on her friend's many positive and uplifting qualities that influenced her life.

> The fun stuff that we did was a big part of [what maintained this friendship]. It was like the glue that held us—our friendship—together and then her comforting spirit she had, spirited compassion she had for me. And for other people that were going through hard things she would reach out to them and that's what really kept the friendship going, you know.

Max Tarkian explained that having a friend has helped him rethink his stereotypes on religion and southern culture. He admires his friend for having Christian values and living by them. Not only does Max Tarkian recognize the positive benefits he receives from being around his friend, he also recognizes that many social benefits accrue from being involved with college students who may have diverse values:

> Uh, I'd say he's one of many people where I'd say I'd want to stay around these people. I like these people. These are intelligent hardworking coeds. People I'm around and just being around them is a lot better than just being around my parents and my brother.

The Turk vocalized his conscious decision to choose friends who have moral and intellectual qualities. His analysis of this process illustrates that individuals with AS tend

to "pursue [friendship] for reasons that are more explicit or based on criteria that are more explicit than are those that NT [neurotypical] people invoke when deciding to be friends." Though The Turk explained that he has difficulty developing friendships outside the boundaries of structured activities, he gave several examples of qualities he looks for in people he would hope to develop a friendship.

> But of the people whom I grew to respect most it was really the personal qualities, the qualities of character, the qualities of intellectual development, and the qualities of implementing that character in terms of making oneself into a good person and bringing out the best in those around the person. So [a] combination of character and aptitude. I looked forward to being around good people. I don't know if you read Aristotle but Aristotle talks about friends working together to bring out the best in each other. So that's, it was the ability to do that with those people was what drew me to sustain relationships outside that context to the extent that I did. Friendship consists largely of mutual admiration. I admire so and so about a person and I want to be around him or her because he or she exhibits those qualities and/or because by being around him or her some of those qualities will rub off on me. So it's not, I do like hanging around with these people but again it's for an odd reason. And again, the liking, the hanging out with them is incidental to the reason for which I'm hanging out with them and interacting with them. And to an extent it is self reinforcing, I do it because I like to do it because of what I get out of doing it. Again, the conceptual structure is the cause of the explanation of it.

As The Turk illustrates, being around friends who have strong moral values has had a positive impact on participants. Friends who were admired by participants appeared to have had charismatic qualities as well as the "control and match" qualities of self-presentation described by Goleman (2006). As The Turk explains above his friends' intellectual qualities as well social skill strengths were the qualities that he found most appealing as well as the qualities that he tried to emulate through his own behavior.

Concern

All participants indicated that friends show concern for them and act on behalf of their best interests. Concern involves "caring about other's needs and acting accordingly" (Goleman, 2006, p. 84). The elements of friend's concern for participants are woven throughout the social interactions described in this chapter and Chapter 6. The demonstration of care added to the feeling of trust, support, and connection that participants had with their college friends. Mutual concern is one affective process that is involved in the development of connection.

Participants described a variety of emotional crises that occurred during their college years. Several participants contemplated dropping out of college. Friends were available to listen and discuss the crisis and give advice. Additionally, friends gave constructive feedback that were not judgmental or condescending. Friends also gave suggestions for how to shape the behavior without hurting the participant's feelings.

Friends also provided support by encouraging the student to engage in social activities rather than withdraw. Friends appreciated the participant's strengths and/or special areas of interest and encouraged participants to share their talents. Friends

demonstrated their appreciation and support by giving small tokens of affections such as jewelry and notes that participants proudly displayed as artifacts. In response to this open support, participants shared secrets, shared confidential information, asked for advice, asked for academic help, and gave advice. Participants also described being able to discuss their difficulties with friends with more honesty and openness than with other people. Friends remained calm and optimistic when participants viewed the world through a negative lens.

Friends showed concern by asking participants what is bothering them, listening to participants, going out of their way to do nice things for them, being affectionate, providing reassurance, explaining social rules that they do not understand, helping them in crises situations, and just "being there." The behaviors described above will be described in greater detail under the categories of trust, support, and connection in the next chapter.

Chapter Six

**Qualities of College Friendships**

This study was designed to investigate the college experiences of individuals with AS with the purpose of developing a better understanding of their friendship experiences. Research questions were aimed at understanding what qualities college students with AS found *personally valuable* and the *processes* involved in friendship interactions. Data were collected through interviews, artifacts, written responses, and blog postings. My analysis of the data found that participants valued their college friendships. The specific qualities of these friendships that were found to be valuable are described in this chapter.

As qualities of friendships emerged, I found it helpful to develop and employ a visual model. My model illustrates the qualities of friendships participants found valuable and the relationship of these qualities to one another. I describe each quality in terms of its content, function, and process. The content is the definition or overall meaning of the quality for participants. Function refers to the role or purpose of the quality in friendship. Processes are discussed in terms of the behavioral, cognitive, and affective qualities of engagement. Behavioral processes are the ways in which the participant demonstrated the quality towards friends. Cognitive processes are the ways in which the participant demonstrated his or her understanding of how the quality impacted his or her friendship. Affective processes are the feelings that the participant remembers experiencing in relation to the quality.

Participants named four primary qualities essential to their college friendships. Figure 1 represents a visual model of these qualities. The qualities of friendship valued

by participants were shared interests, trust, support, and connection. At the center of

these characteristics are shared interests. Analogous to being the glue that binds

friendships together, shared interests is the most essential element to friendships of

individuals with AS. Two other important qualities of friendships include acceptance and

reliability. Acceptance is the overlap between trust and connection. Reliability is the

overlap between trust and support. Empathic concern is the overlap between connection

and support.

Figure 1. Qualities of College Friendships Valued by Students with AS
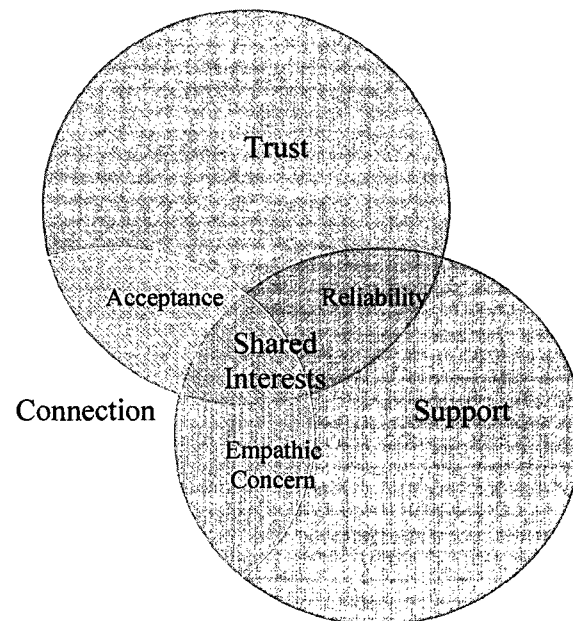
Shared Interests

Restricted patterns of interest are a characteristic of Asperger's Syndrome. These interests take the form of special hobbies, talents or activities that consume large amounts of time and mental and physical energy. As individuals with AS searched for campus activities that coincided within their restricted patterns of interests, they found other college students who shared the same interests. When participants shared their restricted patterns of interests with friends, these interests became *shared interests*. RJ explains his quest for finding friendships through shared interests:

> Yeah, clubs were my main resource when it came to making friends. Just sitting in the basement of the residence building heckling bad movies or old anime was a typical outing, and discussion usually followed after. I was fortunate to have some rather tolerant colleagues to put up with a few of my eccentricities. Most of my friendships through college were usually through the social clubs and interests I chose to attend. Finding someone with a similar interest or expertise helps immeasurably in the need for me to fit in.

Participants in this study engaged in wide variety of shared interests. Shared interests fell into three categories: leisure activities, community service activities, and forensic clubs. Examples of leisure activities included: playing musical instruments, athletic events, movie watching, dining, dancing, drinking, cooking, video gaming, science fiction clubs, and internet surfing and online blogging. Community service activities included volunteering through church and community organizations as well as civil rights and political activist groups.

Daishi is the only participant who did not describe engagement in shared interests related to a college activity. Daishi's friendship experiences during his one semester of community college centered on playing video games and Pokémon cards with his next door neighbor.

Participants accessed friends who were interested in the same activities through *proximity*, typically living near others who share similar interests and by *individual initiative*, seeking or initiating contact with others who share similar interests. Ananda took the initiative to form a club around her special interest of science fiction role playing when none was available on her college campus.

The Roles of Engagement

For all participants, a shared interest was a characteristic that was essential to the foundation of the friendship. Shared interests served the important function of linking participants with friends who shared the same interests. Once the initial contact was made, shared interests also perpetuated the friendship and served specific functions or roles of engagement. Shared interests proved to distract the students with AS from their unhealthy proclivities, helped to build their self-confidence, and broadened their interests and participation in other activities.

Because many participants in this study struggle with depression and social anxiety, engaging in shared interests also served the function of providing healthy opportunities for social contact rather than leaning towards natural tendencies of social withdrawal. Therefore, engaging in activities with friends served as a protective factor against self-destructive behaviors. Joy struggled with cutting behaviors, depression, and

an eating disorder during her freshman year. When depressed, she socially withdrew. However, when her roommate spent time with her, it took her mind off her depression and had a positive effect on her socialization. She discussed how engaging in "fun" activities with her roommate became the primary source of her social interaction:

> She would get me involved in the campus life activities and we were involved because I was in music we would do the praise and worship team and stuff like that and she would help me to get involved in like the activities locally with the youth.... I pretty much got into myself when I was alone and stuff like that during the first half or the second half of the week, just pretty much study, study, study, but whenever she was around, she was like "Let's do some fun stuff." You know what I'm saying. So anyways, she was the connection to the outside world. Not just fun but relief from the burdens of study all the time and no play is like not good for the person who can't relieve any of the stress that was building up. So yeah.

Olivia also described how spending time with her friend impacted her self-destructive behavior:

> I know I wouldn't get out of the house much more because I don't drive. That's one thing about me. I don't drive and I don't get out of the house in the mornings and I've been through surgery, gastric bypass, and I know if I stay home I'm just going to eat all day so I have something to do. I need something to keep me busy. If I just sit around I'll eat myself out of house and home.

Individuals with AS find comfort and can relax by engaging in their special areas

of interests with friends. Their extensive knowledge base, talents, and skills in the areas of restricted patterns of interest provided opportunities for them to excel in social situations in which they would typically lack confidence. By engaging repeatedly in shared interests, participants found common ground with others. The common ground opened the door to developing trust, support, and connection with friends.

Demonstrating specific talents among peers can simultaneously serve the purpose of overshadowing social skill deficits. Rudy discussed how his common interest in sports was viewed as an influential factor in establishing his friendship with his dorm mates while minimizing his social skills deficits:

I think interests. We had similar interests. [We] lived in the same [dorm] and went to the same [college].... [My friends] were more social than I was so they liked to talk about sports and uh, which is one of my interests so uh. Sound familiar? With Aspergers? [smiles] There are people with certain interests and I uh, really uh acquired a great knowledge of it so...sports was one of my things so....

The amount of time spent with friends engaging in shared interests varied from a few hours on the weekend to 5-6 hours per day. When participants felt comfortable engaging in shared interests with friends, they were encouraged to continue the relationship. For many participants who developed this level of comfort with friends, engagement in the shared activity broadened to other unstructured activities. Max Tarkian, for example, broadened his relationship with a friend he met through a political activist club to dining out activities. Lindsey also broadened her relationship with a

classmate to out-of-class activities, such as cooking and dining out. Engagement in varied activities also allows for other components of friendship such as trust, support, and connection to be developed.

Continuous Engagement

Participants acknowledged that special interests played a role in being able to provide the opportunity to interact with friends. Due to the fact that they had a long history of repeated social rejection and failure dating back to high school, they found it meaningful that college friends would make initial efforts to engage with them through shared interests. Participants found it even more valuable when friends were willing to continuously engage in shared interests with them. Therefore, engagement in special interests with friends was in and of itself *proof* to the participant that a friend was a friend. In other words, friends *knew* that friends were friends because they continued to interact with them. The proof resulted from repeated invitations and from consistent interactions.

In fact, when asked how friends showed their desire to be a friend, most cited was being invited to join in activities. Rudy explained that "[my friends] invite[d] me along if they were going somewhere. Um, I don't know. They made me feel like...Um, they'd ask what you're doing this weekend and I'll say stop by. I don't know. Incorporate you into functions and stuff." Ananda also stated that her friend "invited her" to come along to science fiction conventions and later to her home for parties and dancing. Chamillion also discussed how he and his friend invited each other to "watch TV, and play his Playstation and listen to music."

Participants also gauged the depth of the relationship by the interest level of their friends and friends' willingness to spend time engaged in shared interests. For example, David stressed the value of having friends who are willing to spend time with him as one of the critical components of friendship:

There are two critical things: that I feel comfortable enough to ask them a favor and they are willing to give me their time. Someone who won't tell me, "Oh, I'm busy all the time"—making an excuse. Friends will give you their time, allow you to be who you are, and respect you for who you are.

Similarly, The Turk also viewed his friends' willingness to share their time with him as an indicator of friendship:

To a large extent, given that all my friendships were primarily within the context of structured events the most common way to do that was continuing to do that, continuing to interact with me in the events. The fact that they continued to interact with me was a sign that they... You know this is college, no one's looking over your shoulder, play with that nerdy kid to make them feel better. So the fact that they did it in a situation in which they didn't have to, was a sign enough for me. The whole issue didn't really occur to me, perhaps being psychologically self centered and all, well I wasn't looking for it. It never presented itself as an issue, but the fact that they [my college friends] continued to do so.

Negative Aspects of Shared Interests

Eight out of 11 participants also discussed their personal awareness of how

engagement in their special interests and/or perseverative behavior was detrimental to their academic performance. For some, hours spent engaged in a hobby or finding others who could engage in a hobby (e.g., online networking) became all encompassing. Participants procrastinated on their academic work or stopped going to class altogether. A few participants labeled their interests as "obsessions." Friends helped participants by bringing the perseveration to the awareness of the participant, attempting to involve them in healthy socialization, and supporting them in times of crisis when they were most likely to socially withdraw.

Two participants commented on their personal difficulties in developing friendships built around special interests into more meaningful relationships. These two male participants have experienced difficulties in transferring the relationships they built from a structured activity to an unstructured one. Essentially, the friendship was bound by the confines of the activity without extending outside of it to other activities or environments. As The Turk conveyed, "All of my friends have been from one context or another and in the context of that pretty much exclusive to it. I've had my [music] friends or my [gaming] group friends or my [book club] friends. I've never really had friends friends." These participants clearly perceive a hierarchical nature to friendship development with trust, support, and connection being at the highest levels of "true friendship."

The Benefits of Shared Interests

Individuals with AS feel passionate about their special interests. Participants discussed their special interests with positive and animated facial features, slightly rapid

speech, and direct eye contact. They talked about their special interests in detail that was beyond my level of comprehension. Feelings of pride for their special talents and success from their accomplishments were conveyed. Those who had graduated from college also conveyed a sense of loss over no longer being in an environment in which they could immerse themselves in their special interests, especially if those interests were related to their academic majors.

Participants also found that the college provided opportunities to find others with diverse and similar interests and this environment was a welcome change from their previous school experiences. They felt *accepted,* rather than judged, for their specialized interests. Therefore, having the opportunity to develop friendships through shared interests provided a sense of newfound freedom for participants. The opportunity to find friends who also shared their same beliefs as related to special interests also made participants feel valued by their peers.

Participants who engaged in shared interests through proximity found value in having friends who encouraged them to attend activities. Rudy discussed how his college experiences were different from high school:

> It helped having that early network because it made it easier in the beginning to network the social scene better. You at least have somebody to do something with, which was not always the case growing up. It was nice to have friends who were better at communicating with our peers. It took some of the fear away from not being able to meet anybody.

When participants engaged with friends in their areas of special interest, they

expressed feelings of self-confidence. Demonstrating an expertise in their shared interest gave them feeling of pride and respect when they were recognized as being knowledgeable and talented in their field. It made them feel less vulnerable socially and perhaps more willing to take social risks. When they felt respected by their friends for their skills, social anxiety was diminished. When participants felt less vulnerable, feelings of trust, support, and connection also had opportunities to develop.

Trust

In addition to the central theme of shared interests, most everyone identified trust as an essential quality of college friendships. When asked to give a definition of friendship, seven participants specifically identified trust as a primary component of friendship. Trust involved having confidence in friends both to be available to them on a consistent basis and to accept them for their strengths and weaknesses without judgment.

The Anatomy of Trust

The process of building trust involves a stepwise progression of participant behaviors and feelings and friend's reactions to those behaviors. The process begins with shared interests. After engaging over time in shared interests with friends who are receptive companions, participants gain a feeling of "fitting in" with friends. When they feel that they fit in, they begin to take risks to share more of themselves. When friends embrace participants' eccentricities without judgment and continue to remain available over time, participants feel accepted. The indicators of trust are availability and acceptance.

Availability – "being there". Participants valued the time that friends spent with

them. For several participants, their college encounter was their first experience with a consistent and reliable friendship. Because participants had experienced a history of repeated social difficulties in high school, they valued college friends who wished to spend time with them engaging in shared interests.

Participants recognized that friends took time away from their busy schedules to spend it with them. Therefore, the mere fact that friends were *available to them* and willing to spend time with them engaging in shared interests was an indicator that the person was a friend. Nearly all participants indicated that they judged a friend's interest in wanting to have a social relationship by whether or not the friend invited them to participate in activities. For example, Rudy explained how his friends showed him that they wished to be his friend:

> [My friends] invite[d] me along if they were going somewhere. Um, I don't know.
>
> They made me feel like...Um, they'd ask what you're doing this weekend and I'll
>
> say stop by. I don't know. Incorporate you into functions and stuff.

In response to friends' invitations, participants reciprocated the interaction and maintained the friendship by inviting the friend to various shared activities. This reciprocal interaction contributed to participant's feelings that friends were "there" for them. "Being there" means the willingness to demonstrate continued engagement over time. "Being there" also means taking time out of busy study schedules to spend special, one-on-one time with the participant. David explained that he has two criteria that he uses to judge the strengths of a friendship. Friendship has, "two critical things: that I feel comfortable enough to ask them [to do] a favor and they are willing to give me their time.

Someone who won't tell me 'oh, I'm busy all the time'—making an excuse. Friends will give you their time, allow you to be who you are, and respect you for who you are." Furthermore, he explained that his friends are "there" for him, "by making themselves available to me by giving me their time."

Participants also acknowledge that friends have demanding study schedules and personal lives. When friends take time away from studying to spend leisure time with participants, trust is demonstrated. Olivia explained how she valued her friend's availability while acknowledging that her friend had a busy family life:

> She's definitely been there for me and she tried to talk to me. You know I feel like she's just definitely been there even though I don't have kids or anything and I don't have a husband. And we definitely talk about relationship things and about fights and everything. She's like my best friend right now and she's leaving in October so I need to find someone to hang out with. It's really a tough thing to find a friend I can actually hang out with. I don't feel comfortable with people that I can't trust the same way.

Joy also valued the time that her roommate spent with her despite having a hectic clinical schedule as a nursing student. The time that the pair spent together involved more than merely leisure activities, such as going to movies and dining out. Smaller time increments were important also. Joy reminisced that her friend made an effort to take time from her own studying to share small moments of humor with Joy to brighten her day:

> She was taking a break from her work and she would look up online cartoons and

they would be hilarious. And she would share it with me and she would turn her laptop over say look at this, a frog in a blender or something like that. So yeah, it was funny and I was like that's kinda twisted but it's funny. So yeah, yeah, she knew that I appreciated her humor.

Likewise, RJ built a sense of trust with his Korean roommate through shared experiences during a study abroad semester in Japan. RJ and his friend depended on one another to alleviate feelings of being "so alone" by spending time with one another. RJ's memories of eating a Thanksgiving dinner of sushi with his friend were particularly special. His feelings of homesickness were heightened during his semester abroad because he was away from his home country during the semester of the attacks of September 11, 2001. RJ explained that being in Japan that semester:

> had a big effect on me especially being a stranger in a strange land and seeing perhaps the lowest point in American history from across the ocean. And I think it wouldn't be a stretch to say that my work suffered a little bit because of it. I became pretty introverted but there was one person that I ended up reaching out to and that was my roommate.

Participants described the feeling of knowing that a friend was "there" for them. For many, "being there" meant that a friend was reliable and available when he or she wished to spend time with them. In previous academic settings, participants in this study had experienced social situations in which they had misinterpreted the intentions of others or made social blunders that alienated friends. Therefore, in college friendship situations it was crucial for the participants to know that friends were a reliable and

consistent source of companionship. As Daishi explains, "If you have a friend you are never really alone." Max Tarkian used humorous example to explain his notion of how friends are there for each other:

> Be there for someone through thick and thin regardless of their background, where they're from. Uh, who they are, not be biased on something other than character. Uh, maybe it's too lofty but you know I guess maybe some give and take as well and um, I don't know if it was the saying….you know if you go to jail the friend will be right there with you. I always thought that was awesome. Make sure [the arrest is] something really stupid. You know through thick and thin which is something I say I see a lot of. There's some that are there through more thick and thin than others.

Because of the tendency for individuals with AS to depend on structure and routine, it is not surprising that the individuals in this study placed value in having friends who were dependable and consistent.

Acceptance. Through repeated engagement, participants also began to build confidence in the fact that friends not only enjoyed their company, but that they accepted them as individuals. Acceptance is the knowledge that friends perceive the participant's strengths and weaknesses, but, as Ananda quipped, "Friendship is enjoying each other's company, knowing everything about each other and still liking them."

Given the shared interests and their abilities highlighted within those activities, participants seem to take a risk and choose to "be themselves". For some, this meant displaying their odd or unusual behavior, interests, or quirks. For others, being

themselves meant disclosing private information about their AS and other comorbid disorders. Participants were able to share their hopes, dreams, fears, quirks, rituals, thoughts, interests, and feelings without fear of judgment or ridicule.

The fact that friends continued to have contact even after knowing their personal information was an indication to the participants that they were accepted. Olivia explained that her friend is "understanding enough that I told her about my condition and she doesn't laugh. You know she doesn't talk about people behind their back like some of the other girls do in our classes." Essentially, as David indicated, acceptance means that friends "respect for who you are" even after knowing all about one's idiosyncrasies.

Thus, participants value the feeling of being accepted by their friends after demonstrating vulnerability. Vulnerability was demonstrated through sharing potentially embarrassing or unusual behaviors. Participants demonstrated their vulnerability by discussing confidential information about themselves, soliciting help, discussing inadequate performance, discussing fears, and demonstrating ritualistic behavior.

Therefore, participants found comfort and relief in the opportunity to "be themselves" around friends. But if Lindsey's explanation is an indication of reciprocity between friends, being oneself means that both parties show trust as part of being accepted:

> I think by allowing myself to or trusting myself to be myself around her because I
> think that when someone is comfortable enough to be themselves around me that
> is something that is precious in our relationship.... I guess to indicate that I
> would allow myself be very open about things like my rituals and the behaviors I

still display with my autism and my behaviors I still display as a recovering anorexic and um, you know, that I was comfortable sharing with her that I really am comfortable with my own things that I eat or I really need to be left alone for awhile or something like that. I would be comfortable with sharing those kinds of things with her and that way she would be, I think, she would be and in the end she would love and accept me because of that.

Participants conveyed that they also felt that they "fit in" with their friends. Fitting in means being accepted for one's unique qualities and finding people who were like them. Ananda, like other participants found college to be a welcoming environment for finding friends who are "quirky like me". Some participants also felt a willingness to share themselves with friends because they felt the friends could understand them based on similarities in personalities, behaviors, and/or backgrounds. RJ discusses the feeling of acceptance he acquired after engaging with others who shared his special interests:

Yeah, clubs were my main resource when it came to making friends. Just sitting in the basement of the residence building, heckling bad movies or old anime was a typical outing, and discussion usually followed after. I was fortunate to have some rather tolerant colleagues to put up with a few of my eccentricities. Most of my friendships through college were usually through the social clubs and interests I chose to attend. Finding someone with a similar interest or expertise helps immeasurably in the need for me to "fit in". It's like in high school with the cliques. If you can relate to a person in some way, you feel less like a stick in the mud, pardon the expression.

Lindsey also discusses the value of being accepted by people who had similar personality traits at her institution:

> ...what was wonderful about this particular one that I went to was that it was a liberal arts school. And so I was going to college with a whole bunch of like artists types and such and so they were well odd is kind of a negative word but I want to use odd in a positive way. And I felt like I fit in more with those people because if I was going to be kind of strange, I wasn't going to be sticking out in college. So that's what the beauty of that was.

Ananda also explains the value of friendship as it relates to acceptance:

> Friendship is very valuable to me. Aside from close family and my husband, it comprises my most valuable human contact. I need people, and I need friends to discuss my problems with, even if it is just venting with no real advice given. I need to feel *accepted* and to know that someone else besides family cares about me. I need someone to go out and *have fun with*, too. Going to a movie without someone to discuss it with later almost misses the point of going in the first place.

The Physiology of Trust

By repeatedly engaging in shared interests with friends who were available, participants found common ground with others. This common ground opened the door to developing trust. Furthermore, when participant's felt less vulnerable, feelings of trust also had opportunities to develop. Participants described trust as an essential quality that develops over time between friends. Rudy described trust as "the life blood of the friendship and without it the friendship chokes and dies." Therefore, developing feelings

of trust served the function of laying the foundation for building support and connection.

For many, learning how to trust friends was a challenging yet rewarding journey. Lindsey illustrates her personal journey between high school and college with learning how to trust:

> Well, I had a lot less friends in high school or middle school absolutely. At least a lot less friends I was able to trust and be...I was, I was not...I had a lot more bullying going on in middle school and high school, a lot. I discovered friends, a lot more people I couldn't, were just not, I couldn't really trust.... I felt very grateful that I even had them [friends] because it was very different than high school where I was trying to keep or maintain friends and kept losing them.... [In college], I can confidently say that I had a lot of friends from a lot of different social groups on campus. Not everyone had that at my college but I was able to expand myself to be able to hang out with more than one social group, something I never did in high school.

Participants discussed a wide variety of positive and negative feelings associated with trust. These feelings overlap with those found in the other themes of support and connection. Participants experienced positive feelings of comfort and acceptance when they were able to trust their friends. For many, feelings of being able to "fit in" to a peer group for the first time in their lives led to a feeling of freedom and relaxation within the college environment that they had never experienced prior to college. The process of learning to trust a friend initially produced feelings of hesitancy and anxiety until the friend demonstrated that she accepted the participant. As Lindsey explains, "I was a little

bit more cautious with that with college, just learning how to trust people more easily."

Once friends demonstrated that they were trustworthy and accepting of the participant, the participant felt encouraged to openly share more with friend. Relief was experienced when the participant discovered that he or she could openly share experiences and feelings without fear of rejection or judgment. Participants described their hesitancy to engage in social situations due to past difficulties and hurts. For these individuals, the continued engagement with a friend over time is in itself an indication that trust was developed. The ability to trust others without fear of rejection also led to the next two themes: support and connection.

Support

Many participants acknowledged difficulties with regulating emotional and behavioral responses to environmental stimuli such as excessive stress in college. Ten out of 11 participants named a comorbid diagnosis that interfered with daily life functioning during college. Seven out of 11 participants considered withdrawing from college at some point due to difficulties associated with AS and associated comorbid disorders.

Comorbid diagnoses included anxiety disorders, obsessive compulsive disorders, eating disorders, self injurious behaviors, suicidal ideation, depression, schizoaffective disorder, bipolar disorder, ADHD, dissociative identity disorder, and Tourette's Syndrome. Participants acknowledged engaging in a wide variety of self-destructive behaviors that impacted daily life functioning. These behaviors include: excessive worrying, social isolation, ritualistic behavior, compulsive behavior, bulimic and anorexic behaviors, cutting, and emotional outbursts. Despite these difficulties, most

participants were able to graduate from college.

Though participants named self-determination and parental support as being contributing factors to their overall success, support from friends was equally important. Four individuals named their connection with friends as the most important driving force for staying or returning to college. Daishi is the only participant who felt that the primary reasons for his withdrawal from college were a combination of academic demands and emotional difficulties from a recent breakup with his girlfriend. All other participants found that the social demands and anxieties related to comorbid disorders were the biggest sources of stress. Participants related that friends provided support through crises.

Participants defined support as the knowledge that a friend was available for them when they needed assistance. As The Turk explained, "Supporting a person likewise involves that her best interests be furthered." Participants solicited the support of friends by sharing experiences that were emotionally difficult or allowing friends to witness vulnerable emotional episodes or seeking the support of friends. In response, the types of support provided by friends included: listening, direct communication, and social modeling. Through continuous engagement with friends who provided support, there were a number of positive outcomes for participants. These outcomes included: academic success, reassurance/self-confidence, a more positive outlook on life, and stressor relief.

Listening

When participants discussed their academic, social, and emotional difficulties friends demonstrated support by listening to the participant's needs without judgment. By being heard, as Joy explained, participants felt they were "cared" for and comforted

specifically during times of crisis. They also felt that they could share their life stressors with friends without being judged. Furthermore, participants felt that friends could listen without judgment because they could identify with the participants experiences. Friends not only took the time to listen, but they listened with compassion, empathy, and concern. Olivia defined a friend as "Just somebody that's always gonna be there for you. And you know you can vent and cry to that will always listen kind of like a big sister." Similarly, Ananda relied on her friend for support while grieving the unexpected death of her husband during college. Her friend's loyal support and empathetic response was unique compared to the support she received from other friends:

My friend, [name], helped me the most after my husband's shot himself in 1985, just before school started. I went to her house on a weekly basis for the [club] meetings. Unlike other members of the club, [she] never judged me for "grieving too long" or making a big show of things. She let me grieve at my own pace, and even deflected some criticism from some of the other members. She would always hear me out, even when I repeated the same things.... I went to her for both advice and comfort. She always had constructive suggestions on how to make things better for myself. I can't say I always followed them, but just the sound of her voice had a calming effect on me.

Max Tarkian spent many hours involved in web surfing or online networking, which intermittently interferes with the time he spent in class or completing assignments, "keeping myself too long in my room." When Max Tarkian initially realized he had a problem with "binging on Facebook," during the summer break between his sophomore

and junior years, he turned to his friend for help.

> I didn't know what to do so I just called [my friend] because I know that he'd
> done that one time. So I talked to him about it and he sent me an email asking
> about it and asking "so what else have you been up to besides this?" And I took
> quite a bit of time to write that letter back to him.

Max Tarkian found comfort in writing a long letter detailing his difficulties with compulsive behavior and resulting anxiety, because his friend responded by taking the time to read the letter. His friend also showed support that summer by making a special trip across several states to visit with Max Tarkian in his hometown. Max commented on the value of his friend's support in comparison to other college friends:

> He's a great guy and I think he listens to feelings more than some other guys but
> then again maybe some are and they just don't show it and address it and help
> them with their problems if they want help. There were things I talked to him
> about that I haven't told other people, so I feel comfortable.

Direct Communication

After listening to participant's concerns, support was also provided through honest, direct communication and feedback. Participants appreciated the fact that friends provided advice with honesty, openness, and truthfulness without being judgmental or hurtful. Because individuals with AS face challenges associated with social communication, it is not surprising that they find a friend's willingness to provide direct yet constructive communication an indicator of support. Lindsey described one of the defining characteristics of friendship as being able to "address what's bothering you in

constructive ways."

Feedback with Specificity

Participants expressed appreciation for their friend's willingness to point out

social blunders in an open straightforward manner that was easily understood, but

without judgment. Ten out of 11 participants used the phrasing "he/she would just tell

me how he/she felt" as an indicator of the friend's forthrightness. This straightforward

approach is comforting to individuals with AS because it alleviates the need for

guesswork, thereby reducing anxiety and reinforcing the trust between friends.

By providing precise and unambiguous communication on participants' social

behavior, friends were capable of and exercised specific and direct feedback. Direct

feedback with specificity is helpful for teaching social skills in a step-by-step fashion,

much like one would teach a math problem. When used to teach specific social skills in a

classroom or counseling setting, this type of teaching is referred to in the literature as

scripting. Scripting is a set of steps used by individuals with AS when practicing and

performing social skills. Using a script helps individuals with AS learn the rules for

different social settings. The ability to use an appropriate script with repeated success

highly depends on the amount of feedback the individual receives on his or her behavior.

Although the individuals in this study did not indicate that they specifically use scripting

to practice social skills, the fact that participants valued direct feedback is evidence of the

fact that they were drawn to predictable, rule based behavior as is consistent with

systematizing thought processes for this population. These processes will be discussed in

greater detail in the next chapter. The value that they place on receiving feedback with

specificity is an indicator that they require significant practice and rehearsal over time. A friend's ability to provide feedback with specificity helped shape the participant's knowledge of the appropriateness of his or her behavior and helped them refine their internal scripts.

Participants feel that friends communicated with them in a manner that provided greater feedback than other people. For example, RJ explained how his roommate helped him to understand social behaviors better:

I think it all came down to maybe he was more straightforward than some of the other people. He would let [me] know if he wanted to change the subject or something like that.... I think, you know, communicating with him helped me improve my communication as well. You've noticed [my] eye contact is a lot better than some of the other [people with AS]?

Joy also explained how her friend used a compassionate yet straightforward style of communication after Joy had periods of emotional difficulty:

She knew that I had trouble picking up on certain cues so she would just outright tell me, not like blatantly tell me, but not hint either, but she would just tell me in a kind way that something was bothering her. Like if I was, for example, if I had cut [myself] and it had bothered her and she would let me know. And uh, she would ask why and try to figure out what was going on, what she could do to help. And that's how she would let me know that something was bothering her.

Friends also found ways to approach participants in ways that would participants would find most receptive. David, for example, appreciated the fact that his girlfriend

communicated her unhappiness in writing rather in a face-to-face manner:

> I'd get an email or instant message that was written to that fact. Her way of
>
> letting me know that she was upset [was] by [sending] a serious email. Not quite
>
> nasty but she was forthright in some things that annoyed her and I'd get an email
>
> saying. I guess it was easier for her to confront me in writing. And I liked that too
>
> so it was all good.

Social Modeling

Participants conveyed that they respected friends for qualities of character, high morality, advanced social skills, and logical reasoning. Therefore, participants aspired to be like friends in terms of social interaction and overall moral character. This desire to pattern themselves after friends meant that they were more receptive to friend's advice and efforts for encouragement. Because participants, like Max Tarkian, Joy, and Lindsey, also admired friend's positive qualities, they found themselves aspiring to take on the qualities of an all around "good person" when they were in the company of friends. The Turk also explains the characteristics of friends that he valued the most and how those characteristics drove his desire to be around them:

> But of the people whom I grew to respect most it was really the personal qualities,
>
> the qualities of character, the qualities of intellectual development, and the
>
> qualities of implementing that character in terms of making oneself into a good
>
> person and bringing out the best in those around the person. So combination of
>
> character and aptitude. I looked forward to being around good people. I don't
>
> know if you read Aristotle but Aristotle talks about friends working together to

bring out the best in each other. So that's—it was the ability to do that with those people was what drew me to sustain relationships outside that context to the extent that I did.

Through repeated interactions and demonstrations of a friend's character, participants reinforced feelings of trust in a friend's intentions to help rather than harm them.

Positive Thinking

Between 55% and 65% of adults with AS struggle with depression. Anxiety and obsessive compulsive behavior also present challenges for adults with AS. Life stressors, such as the pressure to perform well in the academic and social environment of college, likely exacerbated these tendencies. When participants experienced episodes of anxiety, depression, and resorted to their obsessive compulsive tendencies, they sometimes avoided attending class and socializing with others. Many became socially isolated and withdrawn. Joy and Lindsey took medical withdrawals from college when they experienced feeling of, as Joy related, "being in the dark. Not seeing any light at the end of the tunnel." Rudy also cited numerous instances in which classmates or campus professionals made attempts to uplift his spirits through words of encouragement or complimenting him on his success. Rudy explains how the smallest act of kindness by a study partner made a significant impact on his self-image even today:

There was one memorable instance in particular that she demonstrated great compassion and positive reinforcement. We had a major end of semester project that was geared towards the marketing of children programming. The night

before the presentation one of the other girls changed some of the topics of

discussion around. I had to stay up all night to complete the changes; needless to

say I had a mental breakdown and tried to kill myself by taking a whole bottle of

Advil. I could barely talk during the presentation. The changes made it difficult

because I had been preparing on another script. I apologized to her for not

performing at my best. When I got home she had left me a voicemail pointing out

all the positives of the situation. I never had anyone before or since take time out

of their personal time to do something as simple as making a phone call to

reinforce what I did well. I do not think there are enough words to express what

that friendly gesture meant me. For once in my life I truly mattered to somebody.

From time to time when I felt really depressed or hopeless I would listen to that

voicemail for reassurance. Reassurance is particularly important to people who

have Asperger's Disorder. I can never get enough. I think it creates a problem

with my friendships and relationships. I think looking back that might be a

primary reason for my failures in those primary social areas.

During his last two years of college, the majority of Rudy's friends had graduated

from college. Rudy developed a friendship with a woman from career services who

became "the most influential person in his life during those last years." Rudy not looked

up to her as a role model, but felt listened to and encouraged by her:

> [My friend] was a really, was really a great help to me. She took interest in my
>
> work and projects at school. She became a social outlet. She would answer all
>
> my career questions. She would talk to me about how things were going. She

was a great listener and inspirational speaker. She was quiet, smart, and had a

great sense of humor. She is one of the few people who got my sense of humor.

She and [another professional in Career Services] believed in me like few other

people. They were able to see the brilliant things in me that others often over

looked. They wrote glowing recommendations took time out of their schedules

even after I long departed the [name of university]. They provided their expertise

and encouragement as I made the transition from student to full-time working

professional.

As evidence of the value of her kind words of encouragement on his life, Rudy

provided excerpts from six letters of encouragement his friend wrote to him during and

after his college years. One except reads:

We all go through rough times. It's not a question of "if"; it's a question of

"when." Believe me, I try to thank my lucky stars everyday that I have a job and

that I work with such wonderful people. That could change tomorrow. We just

never know. I can tell from your outlook that you are going to get through this

rough patch with flying colors! You have such wisdom, especially for someone so

young, and you have such a wonderful, positive outlook. You are truly blessed

just to be you! Trust me, if everyone on Earth was as nice and as good as you,

this world would be heaven. That is no joke; I've encountered enough people to

know. Please don't ever forget that. You are blessed to be you and we are blessed

to know you.

Participants found that friends provided moral support to them by making positive

comments or delivering kind words of encouragement. For example, Joy described her friend's method of moral support and the value of her friend's support:

> Um, on campus it helped keep the morale up. [She] helped me to keep pluggin
> along and she'd go "Honk honk, Keep on truckin," and she'd go "Honk, honk."
> So, yeah, she was a lot of fun.... She really was understanding and went out of
> her way to like hug me and stuff and just say, "It's gonna be okay" and stuff like
> that and she uh, was instrumental in me staying afloat a lot of the time.... She was
> a big, she was probably one of the two people that were really instrumental in me
> staying somewhat sane in college so she was a real good friend of mine
> throughout the time I was there...for helping me see the glass half full rather than
> half empty.

Olivia also appreciated her friend's moral support when she experienced an emotional, embarrassing outburst in response to a poor grade in class:

> She never really is mad at me. Well, if I go to the bathroom, if I run out of the
> room crying she'll come check on me. She says, "Olivia, are you okay?" And I'll
> be in there crying and blowing my nose and she says, "It's going to be okay."

Furthermore, Olivia appreciates her friend's efforts at constructive rather than hurtful criticism after one of her "fits": "She'd say, 'You shouldn't be so negative. Have trust or faith in yourself....' She says, 'You can do better than what you are doing.' Sometimes she says, 'You are just being lazy.'"

Perspective Taking

Participants also found that interacting with friends who were all-around "good

people" helped them to view the world in a different light. Max Tarkian had many

positive comments about his friend:

> He's a really charming fellow and he's you know a really nice guy who listens to
>
> people and I'm comfortable around him. This is a good guy to be around... a
>
> really interesting fellow, very creative, very energetic, so energetic, very bubbly,
>
> nice person to be around. I like his personality. There's a lot to learn from him
>
> [about thoughtfulness] because you know I might just not think about things and I
>
> really regret it.... He plans better than I do. He still seems like a free spirit who
>
> uses life in general as his cocaine.

Prior to getting to know his friend, Max Tarkian, an agnostic, had adopted biased

opinions of Christians and Southerners as being unintelligent and hypocritical. Max

Tarkian had based his opinions on childhood interactions with his Southern grandparents

who were "from a much more conservative generation." By witnessing how his

intelligent Southern friend "actually lives by" his Christian values through genuine acts

of kindness towards others, Max Tarkian has now revised his outlook:

> I kind of feel stupid for even assuming that in the first place. I mean that
>
> [Southerners] weren't very likeable because of that. That and I guess realizing
>
> there are guys out there that have interesting conversations other than the dirtiest
>
> things to talk about, like how many women they've banged or what kind of sports
>
> they can do.

Max Tarkian went on to explain how engagement with his friend has further

influenced his perspective and affect:

In my friend I have found a guy is constantly in good spirits, or so it seems, and I believe that part of it has rubbed off on me. Also, among other males, I feel as if I can actually relate to him, since things aren't all about sports and winning and chasing girls. I can relate in feelings. He has also increased my respect for Christianity, as he is not pushy with his religion, but simply lives with the golden rule as a guideline. Personally, I think his style of Christianity could make up for the Crusades and European and colonial missionaries, if everyone would follow his good example!

Chamillion also explained how his struggles with perspective taking led him to being hurt by people he thought were his friends and cost him his true friendship. Although Chamillion's friend tried to warn him about others' ill intentions, Chamillion ignored his friend's warning, ultimately hurting his friend's feelings and losing the relationship.

My sophomore year was the most difficult year for me, because I was going through lot things with my life. My friends helped me out when people on campus were taking advantage of me with my SUV. My friends in college always tell me that I have to realize who my real friends are. Young adults with Asperger's don't understand when they're being taken advantage of and they want everyone to be their friend. Like they say, "Everyone is a friend, until they prove otherwise." I was listening to my Lil' Kim CD and I heard a quote I will always have with me: "Not only do you gotta watch the boys in blue, but you gotta watch your friends too."

In hindsight, Chamillion expressed regret for not listening to his friend's kind words of warning. Chamillion conveyed that his friend was different in his actions from the people who were not his true friends. "He'd make sure I'm alright and check on me every other day." And in his values, "he was really down to earth, caring and strong."

Positive Outcomes from Receiving Support from Friends

Participants found that interacting with supportive friends provided many benefits. The benefits of these interactions included: positive social outlets, self-confidence, and academic success.

Positive Social Outlets

Engaging in special interests through a supportive, caring relationship with friends provided a positive social outlet that allowed participants to engage in healthy activities rather than self destructive or perseverative behaviors. Therefore, just being involved in a healthy supportive friendship provided a diversion from comorbid symptoms while simultaneously providing appropriate social models in the form of positive thinking and perspective taking as mentioned above. Joy explains her friend's role in encouraging her to become involved in healthy pro-social activities even in the throws of depression:

> She would get me involved in the campus life activities. And we were involved because I was in music. We would do the praise and worship team and stuff like that and she would help me to get involved in like the activities locally with the youth. We, I think a couple of times [volunteered at] the soup kitchen in downtown [college city] and that was fun too because the homeless people were a

blast to work with. They were, they have a good, not all of them, but a lot of them had a good outlook on life and they were like "I'm breathing and I'm here. I'm not dead and that's a good day." It helped me to appreciate what I did have because I had more than they did and she helped to show me the glass half full.

Likewise, Olivia's friend provided her with transportation to school and encouraged her to engage in healthy leisure activities. Olivia recognized that without her friend:

> I know I wouldn't get out of the house much more because I don't drive. That's one thing about me. I don't drive and I don't get out of the house in the mornings. And I've been through surgery, gastric bypass, and I know if I stay home I'm just going to eat all day so I have something to do. I need something to keep me busy. If I just sit around I'll eat myself out of house and home.

Lindsey also discussed taking a medical leave of absence from college due to difficulties with her eating disorder. The value of college friends as a positive social outlet became evident to her when she had returned home during her withdrawal from school.

> In my particular case, um, I wanted to go back. Well I missed college when I was gone. Because when I took a semester off, I was all the way in [home town] with my dad and [I was] working full time [with my dad at his] retirement firm. So I really was quite isolated at that time and as much as I needed [to be on medical leave] at the time, I was missing my friends a lot at college. And I was missing playing music and all that so I had this desire that I wanted to go back so by the

time the semesters end or by that next semester even though I wasn't completely recovered or anything I felt like I was strong enough that I would be able to pull it out to go to college and my friendships, the strong friendships that I had with people was a big motivator.

Five participants, Rudy, Joy, Max Tarkian, RJ, and Olivia, found that interacting with friends provided a welcomed diversion from self-destructive behaviors. By replacing self-destructive behaviors with positive social behavior, participants' coursework was positively influenced. Rudy explained that during his junior year of college his "workload increased and friendships went away for a variety of reasons." One reason was the loss of access to friends after he moved out of the dorm in his junior year following his closest friends' graduation from school. He earned a higher GPA during his freshman and sophomore years when he was actively engaged with friends; his GPA was negatively impacted when he became socially isolated.

> I think [my friendships] affected [my coursework] because [my GPA] was really high. [My GPA] was really good. And when things are bad, things are really bad. So it definitely impacted it.... I used to study all the time and work all the time. So I was obsessed with it. When things go well, then things don't go well and just sort of well. I don't know, it was the belief that what you're doing is worthwhile.

Rudy explained that during his junior year, he immersed himself in his schoolwork as his coursework became more difficult and he started an internship. Without the diversion of friends, he focused on his schoolwork while simultaneously

putting tremendous pressure on himself to perform well academically. Perseverating about his schoolwork, he became socially isolated. This pattern continued until he developed clinical depression and suicidal thoughts for which he received counseling during his junior year. Although Rudy had a history of depressive episodes dating back to high school, his depression lessened during his freshman and sophomore years. His depressive episodes in his early college years were "obviously not as much I'd say because I was busy. But I was interacting with people, so I'd say it wasn't a concern because I was doing well in school and I was doing well outside of school. So things were going pretty good."

Self Confidence

Participants also expressed that being involved with a particular friend or set of friends provided a bridge to social interaction with other people. Nine out of 11 participants identified having an association to two or more friends. By having a friend who was outgoing, the pressure of social interaction was reduced. The friend was able to introduce the participant to other individuals who accepted the participant as being part of the group because they were already accepted by the friend. For participants who tended to be timid in social interactions, being with the friend also gave them confidence to join in group activities while also providing some reprieve from having to initiate the interaction alone. Lindsey explains how being friends with someone who had many friends alleviated some social pressure carried over to various social situations on campus even when her friend was not with Lindsey:

I think by feeling accepted by someone who was quite popular in my mind—she's

not sure about herself—but I felt like since I was accepted by her, I felt, um, not as nervous to approach other people as I would if I wasn't close with her. Like her friends would definitely accept me if she accepted me kind of thing. It was a small campus and so a lot of us knew each other because I could hang out with them without her. I can confidently say that I had a lot of friends from a lot of different social groups on campus. Not everyone had that at my college but I was able to expand myself to be able to hang out with more than one social group, something I never did in high school.

Rudy also explains how he felt more confident to enter social situations with the support of his friends being by his side:

It certainly makes things a little bit easier when you're with people that can, you know, introduce you with other people and can. You don't have the reliance on being the one that has to do all the talking.

Providing Academic Assistance

Although the majority of participants indicated that friends had no direct impact on their academic performance, four relied on friends for academic help. Their friends assisted them with studying, preparing for class, or maintaining focus on academics. For example, Olivia explained how she relied on her friend for help with managing her time and focusing on her work:

She helps me with my math homework. Because I have to get ready for a big final tomorrow morning. That's my hardest class. I'm passing the class but....
We had some homework and I had one missing and she made me go through all

of them and do them until I was finished with it. She sat there and did her homework and I did my homework. I actually called her and asked her to come to my house with me and help me out because I was wasting all day with homework. It helps [with coursework] because I have her there and she knows that if I need help with my studies I'd say [to her] what's this about or I don't understand this.

Similarly, Chamillion's friend would "make sure I'm all right and check on me every other day.... He'd make sure I'd wake up, get to class" during his first semester of college away from home. Chamillion's friends helped him study for upcoming tests or helped him prepare for upcoming assignments. Joy also explained why she enjoyed studying with her friend because it helped her put life in perspective, "We did studying together. That was actually fun because she made things like light and it helped me to stay uh, not *just* stay afloat but see the lighter side of things and to see the glass not half full but half empty."

When participants felt trust and support from friends, they were able to develop deeper relationships. This reciprocal feeling of caring between friends is called empathetic concern. Empathetic concern contributes to feelings of connection between friends. These shared experiences contribute to feelings of connection that will be discussed in greater detail in the next section. The building of this level of friendship is called connection.

Building a Connection

As feelings of trust and support developed over time, college students with AS begin to develop deep feelings for friends. As described by Chamillion as a feeling of

being "close" to his friend, these connections were analogous to a special bond that was unique in comparison to other friendships, acquaintances, or relationships. Connections were built through a combination of shared experiences and a feeling of trust and support from friends. Participants used terms such as "bond," "togetherness," and "kinship" to describe these connections. The Turk used the term "partnership" to describe his notion of friendship:

> True friendships are a partnership that involves people working with each other to bring out the best in each other. Very philosophy major answer I know but I guess there is you know just people having fun together which I guess is what a lot of people would say about friendship, I mean you know that's acquaintances that have fun, I think if you want true friendship you've gotta have something more than what typically passes for friendship.

The "something more" that Turk describes is a feeling of connection that is stronger than a casual relationship. Participants described a level of relationship development with friends that was of more personal value than that of mere acquaintances. This section describes aspects of the process that occurred over the course of friendship development that led to connection for these college students. Due to the fact that this study focused more on the actual interactions that occurred between participants rather than the stages of development, the following discussion likely does not include all of the factors that impact friendship development or connection. Furthermore, this study was not intended to organize the stages at which specific feelings emerged into a specific hierarchical order during the process of development but only to

shed light on the factors involved in friendship development.

The following diagram provides a visual model of the evolution of the feeling of connection. Participants begin with a feeling of being on common ground with their friends. By having a sense of commonality, participants have an opportunity to build feelings of trust and support through positive interactions with friends. Positive social interactions occur through reciprocal behaviors. Along the process of development, participants also described personal growth and maturity through their friendship connections. The combination of personal maturity plus reciprocity through the course of friendship contributed to the overall growth of the friendship. The combination of all these factors led to feelings of mutual understanding and mutual concern that are synonymous with feelings of connection. Figure 2 depicts the process of building connection.

Figure 2. The Process of Building a Connection
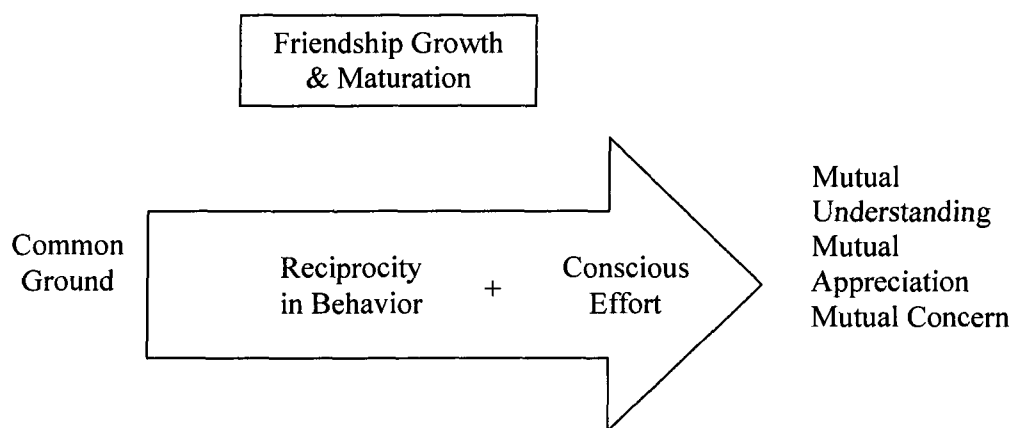
Common Ground

As described in previous sections under trust and support, participants felt as if they were accepted by friends for their personal strengths and weaknesses. Participants also felt that they "fit in" with friends not only because they were accepted for their uniqueness, but also because they shared commonalities with their friends. These commonalities came in the form of similar personality styles and shared lived experiences. Participants felt that friends had "walked a mile their shoes" or had at least experienced similar types of social difficulties that they had experienced in their high school years in terms of social rejection. For these reasons, participants felt that friends could understand their emotional pain and social isolation in a special way.

Shared Life Experiences

Participants also felt that friends could understand them because they were bonded through similar backgrounds and/or life experiences that transcended beyond the scope of casual acquaintances. Friendships flourished when participants shared similar personalities and similar background experiences. RJ explained how he felt connected to his roommate during a semester abroad in Japan because the two shared similar life experiences and similar "quirky" personalities:

> Considering the little bit of Asperger's that I have is—I've always felt like there's always something that set me apart from everybody else that I came in contact with and I just guess that makes me feel a little bit more vulnerable than everybody else. And then coming into this strange country [as an exchange student] and then it's like to feel so alone. And then there comes this guy who has

a little bit of *maverick* inside him too but maybe for different reasons but still.

RJ explains why he and his roommate felt bonded by feelings of being outsiders within the Japanese culture:

It is extremely hard for an outsider or a Westerner to come in and actually

understand the culture because there's a big difference between Eastern and

Western culture philosophies. Easterners are naturally apprehensive when dealing

with the Westerners. Rightfully so, because there's old Chinese revolutions and

stuff in Indochina at least there is—that Americans are more seen as curiosities

than equals. The more I tried to reach out and try to study it, there was always a

little bit of unfairness there.

RJ explained how this commonality of feeling separated from the dominant culture helped to bond the pair together over time and create a feeling of closeness that was qualitatively different than relationships with American friends:

I say [my interactions with him were] much easier because you know as

Americans we want to put up a façade when we first meet people and then when

we know each other more and more we try to peel away the façade of each other

to get to the true people. I think in my relationship with [my friend] we knew it

was useless to have a façade. Both of us knew we were kind of strange in our

own way.

RJ and his friend had an understanding that they were "outsiders in a strange land" looking into a culture in which they never felt fully integrated. This commonality led to his ability to form a connection to his friend:

I find friendship as a way to express your feelings to a person without worrying that you have to hold back. In a way, that usually connects with others who sometimes get to know you better than your parents or your brother or sister. In a sense, they can be a treasure trove of knowledge or other focus that you would never really comprehend if you are on your own or relying on your family.

When individuals with AS can find friends who have experiences of social rejection and/or emotional hardship similar to their own, they feel understood. Three other participants, Joy, Lindsey, and Max Tarkian also described a connection they felt with friends who could *empathize* with their struggles. These three engaged in pervasive ritualistic and repetitive behaviors that impacted their daily life functioning. Joy and Lindsey's ritualistic behaviors centered about controlling eating patterns that manifested as an eating disorder. Max Tarkian also demonstrated some compulsive behaviors that included "binging" on Facebook.

Lindsey explained how she was initially cautious of trusting her college friend, but these feelings dissipated after she found that her friend had experienced similar hurts:

I feared that she was the type that maybe seeming popular and stuff that if I had done something that might have offended her or made some sort of social mistake that she might could ditch me or think that. But when she shared with me how she was an outcast in junior high and high school, I started to feel like, um, I could relate to her more and that in a way brought us closer. Because I thought, "Oh wow! Really, um, that if I do anything strange she's not going to judge me out of that." You know I think that was one of the things too that really made me

feel...like trust that she would still accept me for who I am. Um, that she understood me was when I developed an eating disorder during my third year of college and that's when I took my semester off of school for. And she had shared with me about her experiences during her grade school years, during her junior high school years with that. And so you know even though when I returned to school I was still physically better but I had the psychological, psychologically it's still there with you. And so I can still act like I have rituals and strange behaviors I've established and stuff but she understood that. And I think that kinda made me feel like I was closer to her.

Likewise, Joy felt a bond with her roommate that also allowed her to "be herself," which meant being open about her self-injurious behavior of cutting her arms with scissors as well as her eating disorder. This ability to be "open" with her friend created a special feeling of closeness for Joy during her "darkest times."

A lot of people hide it [cuts] but I felt that and when I went to class I did wear like sweaters and stuff like that and when I was on my hall but when I was in my room with her I didn't see any reason to hide it because I felt she was somebody who could, not just help, but could understand in a way. Because she had been through some things in high school experiences that were hard. She had not a hard childhood but a difficult one so she could understand to a degree, not to the full extent but to a degree what was going on and could empathize a little bit.

As described in the previous section on support, Max Tarkian also described how he felt comfortable reaching out to his friend for support when he "binged" on Facebook.

Max Tarkian felt secure that his friend would not judge him for his obsessive compulsive behavior not only because his friend lived by his "Christian values" and was an "overall good person", but also because "I know that he'd done that at times." For these participants, the bond was strengthened because they felt accepted and understood by friends who had the same lived experiences, social rejection, and associated emotional pain.

Reciprocity

One key element of connectivity is reciprocity. All of the participants in this study described their *definition of friendship* as being built on a reciprocal, rather than one sided, exchange of feelings or behaviors between friends. As described in the previous section on support, participants expressed feelings of gratefulness and appreciation for friends who "were there for them" as a reliable and constant source of companionship. In return, it was important to most participants to also be reliable friends. As Max Tarkian explains, friendship is "being there for someone through thick and thin, regardless of background, through conflict, and give and take." Likewise, Chamillion acknowledges that friendship is a "closeness" in which both parties are "trustworthy, loyal, caring, forgiving, thoughtful, and there for each other."

Gender Differences

While *all* participants acknowledged that friends were "there for them" in a time of need as part of trust development, males and females showed differences in the way they evaluated friend's demonstration of friendship. For the men, an indication of friendship was when friends exhibited *behaviors* that demonstrated that the friend went

out of their way to help them. In reciprocation of their friend's good deeds, participants also demonstrated acts of kindness towards friends such as doing favors or nice things for them.

Male participants – acts of kindness. Rudy and David felt that an indicator of friendship was a friend's capacity to do "favors" or "give me their time." David demonstrated his affection for his girlfriend, whom he chose to identify as his friend through the following behaviors, "I did favors for her and if she needed something I did it. I did things that were pleasurable for her like give her lots of hugs and provide everything for her, drive her around town."

Likewise, David measured the strength of friends' commitment by a friends' willingness to do favors. In reciprocation, David also did thoughtful things for his girlfriend such as planning a vacation to her favorite ski resort.

Max Tarkian's friend showed he cared by organizing a birthday party with other friends from his dorm. In return, Max Tarkian demonstrated his connection to his friend by "listening to him" in a time of need.

Rudy also looked for the qualities of "give and take. Sometimes you have to put your interests aside and do things you might not [like to do.]" Like David's definition of doing favors, one of Rudy's of defining qualities of friendship is that friends can be reliable sources of help. Friends are "someone you can depend on. Someone you can count on. Sharing trouble or they won't just sort of leave you. They will kind of work with you. Like say if you had an accident or something and it's serious and they're busy that week they would fly or they'd figure out a way to come and see you." Rudy

provides a second example of how a friend would demonstrate an act of kindness in not necessarily a crisis, but a difficult situation:

> Say you were on the side of the road and you're stranded and your car breaks down. So you have a flat or something and you don't know how to fix that flat. You have no experience with it but your friend does so you'd call him. Now if the person, say he's busy, but he makes it. You know he's going a different direction, but comes back around. Obviously somebody who doesn't care about you isn't going to come. They're going to say they're busy or they're not going to answer their phone or they're not going to umm...or if you loan them money they're not going to pay you back.

As an indicator of his friend's benevolence, Daishi's friend sold him video games at more than a half price discount at a time when Daishi had no income. In return, Daishi trusted him to borrow his most treasured video game, something he would never have allowed with people he does not trust. While gestures like these may seem trivial to neurotypicals, from Daishi's perspective they were indicators of the strength of the relationship due to the attachment, importance, and energy that he invests in activities related to his special interest. On a daily basis, Daishi spend 5-6 hours per day with his friend in acquiring and perfecting his game skills. Like Max Tarkian's "binging" on Facebook, RJ's excessive web surfing, and Olivia's online dating consumption, these activities interfered with daily life functioning when taken to the extreme. Even though the extent of Daishi's involvement in his special interest was apparent throughout his conversation, he was the only participant who did not consciously acknowledge how

these activities impacted all aspects of his life including his capacity for reciprocal involvement in activities outside of his special interest. Nevertheless, Daishi was able to identify reciprocal behaviors that were of personal value. Even though the majority of his time with his friend appeared to revolve around video game activities, his deeper connection to his friend may be better understood by his definition of friendship, "If you have a friend, you are never really alone."

Female participants – words of kindness. Female participants also valued the ability to "be there" for friends when they needed them and vice versa. However, the women evaluated reciprocity through a friend's capacity to demonstrate emotional support and vice versa. It was important for the women to feel understood, listened to, and cared for by their friends. It was also important to female participants to make their friends feel listened to and cared for. To that end, female participants made a conscious effort to do thoughtful things for their friends and/or to say kind words to friends who needed support. In addition, female participants described reciprocal feelings of affection and love that evolved from having a trusting and supportive relationship that most male participants did not develop towards their same sex friends. The two male exceptions were David, who described feelings of love towards his friend/girlfriend and Max Tarkian who described the importance of being listened to by his friend. All other males described friend *behaviors* that demonstrated acts of kindness.

Conscious Effort

For Joy and Lindsey, demonstration of reciprocal social skills was conscious effort to exercise skills in social awareness and social facility described in the previous

chapter. Both women stress the difficulties of learning how to attune to other's needs and to present themselves in a caring and thoughtful manner. Lindsey described how she made a conscious effort to be a good friend by listening and providing emotional support:

> Well, um, I had learned a lot from reading Dale Carnegie books years beforehand and um, I remember learning about how if there were things that were nice to say to somebody or you know trying to, or a way for someone to really bond with you is if you take the time to listen to them, so if they had or whether it was an upsetting experience that she wanted to share with me or a very happy experience that she wanted to share with me. And she wanted to tell me the story about it, she may have had all these details I may not remember at the time, I would listen to her because that was one indication or a very strong indicator of you know I'm interested in being your friend. I actually care about you. You know. I'm happy for you when you're happy and I will, you know, be a support to you and I will be upset for you when you have a day that is not treating you well. So I was good at, always, not always but I consider myself to be a very good listener. Um, even though I may not be the best at verbally communicating where people may not get me in the right context or things like that. Um if there was for example, like if there was that she did that was really a wonderful favor for me I would take the time to write a very sincere thank you note to her because I knew that was a very good, it's good friendship etiquette to do that. Um, if I noticed something that I really liked that she wore or you know had a talent for I would make sure to remind myself to compliment her on that and be very sincere on that. Not just say

one sentence but maybe a few sentences about you know I really like this and explain as to why I liked it and things like that.

Lindsey describes an evolution of her friendship that blossomed because she took the time to practice and develop positive social behaviors. She explains that these positive habits "require training and discipline." Joy also explains how her friendship evolved into a deep connection because she made a conscious effort to be a good friend:

Friendship for me is something when not only is it one sided, but maybe it is that way at first but over time you get to know the person and you bring something to the table, even if you don't have anything at first and you get to know them and you offer advise and you comfort them when they need comforting you cry with them, you really intently listen whenever they have something to say, back and forth type of thing, what true friendship is, it is something that goes beyond the esthetic thing or the popular thing, it goes deeper than that it goes to the core of who we are. As Mork and Mindy used to say, "We nanu nanu each other."

Both women had to learn how to deliberately take on the role of being a friend. These actions included deliberate learning of social skills and constantly reminding oneself how to demonstrate positive friend behaviors. Individuals with AS must also face their fears of vulnerability and intimidation in order to open themselves to the possibility of having a connection with others. This is a labor intensive process that requires extensive conscious effort. For neurotypicals, this decision occurs more on the subconscious level as an intuitive "gut" feeling about the worthiness of a friend's qualities. For individuals with AS, the decision to proceed with the relationship and to

demonstrate reciprocal behavior is a much more analytical process that occurs in a step by step or slower fashion. In other words, individuals with AS may have a checklist or specific list of criteria friends have to meet before they can move to the next level of friendship. Participants also provided extremely detailed and precise cognitive definitions of friendship. Lindsey provides a description of how her thinking about friendships evolved over time by having a close college friend. She also describes how she looked for certain "indicators" that would should her if her friend was sincere and trustworthy:

> Before college like in high school and stuff I was quite naïve so I didn't really know...I kind of would mistake some people if they made some comments to me I thought was sincere turned out really not to be so sincere, or if it was something they just said I would easily forget it if they said something nice to me. Um so I was a little bit more cautious with that with college, just learning how to trust people more easily. Um so at first um you know with other people I was like 'Its very nice that [my friend] is saying some nice things to me and that she's being friendly with me and saying hello and everything back but I was kind of like, a little hesitant. I am still nice to people but I'm just sort of still cautious about that. Um, I think when she has said some very, very touching things to me about my music and about my performing um and when I had performed at some of these shows she would be happy to help me out if I had to get ready that seemed to be a strong indicator. Um, you know, she would give hugs a lot and I thought that was a strong indicator. With this particular young woman I think at first I was

intimidated by her in a way. Even though she was always from the get go sweet and always sounded very interested in me, she was just so beautiful and she had um a lot of friends like and she was just had wonderful talent was just a wonderful singer um you know I just she was the whole package and I was kind of intimidated by that at first. So I wasn't sure the part of being cautious was whether she was really you know gonna wanna maintain a close friendship with me. I feared that she was the type that maybe seeming popular and stuff that if I had something that might have offended her or made some sort of social mistake that she might could ditch me or think that, but when she shared with me how she was an outcast in junior high and high school, I started to feel like um I could relate to her more and that in a way brought us closer because I thought oh wow really um that if I do anything strange she's not going to judge me out of that.

However, Lindsey discovered that through time and slowly learning to trust her friend she felt understood and accepted by her. Lindsey gradually felt comfortable enough to allow her friend to witness her ritualistic behavior associated with her eating disorder. When her friend maintained the relationship over time without judgment even beyond her graduation from college, Lindsey finally felt comfortable to fully disclose all information related to her autism spectrum disorder. This disclosure coincides with the publication of an article in Glamour magazine about how David and Lindsey's romantic relationship is impacted by their diagnoses of autism:

Then in the past year when the article came out and I had told her beforehand about my diagnosis and everything and um she was just so eager to learn more

about autism and she was doing more research and everything and wanting to
know more about how Dave and I live and all that. Um, and she was so accepting
of it and I was thinking she was so much more real and I we started out on great
terms and we got closer through that. We don't talk everyday and we have our
busy lives too. And she has her other friends. She touches base with and stuff.
And I have my own stuff going on too. But I think that's a very special friendship
to me.

Lindsey's description of friendship development provides a clear description of
the difficult process that individuals with AS face when initially learning the give and
take process of friendship. Other participants, both male and female, discussed the
feelings of intimidation and vulnerability that are associated with being unsure of how
friends will respond to their efforts to demonstrate friendship. One reason that
individuals with AS find it difficult to maintain friends is because the conscious process
of learning the best methods of reciprocation takes time and effort. I believe it takes a
special friend who is able to see the efforts that an individual with AS is making towards
being a good friend and one who is willing to wait for that process to evolve.

For these reasons, I believe individuals with AS tend to allow friends take more of
a leadership role in advancing the friendship at least at the beginning until they built
confidence to reciprocate positive behaviors. Ananda and Olivia described their
friendships as being similar to a big sister/little sister relationship. Both women value the
emotional support given by their friends and the support that they were able to give in
return. Ananda discussed how her she has emotionally matured within the nearly 30 year

friendship. When she was in college, Ananda was very "clingy" to her friend allowing her friend to take the lead in social situations, but over time she has become "less needy" and "more like an adult. More of an equal." Living far away from one another, the relationship has progressed to the point that "I don't have to spend every waking moment with her. Quite obviously I can't. Nor do I email her every day [like I used to]. In response to her clinginess in college, Ananda's friend was "mothering almost" but like a "big sister, little sister relationship. If I had a sister, that's the relationship I would have wanted with her." Like Joy and Lindsey, the pair also demonstrated their connection to one another through physical affection, "we hugged a lot."

Olivia also explains how her friend is somebody "that's always gonna be there for you. And you know you can vent and cry and that [she] will always listen kind of like a big sister." While Olivia has only known her college friend for five months the pair has built a reciprocal connection, "she's always there for me when I need her and I'm always there for her when she needs me." While these two relationships appear to have elements of dependency that reaches beyond the scope of typical friendship, both participants conveyed that there were elements of reciprocity such as caring for one another and being there for one another.

Mutual Understanding, Appreciation, & Concern

As described in previous sections, participants described feelings of acceptance from friends. Feelings of acceptance as part of trust coupled with support led to overall feelings of being "comfortable to be myself" around friends. Six participants described not only being comfortable and accepted by friends, but also being *understood* and

appreciated by them. When these feelings of being appreciated for one's unique qualities emerge, a feeling of connection is achieved. Rudy explains his definition of connection:

> Connection is the process of advancing the friendships from just saying hi every once in awhile to hanging outside normal activities. It is the realization that this person accepts me as a complete person and chooses not to focus on my faults or flaws. They may even grow to appreciate or accept your quirks. It's the glue that holds the bond or friendship together.

Likewise, Ananda explains with pride that she has developed a common "history" over the course of twenty years with her college friend. She also describes how the qualities of shared interests, acceptance, and support contribute to feelings of connection she has for her lifelong friend:

> For me friendship is for life. Friendship is enjoying each other's company, knowing everything about each other and still liking them. Enjoying spending time with them, enjoying their company, friends are fun to be around or if not fun at least soothing.

Friends demonstrated appreciation and concern for participants through acts of kindness, thoughtful words, listening, and providing favors. Joy gives examples of the extra "effort" she put into showing her friend that she cared about her through thoughtful words and kindhearted actions:

> I had this program called *Picture It* on my, it's 2002 like XP or whatever, on my computer. And the funny thing is I would take like pictures of me making goofy faces and make cards and print them out on my computer and make homemade

cards for her. And on the back of it would say this is a [Joy] card or something like that instead of "this is a Hallmark card." I got her—I think I saved up some money for awhile—I got her some roses. I think I got her some pink roses just to show her I appreciated her and that was for her birthday so. Um and she actually would cry when I gave her that. And I was like, "It's just roses" and I didn't understand the emotional aspect to that. She was like "How did you get the money to do that?" And she was like "You didn't have to do that." So that's how I showed her that I cared, that it was important to me, her relationship and friendship.

Joy's kind gestures not only demonstrated that she cared but that she also appreciated her friend for all the support she had given her through difficult emotional periods.

Artifacts

Evidence of connection with college friends was also demonstrated through participants' choice of artifacts. These items fell into three categories: tokens of affection, shared activities with college friends, and personal growth and development. The thoughts and feelings represented by the items represent the characteristics and values supported through the interviews. Participants discussed feelings of trust, support, and connection with friends.

Tokens of Affection

Two participants discussed items that were gifts from friends. Ananda displayed two pieces of jewelry, a refrigerator magnet with a saying about friendship, and an

inspirational poem given to her by friends. The artifacts serve a reminder that "I have someone outside my marriage that I can love." When asked what feelings she has when she looks at these things she said that she feels "cared for."

Daishi received a unique and expensive knife from his friend as a departing present when the friend moved away temporarily. He expressed feelings of surprise and appreciation over the fact that his friend would buy such an expensive object for him when he knew he could not afford it.

Shared Activities with College Friends

Three participants displayed objects that reminded them of shared activities with friends. These objects include: pictures of the individual with a group of friends (Chamillion), a printed Hawaiian style shirt with postcard pictures of college buildings (Rudy), and an article of clothing associated with a specific college club (The Turk). Two other participants included objects that reminded them of tools they used for accessing friends. These objects include a postcard with a friend's contact information (Olivia) and a laptop computer (Max Tarkian).

Chamillion shared pictures of groups of friends at a bar or a club "just socializin' and having fun." The pictures remind him of how he made friends. He indicated that he can look at the pictures to have "good feelings." Rudy shared a collared shirt from his university that was imprinted with university buildings. The shirt reminds him of the times he spent at the college having fun with friends at sporting events and other shared activities. The shirt brings elicited feelings of "nostalgia" of his college times as well as a reminder of his accomplishments and pride for the university.

Olivia shared a postcard with a friend's contact information including name and phone number. This card reminds her of "all the times I've called [friend's name] in the morning, saying to her I've overslept, I need your help with homework, could you come pick me up earlier or come later? Just when I've called her, when I've needed help or assistance."

Max Tarkian brought his laptop as a symbol of his social connection outlet to others through Facebook. He had mixed feelings of the laptop as being a "double edged sword." On the one hand, it is his tool to for learning and social connection through Facebook, but on the other hand it represents addiction. He explained that his use of Facebook and other websites make him feel safe because he feels more at ease with the invisibility of this type of interaction. Communicating by computer puts less pressure on Max Tarkian to perform socially in face to face interactions, reducing his social anxiety. While looking at the laptop during the interview, he experienced a desire to open it up and check his email and Facebook page while also feeling conflicted about neglecting his work. Finally, The Turk shared an article of clothing that is worn by members of a college club which constituted the majority of his social involvement on campus. He asked that the name of his club be kept confidential. He also expresses mixed feelings:

> [There are] positive memories of the discussions I engaged in. Some not so
>
> positive memories of some of the, not just plain isolation, but isolation plus
>
> awareness of the discrepancy, not like jealousy but it reminds me of the feeling of
>
> being on the outside looking in and of course, with the social anxiety, I
>
> [participated in the club activity] and stuff but there was alcohol served and I

often drank a little bit to reduce my social anxiety.... So yeah there's some joy

and some fondness but also some uncomfortable memory whatever the word for

that is and some shame involved too.

Personal Growth and Development

Four participants shared objects that reminded them of their personal journey of

maturity and emotional development during college. Though these objects were not

specifically tied to their friendships, all participants indicated that a friendship discussed

in the interview was important during various times of their college careers.

David brought his bike to the interview location. The bike represents freedom he

experienced during college because he did not have transportation. He expressed pride in

riding on tours of over 200 miles for fundraising events. He rode his bike during long

distances of over 30 miles from his college campus to his parent's house against his

parent's wishes approximately once a month. Riding his bike gives him a sense of

freedom and relaxation.

RJ shared his student identification card from his semester abroad in Japan. This

card reminds him of a journey of personal growth and development that he experienced

as a result of his study abroad. While RJ feels personal ties to the Japanese culture

because he was born in Japan, he also experiences feelings of regret because he wasted

his semester abroad with poor academic performance. RJ engaged in some compulsive

behaviors related to his areas of special interest. At the same time, he felt like the

experience of being exposed to the Japanese culture was a catalyst in making him decide

"what I really wanted to show for my life.... This brought up feelings I had never really

considered when I was in a sheltered high school life."

Lindsey chose to share:

A promotional flier that I photographed, designed, and distributed myself that advertised the senior show I was throwing in my final semester of college. This was a typical thing most music majors in my college did during their final year of attendance as a way of saying farewell to the students, faculty and the school. Each senior had the freedom and flexibility to create whatever they wanted to incorporate in their show (location, stage set-up, collaboration with other music students, show format, etc.). When I look at this, I think of accomplishment, achievement, resurrection, and gratitude. I think back on all I had learned about organizing the show and the awesome memories I had during the rehearsals, the show itself, and all the people who helped me put it together out of the kindness of their hearts.

Joy shared poems and drawings from periods of time when she was struggling with depression, an eating disorder, and self injury prior to receiving her diagnosis of AS. Once Joy received the diagnosis of AS, she began to feel that she was not alone. The picture, poem, and drawings illustrates Joy's struggle with her spirituality and self mutilation at the time. Joy took pictures in magazines of models and redrew them in pain. One drawing depicts a crying girl with self inflicted wounds, entitled *Broken by my Master*. The second drawing, *Eyes of Blood*, depicts a man crying with tears of blood dripping from his eyes. The following verse is an excerpt from her untitled poem:

Untimely cracks across our souls,

Suspended bitter trace.

Ages pass autumn returns

With memories half erased.

Bright ones fell the heavens above,

We're too damaged to tell.

Left behind to carry on,

In the depths of hell.

The picture is of Joy after a cutting episode in which blood is running down her arm. She describes her feelings at the time: "I was very depressed in college and that was reflected in a lot of the stuff that I wrote and the stuff that I drew but there were some good points too. But there were a lot of really painful experiences...." Joy's poems reflect the emotional pain she experienced in trying to fit in socially, but being unable to understand why she could not. Receiving a diagnosis of AS approximately one year after writing these poems helped her to feel relief and find appropriate therapy.

True Friendship

Ten out of 11 participants discussed elements of reciprocity either in physical or emotional connectivity to their friends as illustrated through their words above. The Turk is an outlier due to the fact that he was not able to provide lived examples of how he had developed what he labels "true friendships." The Turk also provided a significant amount of information on his understanding of why he has never been able to develop a relationship that transcends outside of the boundaries of "structured activities." Although

other participants like Rudy, Joy, and Lindsey reflected on their emotional difficulties with more intensity and depth than other participants, The Turk outlined his lifelong difficulties in developing friendships from an analytical perspective that provided a qualitatively different viewpoint than those of the other participants on the notion of "True Friendships." From this viewpoint, he distinguishes his schema of what a friendship would look like to that of his lived experiences.

When asked to member check, The Turk wrote a nine page single-spaced response of his interpretation of the qualities of friendship. At that time, I had drawn a circular diagram of Trust, Connection, Support, and Shared Experiences as being the three major qualities of friendship just as it now. The overlapping qualities had not been identified. The Turk replied that he agreed with the qualities of Trust, Support, and Connection being the three major qualities, but that the center quality should be "True Friendships." The overlapping qualities should be Reliance/Reliability between Trust and Support, Collaboration between Trust and Connection, and Empathy between Support and Connection. Figure 3 below illustrates The Turk's understanding of True Friendship. Figure 3 represents The Turk's depiction of how the qualities of friendship relate to one another.

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Figure 3. *The Turk's Model of True Friendship.*
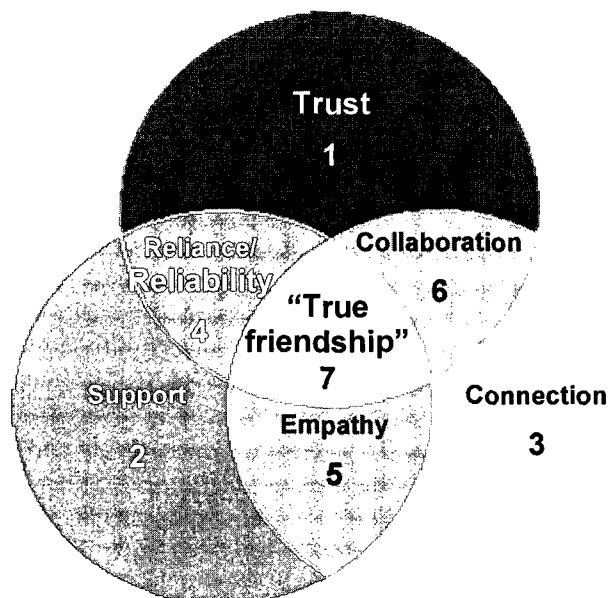
Upon further analysis, I agreed that the overlapping quality between Trust and

Support is Reliance and that the overlapping quality between Support and Connection is

Empathy or Empathic Concern. However, The Turk is the only participant who viewed

"Collaboration" as being a necessary quality of friendship and the only participant who

chose to distinguish "True Friendship" from "Friendship." Collaboration is built upon

"friends working together to bring out the best in each other" and is likely similar to the

give and take qualities seen in connection. Although one other participant, Rudy, also

spoke briefly of the value of "true friendship" within the context of his lifelong struggles

with AS, he did not outline a hierarchical structure of friendship in the same way as The

Turk. I give credit to The Turk for helping me refine the qualities of friendship illustrated

throughout this chapter.

Influenced by his background as a philosophy major, The Turk examined his

difficulties and the model of friendship from a lens that appeared similar to a third party perspective. This type of analytical thinking is often seen in individuals with AS. The Turk explains how he forged relationships with people in a forensic club on campus, spending anywhere from one to three hours per day with his club friends. Though he found the participation in the group intellectually stimulating, he was disappointed that he was not able to develop relationships beyond the confines of the club structure:

> Although I was a full participant in the group's structured activities, um, I never managed to fully integrate myself into the social end and the purely interpersonal things that paralleled those activities. You know other people were able—this is what I was mentioning—to translate their experiences within the structured group into the personal relationships in an unstructured setting. There were people who met each other and started dating. There were people who met each other and made really lasting, of course, friendships there. And though there were some people who came to respect me a lot and though there were people I came to respect a lot and you know, wanted to befriend, respect is not the same thing as friendships. And in brief translation, it is a pattern. This is an incidence of a pattern that would be pretty much my entire life. All of my friends have been from one context or another and in the context of that pretty much exclusive to it. I've had my [book club] friends or my [music club] group friends or my [art club] group friends. I've never really had friends friends. In a couple of sections, well, in high school I was lucky to have but for the most part I've never been able to cross the line into playing by an only implicit set or rules or by no rules at all.

Understanding the "rules," as described here by The Turk, involve skills of social cognition and self presentation as described in Chapter 5. Through a blog posting, The Turk also describes in further detail his difficulties with social cognition and suggests that other individuals with AS, including those in this study, may have similar difficulties:

I was unable to translate my interpersonal relationships within that structure to interpersonal relationships outside that structure. You know, I have a very, very hard time changing the rules by which a relationship is played or going by implicit rules or I guess what most people would perceive as no rules at all. All my relationships stay within that structure. You know it's a blank relationship rather than just a plain relationship. Unfortunately – and especially frequently for people with Asperger's – trust and, with it, "friendships" are not always perfectly reflexive properties. That is, if A trusts B, (or, more generally, considers B a friend), it does not follow that B trusts A (or, more generally, considers A a friend) to the same degree, or perhaps at all. People who have difficulty forming social bonds may greatly respect, admire, and trust people with whom they interact on only an infrequent basis. (As a recent submitter to the community art project "PostSecret" put it, 'my closest friends consider me a mere acquaintance,' or words to that effect.) In turn, there are some 'saintly' people who act as true friends toward people who have not done the same to them or who have even deliberately injured them...The truest and best friendships, however, are the perfectly reflexive kind: friendships in which each party considers the other a friend to a very high (and roughly equivalent) degree, in the process trusting that

party to a corresponding degree and doing his or her best to live up to that other party's trust (as well as performing other actions such as 'supporting' that party).

Interestingly, The Turk and other individuals with AS, could often describe the reasons why they are unable to make friends, exactly what social skill deficits they have, and what skills they need to improve upon. Many practice these skills with therapists in structured settings. Yet, in face-to-face interactions they continue to have difficulty with awkward social interactions. This awkwardness is compounded by internal fears of failure and resulting social rejection if an attempt at socialization is performed poorly. The Turk described a feeling of "[social] isolation plus awareness of the discrepancy [between them and me], not like jealousy but it reminds me of the feeling of being on the outside looking in." Rudy describes a similar search for the social acceptance and connection through his written responses:

> It should be noted that I spent almost thirty years of not knowing why I was different from everybody else it seemed. When I went through school no knowledge or understanding really existed on this condition. It was still very much in its infancy. It's hard when you're five years old and realize you're not the same. Why you're treated differently by your peers. I would think sometimes if I had a different hair I would be liked more. If I dressed well I would be accepted more. I want to thank you for the opportunity to shed some light on this mood disorder. It has given me some advantages and certainly its share of disadvantages. The most glaring being the lack of friends and relationships. It has been a life long conflict. You think you would grow and mature and things

would improve but they never did. I have spent years wanting to kill the things that made me different. I wish I could communicate my feelings better. Socially, I'm very far behind from my peers. I have an advanced vocabulary and sometimes people put higher expectations that I can deliver on. It's hard to practice something which most people are innately born with that skill. They cannot understand you do not have any clue on the natural progression of a conversation. You are forced to be put on trial. In other words, each conversation or interaction teaches you something. I have had to review every conversation and learn what is appropriate and what does not work. There are some people who are not as good with accepting your mistakes and label you and put you in a box. It's hard to recover and break that mold. I have never been able to do it. I still do not have that many friends or relationships. The ones I do have are strong like the roots of an old oak tree. I'm always afraid that today is the day that I'm going to wake up and have no friends. I really worry about dying alone. Fortunately, I have always had a guardian angel to help through the darkest times.

Like The Turk, Rudy, and Joy, authors with AS have written about similar feelings of "being on the wrong planet." They often described the feeling as a heartbreaking desire of wanting to make a connection but being unable or unskilled at doing so effectively.

Despite these difficulties participants continue to make attempts to practice socialization skills in safe settings in which they feel comfortable to be themselves. Many desire to have friends and work hard to acquire them to the best of their

capabilities. Based on the data analysis, the following *statement of meaning* was developed in according with phenomenological methodology. Participants in this study viewed the overall value of friendship in terms of the following statement:

The Meaning of College Friendship for Individuals with AS

The essence of friendship is a bond built on the core qualities of *trust, support, and connection.* **Trust** is defined as a feeling of comfort and *acceptance* built on the knowledge that my friend will embrace my strengths and my weaknesses without judgment. My friend will also maintain my secrets with complete confidentiality. **Support** involves knowing that my friend is there for me whenever I need them as a reliable source of help and guidance. My friend also communicates his or her feelings with honesty, openness, and truthfulness without being hurtful. **Connection** is a kinship between friends that involves sharing both good and bad experiences as well as sharing emotions. At the center of my friendship are **shared interests** and **shared experiences** that initiated and maintained the relationship.

Chapter Seven

Summary, Conclusion, Recommendations

Friendship it is an elusive thing for someone like me. It is probably the most important thing in life. You probably have the least amount of control over it as well. You are dependent on another person to make it work. When it works it can wash away the feelings of despair and isolation. There is nothing else like it. You cannot buy it. You cannot invest in it. It's not like changing with the seasons and styles. It's like your *trusty* pair of jeans or favorite jacket. It's warm and inviting. It drives you crazy when you do not have it. You search for it constantly. Most times you never find it when you're like me. It's catastrophic when you lose friendships it feels like apart of you dies. I do not have many friends and lost more people than I can count. I have been left for dead. It's hard to meet people when you do not have friends. Friends help with tasks and activities. They can be a resource and a comforter. They are the structure that makes sense of this vast world. They bring context and meaning to the world. In other words, they are the life blood to life. It teaches you the value of sharing and understanding another's perspective. That there is more than one way of doing things. They encourage you in your darkest moments. I sometimes wonder how many true friends that I have had. When you have friends life seems more possible. It takes that focus off of yourself and your problems. It keeps you busy. It makes you an active participant. When you stay in your house or own little closed world you are removing yourself from that active sense. Your brain will naturally focus on your flaws and faults. Humans require human contact and love and without these virtues your soul dies. You can have all the money and material things in the world but it cannot possibly fill the void in your heart and brain (Rudy).

The Value of College Friendships

For typically developing students, college is a time of tremendous growth in independence, academic knowledge and skills, and personal development. Part of the process of building independence involves managing novel situations that take students outside of their comfort zone in terms of different living situations and expose them to

new ways of thinking, academic challenges, and new social situations. To accomplish this, students must develop independent problem-solving skills. Orchestrating novel situations as an adult requires flexibility in thinking and application of social skills students have learned but not had to practice without the support of caregivers. Though novel situations tend to induce feelings of anxiety and apprehension, most college students learn through typical development how to achieve independence as an adult. Part of this independence involves navigating new social situations appropriately and learning how to build new social relationships. The ability to build new friendships in the college setting over the course of a student's freshman year has a positive impact on retention and overall college adjustment (Pittman & Rossman, 2008). Students who do not build new friendships are more likely to drop out during or after their first year of college.

In general, individuals with AS struggle with rigid thinking patterns that make it difficult for them to adjust to novel situations. They also demonstrate difficulties with processing social language, understanding nonverbal cues, and understanding social rules, skills involved in social awareness (Adreon & Durocher, 2007). In conjunction with social awareness, which is a documented difficulty for individuals with AS, participants in this study also reported having deficits in social facility. However, participants in this study conveyed that they not only learned social skills by watching their typically developing friends, but that these friendships also held significant intrinsic value for them.

Participants reflected upon these processes in terms of how they impacted the

development of their social relationships in general and specifically within their friendships. Participants also reflected about how their friendships impacted them personally in terms of their social, emotional, intellectual, and moral growth. Individuals with AS in this study valued the friends that they acquired. Some, as Rudy demonstrates in the above quotation, continually *search* for friendships that provide value to their lives. His words reflect the pain he has felt while experiencing social rejection.

The distance between wanting to acquire friends and the effort it takes to make those connections is significant. Because of the rejection individuals with AS have faced in the past coupled with the effort it takes to socially interact, it often becomes easier to withdraw socially. However, when they find friends who are willing to embrace their eccentricities without judgment, a connection is possible. When they find friends whom they can trust, support, and connect with, the relationships created are *significant and special*. Although college friendships tend to be somewhat transient, the friendships that individuals with AS have made with friends have had profound and lasting effects.

As Rudy mentions above, these friendships are special for two reasons: their elusiveness and the value they have provided in terms of social, emotional, intellectual, and moral growth. Although typical college students depend on their friends for social support, for all participants in this study, friendships were even more crucial for providing emotional support. In some cases, friends became as Rudy explained the "life-blood" that helped them, according to Joy, "get through their darkest times."

Therefore, one of the major findings of this study is that friendships for college students with AS provide not just value, but importance to their lives. Because

individuals on the autism spectrum have difficulties forming interpersonal relationships, it is often assumed that they are not able to form relationships that have depth, meaning, and value. This study has found that relationships, and specifically friendships, have value in the lives of individuals with AS. Friendships had a positive impact on participants' social development. Participants provided detailed and precise cognitive definitions of friendship. Because of the elusiveness of friendships, individuals with AS may actually place higher value on their friendships than their typically developing peers.

Finding the Right Kind of Friends

Taking initiative to form friendships requires strength and a willingness to expose one's weaknesses to others. For individuals in this study, taking the initiative required being vulnerable and overcoming anxiety enough to expose oneself. Exposing oneself also means trusting others and possibly opening oneself up to criticism. Taking this chance, however, with the right kind of people produced big payoffs in terms of emotional rewards. The right kinds of friends were able to not only tolerate participant's eccentricities, but also provide feedback that helped the participants to shape their behavior.

The challenge with building college relationships lies in not only opening oneself up but with finding the right kinds of people. Because of their natural engagement in restricted patterns of interest, individuals with AS access friends through activities that are shared. Therefore, the second major finding is that most important aspect of gaining friendships in college was actually *accessing friends* through groups, clubs, and activities that provided these opportunities. Due to their tendencies to engage in repetitive

activities, the shared activity becomes the only source of finding and developing friends. While other college students tend to locate friends through multiple sources such as through classes or casual meetings in the cafeteria or sporting events, for example, individuals with AS tend to maintain friendships through the engagement of structured activities that revolve around special interests. Because the engagement in the activity takes precedence, the development of the friendship cannot happen without it. Without the shared activity to precipitate the social interaction, individuals with AS tend to socially withdraw. Once these initial interactions are made then there is the opportunity for developing the relationship further, but the shared activity is essential to joining friends together.

Holding On to Friendships

> Well, first of all, I am above average in some ways but I'm pretty far below average in others and there are—I, maybe well, I haven't had it drilled in my head as much as I've drilled it into my own head from an early age that just cause you have these intellectual capacities that other people don't have, it doesn't make you any morally better than they are. In some ways it makes you a worst person because you are always falling back on these and taking the easy way out rather than using these other [social skills] that you don't have so well developed. You really need to be practicing and improving upon [them]. I mean some of the things that average people do on a daily basis I couldn't do to save my life and so again the question of whether I get bored with a so-called average person depends upon what I'm doing with him or her. And so some things I would get bored by and some things I wouldn't. Some I'd be constantly interested in learning about from this average person about an area in which I'm below average. You know I'll get sick of playing chess with somebody who isn't very good because I'll get sloppy and mess up my own game in the process. But just in terms of social interactions and watching somebody who is just very socially apt, it's just the opposite. And *someone who is socially apt who's willing to interact with me, a rare combination but someone like that I'm gonna **hold tight to that one*** (The Turk) (emphasis reflects vocalizations).

Individuals in this study put high demands on themselves to perform well

socially. Participants stressed that developing relationships takes conscious effort and

emotional input. This type of investment also requires significant emotional risks. As

The Turk iterated above, participants are aware of the stark contrasts between their

intellectual and academic skills and their social awareness and social facility. As a result

of the awareness of the "discrepancy" as The Turk calls it, they tend to put pressure on

themselves to perform well in all arenas. Although most participants did not struggle

with the academic demands of college, the social nature of the college environment

presented significant challenges. This situation is compounded by the people who do not

understand the nature of AS, yet have high expectations based on the proven academic

abilities of students with AS. Those who do not understand often misinterpret their social

gaffs as aloofness or extreme eccentricity. With friends who provide trust and support,

individuals in this study learned to connect.

Developing Connections

Going back to Joy's description of connection quoted in Chapter 6 in which she

alluded to Mork and Mindy's declaration of *nanu-nanuing* each other, her words lead us

to believe that individuals with AS can develop special connections with friends that are

reciprocal and empathic. Joy explains here, connecting with others is a *process* that

develops over time. It is a process that requires a considerable amount of effort and

practice on behalf of the individual with AS because they have to consistently practice

social awareness and social facility. Due to their difficulties with past social rejection,

individuals with AS also have to learn to trust others by also learning to expose their vulnerabilities in order to build trust. All of these factors contribute to developing a connection at a pace that may be slower than neurotypicals.

Social Skill Development for Adults with AS

Although research has shown that children with AS have deficits in social skills and social communication, the research available for measuring the social skills deficits of adults with AS is less clear. Deficits in these skills for individuals with autism spectrum disorders is often attributed to deficits in perspective taking otherwise known as Theory of Mind (ToM). The term Theory of Mind is sometimes used interchangeably with empathy or having concern for and understanding the needs of others (Goleman, 2006). Current research on empathy for adults with AS shows that adults demonstrate various degrees of deficits on contrived ToM tasks (Baron-Cohen & Wheelwright, 2004; Lawson, Baron-Cohen, & Wheelwright, 2004; Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006). Most adults can demonstrate ToM skills through hypothetical situations when they do not have the demands of face-to-face interactions. Few measures are available to evaluate ToM and empathetic skills. By using questionnaires, Simon Baron-Cohen and his colleagues (2004) has determined that individuals with AS demonstrate difficulties with empathy. However, quantitative measures present challenges in assessing real life experiences within specific contexts. Even though three other studies have examined aspects of the social relationships of college students with AS, this study is one of the few of its kind to link the processes of friendship, including empathy, to a real lived experience of friendship and within a specific context of college (Babiracki,

2002; Robledo, 2006; Schalabach, 2008).

Empathy

This qualitative study was designed to shed light on the nature of friendship processes in college. Research with adults with Asperger's Syndrome has traditionally identified deficits in Theory of Mind, the cognitive aspects of empathy, through self-report measures and the use of hypothetical narratives (Baron-Cohen & Wheelwright, 2004; Lawson, Baron-Cohen, & Wheelwright, 2004; Rogers, Dziobek, Hassenstab, Wolf, & Convit, 2006). However, empathy is multidimensional in nature with cognitive and affective components (Rogers, Dziobek, Hassenstab, Wolf, and Convit, 2006). This study has explored how empathetic responses were influenced by an individual's degree of empathy as defined by the constructs of social awareness, social facility, self-awareness and self-management delineated in Goleman's theories of Emotional (1995) and Social Intelligence (2006). I suggested in my conceptual framework that empathetic responses in the form of verbal and nonverbal behavior toward friends depend on the degree to which an individual is consciously aware of these skills. My interview questions were designed to target participants' perspectives on how they demonstrated an empathetic response toward friends (i.e., "What made you keep or maintain this friendship? What did you do to show him/her that you considered him/her a friend? How did you let your friend know if you were uncomfortable/comfortable/happy/unhappy?").

Data collection confirmed that empathetic responses are likely influenced by the degree in which participants are consciously aware of how their words and actions

influence others. Those individuals with more insight into how their own behavior may impact others have greater skill in feeling, but more importantly showing empathy. Likewise, those individuals who have greater perspective taking skills (ToM) have greater influence over social situations.

I did not expect to find that individuals in this study have to put so much conscious effort and practice into giving empathetic responses, making most empathic responses occur along within the conscious or rational parts of the mind. Whereas, neurotypicals are able to process empathetic responses subconsciously, individuals with AS have to make conscious decisions about how to facilitate each empathetic response to produce a desired outcome. These efforts can be very tiring, time consuming, and stressful for the individual.

Participants reported that they had experienced difficulty in social situations. Conscious difficulties in the areas of social awareness translated into difficulties in the areas of social facility. In other words, participants made connections between their difficulties in accurately perceiving social situations to their difficulties in social responses. In the area of social awareness, participants described the most difficulty with reading nonverbal cues (facial expressions, gestures) (primal empathy) and understanding the rules for social situations (social cognition). In the area of social awareness, participants also acknowledge difficulties with synchrony and self-presentation.

Participants explained that they demonstrated difficulties both with reading the nonverbal gestures of others (synchrony) and then using that information to interpret a social situation and act appropriately (self-presentation). However, participants also

explained that their synchronization and self-presentation skills had improved over time

through maturity and development and through the exposure to various relationships

including friendships.

Friends provided a platform for practice, guidance, and feedback on the

appropriateness of their self-presentation skills. In fact, friends who are trustworthy,

accepting, and supportive may provide direct and specific feedback to individuals with

AS. As Rudy stated,

> I think people with AS can achieve this level of friendship [that is, connection] if
>
> given the opportunity to grow and learn from their mistakes. I think people with
>
> AS can achieve this level of friendship if given the opportunity to grow and learn
>
> from their mistakes. I think people with AS are capable of receiving feedback as
>
> long as the feedback is genuinely meant to help the friend. It is the only way they
>
> can make improvements in the social arena. It takes a special person with some
>
> patience or understanding earlier on. We just do not have some of the innate
>
> conversation skills that come naturally for people off the spectrum. I think [people
>
> with AS] can share feelings and emotions but might have trouble visually
>
> showing them sometimes.... I know that I had a nervous reaction when
>
> something went wrong and would often let out a laugh at the wrong time. It was
>
> not meant to hurt or injure the person's feeling but that is what happened. I think
>
> what can be misconstrued is that people with AS lack empathy or feelings. I do
>
> not agree with that. I think it is more true to say they have the capabilities to
>
> demonstrate these things but sometimes lack how best to respond to in the

moment of distress. I think that can be attributed to our inability to read facial expressions and body language. I don't think friendships could be made or exist without that ability to share feelings or take other's feelings into account.

Like Rudy, other participants conveyed that they wish for others to know that they are capable of building relationships despite their social skill weaknesses. Furthermore, respondents reported that they do have feelings of empathy for others but they are inhibited by three major interrelated factors: (1) the ability to interpret correctly a social situation in the moment; (2) the ability to perspective take (Theory of Mind) in the same way that others can; and (3) the ability to demonstrate their feelings of empathy clearly. The ability to demonstrate their feelings of empathy is compounded by two factors: (1) they misread the situation (social awareness) and (2) they project themselves poorly or inappropriately (social facility). Once a participant becomes aware of their social blunder, they experience a wide variety of feelings including confusion, embarrassment, shame, and a sense of loss for the opportunity missed to fix the blunder. Through this study, they wished to convey that they are able to make friends in college when they are given a chance to be themselves and when provided with various types of supports on campus. These supports are discussed below.

Recommendations for Higher Education Institutions

Based upon the data collected and analyzed, several recommendations for higher education emerge. Participants discussed how their college friendships impacted their retention and made suggestions for supporting individuals with AS in college.

Retention

Participants discussed the vast contrast between their intellectual and social skills. With the exception of Olivia, Chamillion, and Joy whose friends became study partners, most indicated that their friends did not directly impact their coursework on campus. For all participants, friends were an important aspect of their social lives on campus.

Seven participants indicated that they had considered dropping out, taking a medical withdrawal, or taking time off from college. With the exception of two participants, friendships influenced a participant's decision either to remain in college or return to college after a period of absence. Although a few participants named their friendships as the driving force that influenced their decisions to remain in college, other participants indicated that being involved in their college social environment had positive impacts on their social involvement, social understanding, and moral and intellectual growth. Therefore, another important finding of this study was that friendships provided *added value* to the college experience and an *indirect impact* on retention for this population. Therefore, the following recommendations are designed primarily around how to develop these relationships for individuals with AS.

Suggestions for Support Provided by Participants

This study also shed light on what supports individuals with AS feel they needed to be successful in college. Through a blog posting, participants provided several ways that college staff could provide support to individuals with AS in college. They identified several areas in which they felt they needed social support and/or opportunities to develop friendships.

Social involvement. Participants indicated that the most common way that they made friends was through clubs designed around their special interests. As Max Tarkian suggested, "I think the best option is to get AS students involved with the community on campus ASAP." Other participants agree that posting events of interest and encouraging students to participate in these activities is the best method of meeting friends. College personnel should make extra efforts to publicize, recruit, and offer a wide variety of activities that will appeal to various populations of students. Students may need additional encouragement to participate in clubs that includes a specific explanation of why participation in the group could be beneficial for him or her (Kowalski, 2009). Rudy also suggested that faculty members who are aware of students with AS should reach out to students with AS to help them get involved with research or internships. He stressed the social and emotional benefits of having faculty members who believed in him, encouraged him, and kept him focused throughout his college career.

Counseling support. Max Tarkian, Rudy, and the Turk all stressed the importance of utilizing on-campus counseling services to assist with college adjustment and building social skills. Psychologists can help individuals with AS work through a variety of challenges that they face. Participants gave examples of learning to read social cues fluently to deal with emotional problems, to balance their academic and social lives, including dorm living.

Psychologists who are familiar with AS can also prepare students before they are overwhelmed with situations in which they either do not understand or do not have the coping skills to handle. Chamillion and Max Tarkian explained that because of their

gullibility, they would include assistance with being taken advantage of by others whom they believed to be friends. Psychologists may also provide modeling of social skills, social scripting, and encouragement to try new social situations. Max Tarkian found it helpful, working with his campus psychologist, to set targeted behavioral goals related to social interactions with friends (i.e., plan to have dinner with friend x amount of times). By eating with one friend a certain specified number of times per week in the cafeteria, he found that his social network slowly expanded to include new friends who began eating with the pair.

Furthermore, psychologists can also assist in helping individuals with AS understand the difference between various types of social relationships (acquaintance, friendship, romantic, and formal) and how to apply social skills to each specific context. If there are enough students on campus interested, a support group for individuals with AS can be helpful for discussing shared difficulties and helpful methods of addressing social situations on campus.

Resistance. Participants in this study likely represent a subset of college students with AS who are atypical in terms of their openness to discuss their difficulties as well as their willingness to seek psychological counseling services. These participants place a high value on campus counseling services and psychological treatment following college. Many participants currently receive ongoing counseling services to deal with the pressures associated with social stress. I acknowledge the fact that the participants in study represent a subset of individuals with AS who are open to change and who work extremely hard to "fit in" with societal expectations.

Max Tarkian and RJ discussed how *the above recommendations for social involvement and campus counseling may not apply to all people with AS for two different reasons.* First of all, individuals with AS may not be comfortable participating in clubs and organizations that would help them build these skills. *Hesitancy to join social situations derives from being uncomfortable with applying social skills with ease in face-to-face interactions.* This hesitancy is why many people with AS rely on Facebook and other forms of social networking sites for socialization. RJ also discussed how some people with AS do not view themselves as having a "disability" and therefore become "insulted" at the suggestion of needing these extra opportunities for socialization.

Because of their eccentric behavior, poor social skills, and restricted patterns of interest, individuals with AS are likely stand out on a college campus. However, they will be the students who are least likely to approach staff for help. It is possible that the first contact that support staff will have with a student is through a faculty complaint, a disciplinary hearing, a student complaint, a request for mediation, or a housing complaint. Therefore, as Rudy has suggested, *all* campus staff should be aware of the social challenges individuals with AS face in adjusting to college and in adjusting to novel social situations.

Before a student's behavior gets out of control, staff should reach out to provide encouragement, assistance, and reassurance. Individuals with AS need to be told directly in a specific yet supportive and private manner when their behavior is offensive. Specific details of the offensive behavior and how to replace it with positive behaviors as well as how it makes other people feel when he or she does these behaviors are necessary.

Addressing social skill deficits without being offensive to a person with AS is a skill that takes finesse, compassion, understanding, and most importantly, trust. Friends of participants in this study found a way to achieve this balance without hurting the participant's feelings.

Due to the reflective nature of this study it is unknown exactly when this balance occurred, it likely happened early in the relationship before the friend knew the participant had AS. Friends were likely aware at a first or second meeting with the participant that something was wrong and chose to respond in positive and supportive rather than a negative way. This continued engagement helped to build trust that ultimately led to positive social changes. For professionals to assist with changing behavior, they have to build trust with the student over continuous engagement. Max Tarkian advised that the key is to "focus on positive behaviors when encouraging positive social interactions." Similar to their relationships with friends, students have to have a trusting relationship with the person who is trying to model positive behaviors. Though this sounds entirely like a client/patient relationship, this type of trust can develop with *any* campus professional (Disability Services, Career Services, Residence Hall staff, Student Affairs staff) with whom the student feels comfortable. In a recent article on the *Primacy of Trust*, Dr. Barry Prizant, a researcher and consultant to individuals with ASD supports the notion that trust is vital:

> A trusting relationship between a person with ASD and his or her partners in school, and indeed in life, may be the most significant factor in a world that may be perceived as confusing and overwhelming. Trusting relationships may

ultimately contribute to tremendous progress and growth in the face of the inevitable challenges of having an ASD" (2009, p. 33).

Suggestions for professionals who wish to build trust with individuals with ASD include acknowledging efforts of the individual with AS to communicate, being respectful in language and behavior toward individuals with AS without making assumptions about the intentions of their behaviors, and acknowledging one's emotional state by trying to reduce stress levels (Prizant & Carley, 2009). Professionals in the realm of higher education can also be aware of the importance of being "dependable, reliable, and clear" when using language and when expressing emotions (Prizant & Carley, 2009, p. 30).

Rudy also described how many professionals on his campus such as those in Career Services, Disability Services, and faculty members reached out to him and provided feedback, reassurance, and social modeling that was essential to his success. None of these individuals was aware that he had AS because he had not been diagnosed at the time, but somehow they all knew what he needed and they celebrated his successes, a key factor in building trust (Prizant & Carley, 2009). Just like finding friends, the key is finding the right professional who can build trust with the student that may open doors to building social skills and linking the student with other social networks.

Diagnosing during or after the college years. Individuals who were diagnosed as adults expressed a desire to be identified earlier. Participants expressed a feeling of "not fitting in" throughout childhood and adolescence, but not fully understanding the nature of AS until after receiving a diagnosis. All of these individuals were diagnosed

with other conditions prior to receiving the diagnosis of Asperger's Syndrome. Feelings of frustration over mis-diagnoses were expressed. Likewise, participants felt relief when an appropriate diagnosis was made. Some participants wondered why professionals on their college campus had not identified their condition during their college years even when they had sought campus counseling services.

Professionals, who interact with students with AS may not recognize the relevant symptoms when comorbid disorders, such as extreme anxiety and depression, are present. Mental health professionals and others who may come in contact with students with psychiatric conditions should be aware of the behavior patterns associated with students with AS so that appropriate referrals for diagnoses and counseling can be made. Other individuals on campus, such as advisors, deans, disability service coordinators, and residence hall advisors, who may have direct contact with students and who have experienced social or academic difficulties, should be educated on the characteristics of AS so that referrals can be made.

The Turk suggested that higher education institutions might assist students in self identification by providing access to anonymous paper and pencil self-identification tools, such as the Asperger's Questionnaire. Students could be educated about AS in same manner in which they are screened for depression and cancer self-examination and then given resources for follow-up assistance or encouraged to visit the Campus Counseling Center. Resource information can also be disseminated through the institution's online website. Once a student has self-identified, he or she can be given contact information for various campus offices that can provide further support.

Along these same lines, it could be beneficial to all students, not just those with AS to be paired with dorm mates and floor mates who would be tolerant of their eccentricities. Prior to pairing roommates, students could take a brief online personality assessment that would aid in pairing up individuals with similar interests, backgrounds, and personalities.

Recommendations for Further Research

Due to the fact that adults with Asperger's Syndrome is a population that is just beginning to be examined by researchers, there are many facets of their social relationships that are available for examination. This study was primarily designed to shed light on the processes and qualities of friendships that occur for those individuals with AS who have attended college. Given the parameters of this dissertation study, there are several questions that have emerged from the data collected. Recommendations for further research are designed to aid our understanding of these questions.

Understanding Cognitive, Behavioral, and Affective Processes of Friendship

Participants in this qualitative study identified trust, support, connection, and shared interests as being the main qualities in college friendships. However, much is unknown about the thinking patterns involved in relationship development for individuals with AS. The Turk has suggested that individuals with AS approach friendship development in a systematized way, constantly comparing past experiences with current ones rather than relying on a "gut feeling" about a friend. He also suggested that individuals with AS may approach relationships with more explicit criteria than neurotypicals when deciding to be friends, making the decision to proceed with the

relationship more of a "formal" process than a gut feeling or intuitive process. This type of black and white thinking is associated with the cognitive patterns evidenced in individuals with AS. Some researchers refer to these patterns as systematizing.

Simon Baron-Cohen (2004) has found that adults with AS score higher on cognitive measures on systematizing types of tasks rather than empathizing tasks. However, the individuals in this study clearly expressed *feelings* of empathy towards their friends. More understanding of the social thinking processes of individuals with AS in terms of the processes involved in finding, acquiring, and holding onto friends is needed to determine how people with AS build friendships. By understanding these cognitive processes, interventions aimed at building these skills can be developed. I recommend that research be conducted that follows individuals with AS in the moment as they are working through the stages of friendship development to understand these thought processes as they occur. Because of the reflective nature of this study and the time lapse between the present and the past college experiences for most participants, these questions could not be answered through the current study.

In addition to understanding the cognitive processes involved in friendship development as the relationship progresses, it would be helpful to understand how individuals with AS develop feelings towards friends. A number of questions remain unanswered. What is the time lapse between building trust and support for individuals with AS and neurotypicals? Participants in this study alluded to the fact that it takes a long period of time to build trust based on past social failures, but is it any longer than with typically developing college students? When exactly do the feelings of connection

emerge? Along these same lines, this study did not specifically explore the sequential or hierarchical process of friendship development. Participants suggested that trust and acceptance must be developed before support and connection can occur. Are there instances in which support can come before trust and connection?

Robledo (2005) found that academically successful individuals with Autism Spectrum Disorders, who have attended college, can engage in intimate, mutual, and reciprocal supportive relationships. Participants identified properties of their supportive relationships as consisting of mutual trust, respect, caring, presumption of competence, focus on independence, and communication. All individuals identified a family member or paid staff member as a key factor in their success. Participants in this study identified similar qualities of trust, support, and connection as being important within their college friendships. More information is needed on the impact that family relationships and friendships have on college adjustment and college performance. Three participants in this study indicated that their parents provided significant emotional support during their college years, but for other individuals it is less clear the how much of their success is attributed to different types of relationships (familial, romantic, professional). The notion that it takes many different sources of support to contribute to a student's success at college is likely at play, but largely unknown for this population.

More information is also needed on empathy development for individuals with AS. As there are likely many degrees of empathetic response, the term is not fully understood and operationalized by researchers. Several questions are still left unanswered by this study. In regards to empathy development, can people with AS only

feel empathy toward those that they know and feel close to? Does this then mean that feelings of empathy are expressed in a hierarchical nature with the strongest feelings towards friends, less for acquaintances, and even less for strangers? Likewise, does the degree to which an individual demonstrates appropriate social awareness and social facility improve as the closeness of the relationship grows? These types of assessments lend themselves to lend to making an assessment on the level of closeness on the relationship. Gathering additional data from the perspective of others close to the participant in combination with behavioral observations of actual interactions could provide useful data for assessing these interactions. However, researchers should be extremely cautious in applying universal definitions of friendship onto those with AS as friendships can have intrinsic and personal values that may not apply to neurotypicals.

Student Development Theory

Participants indicated that for them college was a time of social growth and independence. Scholars of student development theory have found that a developmental progression in skills occurs between student's freshman and senior years of college in the areas of cognitive, moral, and social development. I continue to wonder how these theories apply to students with disabilities, especially those with AS, who enter college with deficits in core competencies. Chickering & Reisser (1993), for example, indicated that the three qualities of competence (intellectual, physical, interpersonal) are necessary for building confidence and for moving onto the next stages of development: managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing

integrity. What happens when students do not enter or leave college with those core competencies due to their disabilities? Does this mean that they are not capable of achieving higher levels of development? One qualitative study used a focus group format to explore parent perceptions of the anticipated needs and expectations for support for their college bound students with AS (Morrison, Sansoti, & Hadley, 2009). Researchers used Chickering & Reisser's model as a conceptual framework for data analysis. Parents specifically expressed concerns about their children's capacity for developing each of the following vectors: Achieving Competence, Managing Emotions, and Moving through Autonomy toward Interdependence. Suggestions for practice included linking students with campus professionals who could assist them with acquiring appropriate supports and accommodations as well as helping students acquire self-advocacy skills. Researchers acknowledge that it may be useful to obtain the perceptions of students with AS to determine if these supports are successful in helping students achieve higher levels of development.

Although students may be able to graduate from college, many struggle with finding work and negotiating social skills in the workplace. What does this say about our responsibility as institutions to educate them and provide valuable life skills? To what extent are institutions of higher education responsible for helping students acquire these competencies even if they cannot do so on their own? There is a growing push within K-12 education for special educators to help students with disabilities develop social skills in addition to academic competencies. To what extent do these expectations continue beyond high school graduation? In the court case, *Re: Dracut Public Schools* (2009), a

school division in Dracut, Massachusetts was found liable for providing compensatory services for a freshman college student with AS who had difficulties with interrupting his professor, having poor social skills, and poor hygiene. The judge ruled that the school division had not adequately provided transition services in order to prepare the student for college and adjustment including social skills training prior to leaving his senior year of high school. With the 2008 Amendments to the ADA, increasing demands are being placed academic and workplace environments to provide protection and accommodations for individuals with disabilities. Will these same responsibilities of providing social skills and social supports for students with AS one day be transferred to the higher education setting? And if they are, will we be prepared to meet the needs of these students?

Appreciations & Reflections

When I initially began this project, I had expected to find that individuals with AS were extremely intelligent, polite, and likable individuals. I found through the course of this study that they are also reflective, thoughtful, and caring people. What surprised me the most was their desire to please and their constant need for the affirmation that they were meeting my needs and more importantly, the needs of the study. Many participants have contacted me throughout this past year since the initial interviews to check on my progress and update me on theirs. A few have also asked me for advice or feedback on a specific social situation. I am hoping this contact has resulted because they know they can trust me to provide honest and open feedback.

I have also learned that their college friendship experiences are more complex

than previously understood. I learned that there is much more give and take/reciprocity than what I had initially expected to find. Participants discussed feelings of love, affection, kinship, and reliability when speaking of their friends.

In regards to empathy, I had always felt that people with AS are capable of feeling these emotions but have inadequate methods of showing it. I draw upon my work as a School Psychologist for this knowledge. When I ask my middle school students with AS to explain how others might feel in a certain social situation, they can usually give the correct answer, but have difficulty in the execution of the appropriate behaviors to influence the situation to give them the outcome they would like. Participants in this study spoke with conviction on the topic of empathy. Most were adamant that they possess empathy but have difficult ways of showing it towards others. Joy characterized the scholars who think otherwise as "just old" and posited that newer research is beginning to show otherwise. As Lindsey stated, "the ability to feel empathy and express that towards others requires training and discipline." Again, I found that the participants in this study work extremely hard to develop the relationships they have with a desire to be productive citizens who make a difference. With the right supports from friends who are trusting and supportive, they can form valuable social relationships.

Appendix A

Interview Questions

General Information

What college did you attend (are you attending)?

How long have you attended there?

What is your major?

When (did you) will you complete your degree?

If you are not currently enrolled, why did you decide to withdraw from college?

Friendship Experiences in College

I'd like you to have you think back about friendships you have had (or currently have) in college. Tell me about a friendship that was important to you at that time.

How, if at all, did this friendship differ from earlier school experiences?

What kinds of activities did you engage in together?

How much time did you spend together?

What made you keep or maintain this friendship?

What did you do to show him/her that you considered him/her a friend?

How did your friend show you they wanted to be friends?

How did your friendship change over time?

How did your friend let you know if he/she were uncomfortable/comfortable/happy/ unhappy?

How did you let your friend know if you were uncomfortable/comfortable/happy/ unhappy?

Suppose I were present with during an interaction with that friend during childhood/high school/college. What would I see happening? Describe to me what those visits would be like.

How, if at all, did your friendship impact your coursework/social involvement on campus?

At any point, did you ever consider dropping out of college? What influenced your decision to stay enrolled or drop out? What role did your friendship play in your decision to stay enrolled in college?

How would you define the term "friendship"?

Appendix B

Questions for Written Responses

Tell me about a time a college friend helped you through a difficult situation.

Some friends give us wisdom in how to understand the world in unique and different ways. Did you experience this in your friendship?

Tell me about a time you had a disagreement with a friend. How did you handle it?

What do you value about friendship?

Appendix C

Questions for Blog Posting

Some scholars say that individuals with Asperger's syndrome have difficulty expressing

feelings of empathy for others and difficulty forming meaningful friendships with others?

How do you feel about this statement?

What would you like others to know about the relationships between people with AS and

their friends in college?

How can colleges better support students with AS? How can colleges help support

students with AS in building social networks on campus?

How did you make friends in college?

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