Psychosocial Development of Students with Autism Spectrum Disorder in Higher Education

Kathleen M. VanderVeen
Western Michigan University, vandervk@gvsu.edu

Follow this and additional works at: https://scholarworks.wmich.edu/dissertations

Part of the Special Education and Teaching Commons

Recommended Citation
PSYCHOSOCIAL DEVELOPMENT OF STUDENTS WITH AUTISM SPECTRUM DISORDER IN HIGHER EDUCATION

by

Kathleen M. VanderVeen

A dissertation submitted to the Graduate College in partial fulfillment of the requirements for the degree of Doctor of Philosophy Educational Leadership, Research and Technology Western Michigan University April 2013

Doctoral Committee:

Andrea L. Beach, Ph.D., Chair
Donna M. Talbot, Ph.D.
Stuart S. Segal, Ph.D.
Students, in general, are not graduating from college in percentages above 60% after five years (Chronicle of Higher Education, 2012). According to the National Council on Disability (NCOD, 2007), more students with disabilities are enrolling in higher education every year; but their graduation rates are declining (Getzel, 2008; NCOD, 2007; Orr & Goodman, 2010; Troiano, Liefeld, & Trachtenberg, 2010).

Exploring ways to improve the retention and success of students with disabilities in college, leads to the review of psychosocial student development theory, which has guided student support for many years, but has not been widely applied to students with disabilities.

This qualitative study explored the college experiences of senior students diagnosed with Autism Spectrum Disorder (ASD), and the meaning they make out their development in three areas of psychosocial growth phases. Through a phenomenological approach, six participants from four different four-year public universities in Michigan described their college experiences, both academically and socially. These three (of seven) “vectors” as Chickering (1969) theorized, are growth phases that most traditional age (18-22) college students eventually pass through (Chickering & Reisser, 1993). They
referred to these three vectors as “developing competence,” “managing emotions,” and “moving through autonomy toward interdependence.”

From the interviews, five emergent themes describe the participants’ experiences in college: a) coming to terms with an autism spectrum diagnosis; b) using the “campus compass” to find purpose; c) being aware of diversity; d) participating in purposeful social interactions; e) being aware of emotional growth. The findings from this study support development in the first two vectors, developing competence and managing emotions, but did not directly support the third vector, moving through autonomy toward interdependence. In addition, participants’ experiences reflected development along the sixth vector, developing purpose. Conclusions from these findings provide good discussion about what universities are doing well to promote student development, as well as, what more can be done to assist the increasing population of students with ASD to grow more independently while in college.
ACKNOWLEDGMENTS

This dissertation would not have been possible without the support and involvement of many individuals. My deep gratitude goes to Dr. Andrea Beach, my chair and advisor, whose expertise and unlimited supply of encouragement, insight, and guidance helped to make this a quality project. Sincere thanks to the rest of my committee, Dr. Donna Talbot and Dr. Stuart Segal, for your knowledgeable input and direction. To my cohort at WMU, thanks for listening to the various versions of this research and being such a great group of friends. To all of the amazing students featured in this dissertation, thank you for allowing me to share your experiences in college.

My special thanks to my children Brandon, Candace and Jordon, for your support and encouragement. To my extended family who also encouraged me. To my many mentors and colleagues who believed in me. To my wonderful parents who taught me the value of an education.

To the members of the pink club, we are warriors. In memoriam of my dear friend Mary Virginia, cousin Miriam, and Aunt Mets, who I lost during the writing of this story.

Finally, to my best friend and husband, Don, thank you for believing in me, loving me, and providing the “drive” I needed at times.

Kathleen M. VanderVeen
TABLE OF CONTENTS

ACKNOWLEDGMENTS ...................................................................................... ii

LIST OF TABLES .................................................................................................. vii

CHAPTER

I. STUDY OVERVIEW ................................................................................. 1

  Background for the Study ........................................................................ 3
  Problem Statement .................................................................................. 6
  Purpose of the Study .............................................................................. 7
  Research Questions .............................................................................. 8
  Overview of the Methodology ............................................................... 9
  Significance of the Study ...................................................................... 9
  Limitations and Delimitations ............................................................... 10
  Definitions ........................................................................................... 11
  Chapter Summary ................................................................................ 11

II. LITERATURE REVIEW ........................................................................... 13

  Disability Studies and Disability as a Social Construct ....................... 13
  Autism Spectrum Disorder .................................................................... 17
  Student Development ............................................................................ 21
    Psychosocial Development Theory .................................................... 23
    Chickering’s and Reiss’ Vectors ........................................................ 25
    Developing competence ..................................................................... 25
### Table of contents - continued

#### CHAPTER

<table>
<thead>
<tr>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing emotions</td>
<td>27</td>
</tr>
<tr>
<td>Moving through autonomy toward interdependence</td>
<td>27</td>
</tr>
<tr>
<td>Developing mature interpersonal relationships</td>
<td>28</td>
</tr>
<tr>
<td>Establishing identity, developing purpose, and developing integrity</td>
<td>29</td>
</tr>
<tr>
<td>Research on Students with Asperger’s Syndrome in College</td>
<td>30</td>
</tr>
<tr>
<td>Student Development Theory and Students with Disabilities in College</td>
<td>35</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>36</td>
</tr>
<tr>
<td><strong>III. METHODOLOGY</strong></td>
<td>38</td>
</tr>
<tr>
<td>Overview</td>
<td>38</td>
</tr>
<tr>
<td>Qualitative Research</td>
<td>39</td>
</tr>
<tr>
<td>Theoretical Paradigm for Qualitative Research</td>
<td>39</td>
</tr>
<tr>
<td>Research Design</td>
<td>41</td>
</tr>
<tr>
<td>Phenomenology</td>
<td>41</td>
</tr>
<tr>
<td>Subjects, Sampling Approach, Setting, and Access</td>
<td>42</td>
</tr>
<tr>
<td>Data Collection, Instrumentation, and Procedures</td>
<td>46</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>47</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>49</td>
</tr>
<tr>
<td><strong>IV. PARTICIPANT NARRATIVES</strong></td>
<td>50</td>
</tr>
<tr>
<td>Matthew</td>
<td>52</td>
</tr>
<tr>
<td>Kelly</td>
<td>61</td>
</tr>
<tr>
<td>Mallory</td>
<td>67</td>
</tr>
</tbody>
</table>
CHAPTER

Andy .................................................................................................... 75
Richard ................................................................................................ 80
Anna .................................................................................................... 85
Chapter Summary ................................................................................ 92

V. RESEARCH FINDINGS ............................................................................ 93

Theme one: Coming to terms with an autism spectrum diagnosis: “We always knew that I was different.” ................................................................. 94

Theme two: Using the “campus compass” to find purpose: “It is great to be serious about something and that you have a sense of direction in your life.” ................................................................. 102

Theme three: Being aware of diversity: “I like it a lot more because there was more variety...it was different...in high school...everyone was about the same.” ................................................................. 107

Theme four: Participating in purposeful social interactions: “I actually prefer to do group projects way more.” ................................................................. 109

Theme five: Being aware of emotional growth: “I don’t react to every little thing.” ................................................................. 114

Chickering’s and Reisser’s Vectors ................................................................. 118

Developing Competence ....................................................................... 119
Managing Emotions ............................................................................. 125
Moving through Autonomy toward Interdependence ...................... 129
Developing Purpose ............................................................................ 131
Summary of Findings ............................................................................ 133
Table of contents - continued

CHAPTER

Advice for incoming freshmen: “Find your passion” ..........................133
Recommendations for Improved Practice .............................................137
Future Research Possibilities .............................................................144
Insights from the Researcher ...............................................................146
Final Conclusions .................................................................................147
REFERENCES ................................................................................................... 149

APPENDICES

A. Communication for Recruiting Participants ......................................158
B. Detailed Script for Recruiting ............................................................161
C. Consent Form ....................................................................................164
D. Interview Protocol ............................................................................168
E. HSIRB Approval ..................................................................................172
LIST OF TABLES

1. Oliver’s (2004) Two Models of Disability ..........................................................15

2. DSM-IV TR Diagnostic Criteria 299.80 Asperger’s Disorder ...................20

3. Summary of Demographics of Study Participants .................................51

4. Recommendations for Incoming Freshmen with ASD from Study Participants .................................................................135
CHAPTER I

STUDY OVERVIEW

This qualitative study explored the college experiences of students with disabilities (SWD) who were diagnosed with a social developmental disorder called the Autism Spectrum Disorder (ASD). The study focused on those experiences that contributed to the development of the first three psychosocial growth phases identified by Chickering (1969) and elaborated by Chickering and Reisser (1993). Chickering and Reisser recognized the limitations of sequential models and proposed that the order of the stages suggested building blocks to make a good foundation; therefore, it is likely that a college, by virtue of its mission, will move students along the first three vectors helping to construct identity. These first three (of seven) “vectors” as Chickering (1969) theorized, are growth phases that most traditional age (18-22) college students eventually pass through (Chickering & Reisser, 1993). They referred to these three vectors as “developing competence,” “managing emotions,” and “moving through autonomy toward interdependence.” In this study, the students with ASD were asked to describe experiences and interactions with persons, things, and events during their college tenure.

I used a phenomenological approach so that the students selected for the study could fully describe their experiences. This method allowed me to gain a better understanding of how the participants have experienced growth in the areas of interest in their psychosocial development. Because phenomenological research typically uses interviews or extended conversations as the primary source of data, my skills needed to include excellent listening and observation as well as the ability to form an empathic association with the subjects being studied (Rudestam & Newton, 2007). Using the
phenomenological heuristic approach (Moustakas, 1990) allowed me to have a broad scope of the phenomenon but also maintain a close connection to the stories of the individual students.

The conceptual framework for this research started with the model of disability as a social construct. This model views disability not as a diagnosis, but instead as cultural and social restrictions that are imposed on the individual who has the impairment (Smart, 2009). The United Nations (2003) described disability as the loss or limitation of opportunities to take part in the life of the community on an equal level with others due to physical, social, attitudinal and cultural barriers encountered by persons having physical, sensory, psychological, developmental, learning, neurological or other impairments which may be permanent, temporary, episodic or transitory in nature. Since the emergence of disability studies as a discipline on college campuses, persons with disabilities have had more voice in how they are participating in research about themselves. How disabilities are being studied helped to frame the social model, which in turn has influenced policy making at all levels of government (Smart, 2009).

Disability studies is a relatively new academic discipline and is being established in many countries through courses, programs, scholarly journals, academic associations, conferences and researchers that focus their work on the issues of disability (Clark, 2006). Disability studies has been closely associated with the disability rights movement; focusing on the demand for citizenship and participation in every aspect of life. The field of study was formed from the desire to end oppression and marginalization and acquire new ideas of what normal is (Clark).
Background for the Study

The disability rights movement started in the throes of the 1960’s, paralleling historical struggles of African Americans and women, who were also battling for civil rights. Eventually the momentum from the disability rights movement propelled scholars to look at disability in the same category as other socially constructed experiences such as race, gender, and socioeconomic status (Clark, 2006). Moving toward a social model for disability and away from the medical model, the passing of the Americans with Disabilities Act (A.D.A.) of 1990 solidified the efforts for persons with disabilities to end discrimination as a matter of law (Smart, 2009). This resulted in students with disabilities enrolling in college in increased numbers (NCOD, 2007). Earlier laws that leveled the playing field in the K-12 educational system, such as the Individuals with Disabilities Education Act (I.D.E.A.) and the Rehabilitation Act of 1973, made it possible for parents to send their children to primary schools. Prior to enactment of these laws, families without financial means took the responsibility of educating their children as best they could. Now students and families who previously never considered college as an option after high school are making plans for postsecondary education (NCOD, 2004).

While the passing of the ADA in 1990 increased the number of persons with disabilities in college (NCOD, 2007), reports and studies have consistently indicated that students with disabilities are not keeping up with their peers in terms of retention, persistence, and time to graduation (Getzel, 2008; Jorgensen, Ferraro, Fichten & Havel, 2009; NCOD, 2007, Orr & Goodman, 2010; Troiano, Liefeld, & Trachtenberg, 2010). One longitudinal study of 11,317 students produced findings to the contrary, in that, SWD were graduating at similar rates as nondisabled students after six years of college;
however, variations still existed during years four and five (Wessel, Jones, Markle, & Westfall, 2009). Jorgensen et al., (2009) used psychosocial variables to determine who dropped out less frequently at one to three semesters of college (SWD or students without disabilities); students with disabilities tended to stay in college one to three semesters, but had a higher dropout rate in later semesters. Troiano, et al. (2010) studied students who attended learning support centers regularly to help determine who were more likely to have a higher grade point average and graduate. Results indicated that students who had higher levels of interaction with support centers had higher grade point averages and higher graduation rates.

Of particular interest for this study were students with disabilities who have been diagnosed with Autism Spectrum Disorder (ASD). A recent report suggested that one in 88 children is diagnosed within the autism spectrum (CDC, 2012). New criteria was established and published in June 2013 in the American Psychological Association (APA) Diagnostic Statistical Manual (DSM-V) so participants who were recruited for this study had documentation that would report a diagnosis such as Asperger’s Syndrome (AS). Asperger’s falls within the spectrum and is a pervasive social developmental disorder that was first entered into the American Psychological Association (APA) Diagnostic Statistical Manual IV (DSM-IV) in 1994. The fifth edition (2013) consolidated autistic disorder, Asperger’s disorder, and pervasive developmental disorder into Autism Spectrum Disorder. “Symptoms of these disorders represent a single continuum of mild to severe impairments in the two domains of social communication and restrictive repetitive behaviors/interests rather than being distinct disorders” (p. xiii). Characteristics described in the DSM-V included impairments in reciprocal social
communication and social interaction (Criterion A), and restricted, repetitive patterns of behavior, interests, or activities (Criterion B). Autism Spectrum Disorder (ASD) now represents disorders that were previously a separate diagnosis. These include Kanner’s autism, atypical autism, high-functioning autism, childhood autism, infantile autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder.

All across the country, students diagnosed with ASD, who are otherwise qualified academically, are preparing to attend college. The college environment presents many challenges for students with disabilities, but for students with ASD, these challenges are compounded because social and emotional reciprocity is the cornerstone of college life (Wolf, Brown, & Bork, 2009). Successfully steering through the social avenues in the higher education system is essential for growth and development as a person.

It has been over 40 years since its introduction, but Arthur Chickering’s (1969) student development theory continues to be the theoretical lens to which student affairs professionals gravitate when there is a need to examine issues of student growth and development in college. Student development is a combination of theories that reflect human growth and environmental influences and are then applied as learning opportunities (Evans, Forney & Guido-DiBrito, 2009). The psychosocial development of college-age students was first studied and proposed by Chickering (1969) based on Erikson’s (1980) stages of development and then later revised (Chickering & Reisser, 1993). Psychosocial development in traditional age (18-22) college students is based on growth phases or “vectors” within which growth is measured by accomplishing certain
tasks, suggesting a strong link between academic success and the development of these vectors.

Problem Statement

Students, in general, are not graduating from college in percentages above 60% after five years (Chronicle of Higher Education, 2012). While the National Council on Disability (NCOD, 2007) reported more students with disabilities are enrolling in higher education every year, degree completion rates for students with disabilities are not at the level of their nondisabled peers (Getzel, 2008; NCOD, 2007; Orr & Goodman, 2010; Troiano, Liefeld, Trachtenberg, 2010).

The college environment presents many challenges for students with disabilities. Students must adjust to new guidelines and laws that govern how they will receive accommodations and resources. In the K-12 educational system, Section 504 of the Rehabilitation Act of 1973 and the Individuals with Disabilities Education Act (I.D.E.A.) dictate services. Colleges and universities rely on the Americans with Disabilities Act (A.D.A.) as amended in 2008, as the guidepost for college administrators to set policies. Students must disclose and present documentation of their disability at their own expense. They need to be specific with their request for academic accommodations and their documentation needs to be specific to the functional limitation of the impairment. However, for students with ASD, this need is generally different. They tend to be high achieving academically and struggle outside of the classroom (Wolf et al., 2009).

Student development theory has been used for many years but has not been widely applied to students with disabilities, and was the focus of this investigation. This study focused specifically on the first three (of seven) vectors from Chickering and
Reisser (1993) because, as the authors assert, it is most likely to identify growth in these areas based on the mission of higher education, which is to develop intellectual competence. Other goals for student growth are built into university life such as participation in activities, meeting new people, making decisions, setting goals and increasing autonomy. Because the very fiber of college life is social and many of the psychosocial growth phases depend on students’ interactions with others (Chickering & Reisser), growth and development for ASD students may be delayed or developed differently (Wolf et al., 2009).

Very few studies exist that have explored what makes a population of students diagnosed with ASD successful in college with regards to retention and graduation rates, and no research specifically examines psychosocial development as proposed by Chickering and Reisser (1993). With the limited research on ASD students’ experiences in college, there is little to assist student affairs professionals, faculty and administrators in decision making about what is best to help this population in college.

**Purpose of the Study**

The purpose of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, focusing on factors that contribute to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence. This qualitative phenomenological study examined these experiences and how they related to the development of the growth phases as described by Chickering and Reisser (1993). This study allowed me to identify problems, issues, or barriers that students with ASD
may be encountering during their tenure in college, as well as, what entities have allowed them to persist.

The knowledge acquired from this study can be used by faculty and administrators to better understand the issues faced by students with ASD. Institutions of higher education must pay attention to the graduation rates of this population and the larger disabled student population, and create systems with fewer barriers to their success. Hearing the stories of ASD students regarding how they found the confidence and skills associated with developing competence, managing emotions, and moving through autonomy toward interdependence could help educators create intentional learning experiences that will support students’ full development.

Research Questions

The research question this study explored is below with sub questions following:

1) How do students with an Autism Spectrum Disorder (ASD) experience college, both academically and socially?
   a. What experiences do students with Autism Spectrum Disorder (ASD) associate with their learning and academic success?
   b. What kind of meaning do they attach to the experiences and how far do they perceive they have moved in their development?
   c. How do the experiences they talk about reflect growth in their psychosocial development; specifically, developing competence, managing emotions, and moving through autonomy toward interdependence?
Overview of the Methodology

“Qualitative research is the preferred strategy if the research involves asking ‘how’ and ‘why’ questions and the researcher has little control over events and when the focus is on contemporary phenomenon with some real life context” (Yin, 2003, p. 1). This study used a heuristic phenomenological method since the research involved an in-depth discovery of the experiences from students with ASD who are attending college. Moustakas (1990) described the root meaning of heuristic as “a process of internal search through which one discovers the nature and meaning of experience, and develops methods and procedures for further investigation and analysis” (p. 9). He further explained that at the heart of this kind of research lies the “investigator’s internal frame of reference, self-searching, intuition, and indwelling” (p. 12). The phenomenological approach to research allows the person whose experiences are being documented to fully describe his or her experiences, which gives the researcher a fuller and richer understanding of how the subjects are defining their experiences (Marshall & Rossman, 2006). The participants of this study had an opportunity to explain how they experienced growth during college in three areas of psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence.

Significance of the Study

This research may add to the body of knowledge regarding students with disabilities, specifically those with ASD, with a focus on their psychosocial development in college. The study was designed to fill in the gaps in the literature on student development and provide a voice for individuals not heard in the literature. It is
important to hear from the ASD students from their own voice about their experiences in college.

Disability support offices and student affairs professionals may benefit from new perspectives about students with disabilities when creating programs and high impact experiences (Kuh, 2008) that promote development. The hope is that these research findings lead to a better understanding of students’ successes in college and ultimately improve practice. By better understanding students with ASD and their experiences in higher education, and exploring the relationship of these experiences with psychosocial growth as it relates to academic success, institutions of higher education can make improvements in programming that promote growth for students with ASD attending college.

Limitations and Delimitations

Limitations are those areas of a study that are potentially weak or could cause problems with the validity of the study (Creswell, 2008). Researcher bias is a limitation and efforts were made to avoid bias through epoche and journaling before and after interviews. A potential limitation for this study was that not all participants could effectively articulate their experiences due to the nature of their disability. It was important to establish rapport with the participants and build trust so they could share their experiences. Offering participants multiple methods for responding to questions was available if traditional face-to-face interviews failed to produce in-depth responses.

Delimitations included the narrow demographics of the population (i.e., seniors, successful in their program of study). I drew the sample from four-year public institutions through the university’s respective disability support offices (DSO) through
my association with a professional organization called Michigan Association of Higher Education and Disability (MI-AHEAD).

**Definitions**

Asperger’s Syndrome: Developmental disorder that affects a person’s ability to socialize and communicate effectively with others.

Autism Spectrum Disorder: Term used to describe neurodevelopmental disorders such as Autism and Asperger’s Syndrome.

Disabled student or students with disabilities: Traditional college-aged students (18-22) who are defined by the Americans with Disabilities Act (ADA) as amended in 2008. The terms are interchanged to accommodate preferences.

Retention: Term used in higher education to describe keeping students enrolled from one academic year to the next in degree-seeking programs.

Student Affairs: A division or unit at an institution of higher education where the mission is to develop services, environments, and programs that enhance the personal, social, and academic lives of the student.

Time to graduation: Term used to describe how long it takes a student to graduate from the time he or she enters a degree-seeking curriculum in college.

**Chapter Summary**

Graduation rates of college students in the United States, in general, at a majority of institutions of higher education are lingering around 60% after six years (Chronicle of Higher Education, 2012); graduation rates of students with disabilities are even further below this average (NCOD, 2007). Therefore, this qualitative study explored the experiences of disabled students in college, particularly students who have been
diagnosed with Autism Spectrum Disorder (ASD), focusing on what contributed to their success through the development of their psychosocial growth phases or vectors (Chickering & Reisser, 1993). The study used a phenomenological approach so that the students selected for the study could fully describe their experiences. This method allowed a better understanding of how the participants have experienced growth in the areas of interest in their psychosocial development. Data from this study can be used to inform practice in disability support offices (DSO) and other campus leaders about disability issues.

The following chapters are arranged as such: Chapter Two reviews the literature that informs this study; Chapter Three focuses on the research methodology of the study; Chapter Four includes narratives; and Chapter Five summarizes the conclusions of the research and makes recommendations for future research opportunities.
CHAPTER II
LITERATURE REVIEW

The focus of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, focusing on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence. The literature that informed this study is presented as: a) an introduction to disability studies and disability as a social construct; b) an introduction and definition of Autism Spectrum Disorder (ASD); c) an introduction and definition of student development with a focus on psychosocial development theory; and lastly, d) research that has concentrated on college students who have a diagnosis on the autism spectrum, and studies that used psychosocial student development theories to learn more about disabled students in college.

There were three primary databases used to search for these articles and empirical studies. These databases included ERIC, Scopus, and Dissertation Abstracts using keywords and phrases such as: Autism Spectrum Disorder, Asperger’s Syndrome, disability, disability studies, higher education, persistence, retention, and student development theory.

Disability Studies and Disability as a Social Construct

The discussion surrounding disability as a social construct, as it is referenced for race, gender, and socioeconomic status, starts with an historical journey of the disability rights movement and the formation of disability studies as a scholarly discipline. When President George H.W. Bush signed the Americans with Disabilities Act (ADA) into law in 1990, it had already been 30 years since Edward Roberts had attended University of
California, Berkley, graduated, and became one of the disability rights pioneers (Shapiro, 1994). Roberts, who contracted polio as a teenager, advocated for himself to finish high school. He later founded the first Center for Independent Living (CIL), an organization whose mission is to support disabled people to live independently. Laws such as the Individuals with Disabilities Education Act (I.D.E.A.) and the Rehabilitation Act of 1973 laid the ground work for the ADA, but legislation written as civil rights law did not emerge until Congress established the National Council on Disabilities (NCOD) in 1984 as an independent federal agency charged with the scope of reviewing laws, regulations, programs, and policies that affected people with disabilities (NCOD, 2007).

At the same time the disability rights movement was gaining momentum, scholars were beginning to theorize that disability belonged in the same category as other socially constructed experiences, such as race, gender, and socioeconomic status (Shapiro, 1994). And how disabilities were being studied helped to frame the social model that drove activism. The formation of disability studies as an academic discipline has been closely associated with the disability rights movement, and focuses on the demand for citizenship and participation in every aspect of life (Clark, 2006). Disability studies has emerged on college campuses in many countries through courses, programs, scholarly journals, academic associations, conferences, and researchers that focus their work on the issues of disability (Clark). The field of study was formed from the desire to end oppression and marginalization; new ideas about normal.

Smart (2009) defined a model of disability as a set of concepts and assumptions about the phenomena or human experience. Models help to define a disability, locate the “problem,” identify who is held responsible for the solution, and determine what the
needs are. Models guide the policies and laws that are created. They determine the academic disciplines that study and learn about the experiences associated with having a disability (Smart, 2009). Persons with disabilities are aided with their identity formation when models are used since the models provide definitions, diagnoses, and causation based on authoritative sources. Unfortunately, models can also cause discrimination and lead to prejudice (Smart, 2009). The accepted definition of disability prior to the disability rights movement had been constructed through what is termed the medical model. This model theorized that something is wrong with the person and there is a need to fix the person (Smart, 2009).

According to Traustadottir (2009), agreeing on the meaning of “disability” was a controversial issue in disability studies and fields that are related. Oliver (2004) offered the definition of disability through two models, the individual or medical model and the social contextual model (Table 1).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oliver’s (2004) Two Models of Disability</td>
</tr>
<tr>
<td><strong>Individual or Medical Model</strong></td>
</tr>
<tr>
<td>Focus on the impairment, and the individual</td>
</tr>
<tr>
<td>Emphasis on clinical and medical diagnosis</td>
</tr>
<tr>
<td>Emphasis on individual deficits</td>
</tr>
<tr>
<td>Views the person as the problem that needs to be fixed or cured</td>
</tr>
<tr>
<td>Medical, psychological, and rehabilitative services are the answers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Social Contextual Model</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on the social context and environment</td>
</tr>
</tbody>
</table>
Smart (2009) identified four distinct models of disability. The first model, the Biomedical Model of Disability, is the oldest model. This model inferred that abnormality and deviance are present in the individual. According to the medical profession, disability concerns are separate from any social needs or attitudes regarding disabilities, and “problems” exist entirely within the person who has the disability. The treatment methods are designed to change the individual (Smart, 2009). Social security was created with this model in mind as a means to assist with expenses related to the disability. It was not intended to help individuals find employment.

The Functional Model of Disability, according to Smart (2009), posited that the functions of the person impact the definition of the disability. An example of the concert pianist who lost one finger illustrated that for most people this would not be considered a disability, yet for the pianist it would be life altering. The Functional Model of Disability included work and wage-earning elements to define the disability. Those associated with the Disability Rights movement regarded this model as economic. Vocational Rehabilitation (VR), a state and federal system designed to assist persons with disabilities, based its philosophy on the Functional Model. Worker’s compensation is
also based on this model because a person has to declare that he/she can no longer work based on the impairment of the disability. Smart (2009) contended that technology and how technology can play a role in assisting with functioning, is a big consideration within the model.

The Environmental Model of Disability theorizes that a person’s environment – physical and social – can cause, define, or exaggerate the disability. Smart (2009) illustrated this model giving the example of the various medications for persons with psychiatric disabilities. These drugs have made it possible for individuals to participate in areas of society that previously they could not. The environment (drugs) is what has changed, not the mental illness.

Finally, the Sociopolitical Model of Disability is also known as the Minority Group Model or Independent Living Model. Supporters of this model present disability as a societal concern. This model is a reaction to the Biomedical Model and attributes prejudice and discrimination as causal factors in disability. Essentially, any inferiority attributed to people with disabilities was socially constructed. Smart (2009) contended that the Americans with Disability Act (ADA) of 1990 was based on a combination of the Functional Model and the Sociopolitical Model. The courts defined disability according to the Functional Model, yet clearly used the Sociopolitical Model to gain the momentum for equal rights.

**Autism Spectrum Disorder**

New criteria for Autism Spectrum Disorder (ASD) were established and published in June 2013 in the American Psychological Association (APA) Diagnostic Statistical Manual (DSM-V). The fifth edition (2013) consolidated autistic disorder,
Asperger’s disorder, and pervasive developmental disorder into Autism Spectrum Disorder (ASD). Previously, these disorders were grouped as pervasive developmental disorders in the previous edition of the DSM. ASD is grouped with conditions now labeled in a larger category called Neurodevelopmental Disorders, which are described as manifesting in the developmental period. These disorders include: a) intellectual disabilities; b) communications disorders; c) autism spectrum disorder; d) attention-deficit/hyperactivity disorder; e) specific learning disorder; f) motor disorders; and g) other neurodevelopmental disorders. Symptoms of the disorders consolidated as ASD “represent a single continuum of mild to severe impairments in the two domains of social communication and restrictive repetitive behaviors/interests rather than being distinct disorders” (p. xiii). Characteristics described in the DSM-V included impairments in reciprocal social communication and social interaction (Criterion A), and restricted, repetitive patterns of behavior, interests, or activities (Criterion B). Autism Spectrum Disorder now represents disorders that were previously a separate diagnosis. These include Kanner’s autism, atypical autism, high-functioning autism, childhood autism, infantile autism, pervasive developmental disorder not otherwise specified, childhood disintegrative disorder, and Asperger’s disorder.

In 1944, Hans Asperger, a researcher and pediatrician, first wrote in German about his observations of a group of young boys with distinct social and communication characteristics. At roughly the same time Kanner (1943) was writing about autism and starting his research on autism. Asperger’s work was never translated to English until Lorna Wing (1981) discovered Asperger’s work and introduced the original research to the English-speaking world in an article in 1981. Asperger’s syndrome is defined as a
neurological developmental disorder; describing the person with Asperger’s as having difficulties with social interaction, restricted interests, and stereotyped and repetitive behavior in the absence of significant cognitive and language delays (American Psychiatric Association [APA], 1994). Asperger’s Syndrome (AS) was considered to be a milder form of autism (Attwood, 2007) before the changes in the DSM-V (2013) when these categories were consolidated into Autism Spectrum Disorder (ASD). Wing (1981) described AS features as having: a) lack of empathy; b) naïve, inappropriate, and one-sided communications; c) emotionless repetitive speech and poor non-verbal communications; d) intense absorption in certain subjects; e) little or no skills to form friendships; and f) clumsy and uncoordinated movement with odd postures. Johnson (2005) reported that persons with AS tend to socially isolate themselves; they lack empathy and intuition, and find it difficult to read facial expressions and body language. They also have difficulty using these means to express themselves. The student with AS tends to interpret things very literally and will struggle when the routine is changed (Johnson). The person with AS can be viewed as remote, uninterested, and not meeting the emotional needs of those he or she interacts with because of the inability to recognize thoughts and feelings of others. In addition to these impairments, students with AS sometimes have academic difficulties, sensitivity to sensory stimuli, and motor-skill and physical deviations.

Fitzgerald and Corvin (2001) offered the following as indicators of AS in small children: “a) a lack of normal interest and pleasure in people around them; b) a reduction in the quality and quantity of babbling; c) a significant reduction in shared interest; d) a significant reduction in the wish to communicate verbally or non-verbally; e) a delay in
speech acquisition and impoverishment of content; and f) no imaginative play or imaginative play confined to one or two rigid patterns” (p. 310).

The criteria for Asperger’s varies somewhat; however, the American Psychiatric Association (APA) criteria (Table 2) has been the most widely applied set of criteria starting in 1994 when AS was included in the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV). This criterion was the basis for the diagnoses for the participants of this study. An increased number of children have been diagnosed, and subsequently, an increased number of students with AS have been identified on college campuses, although there are no reported statistics on AS among students enrolled in higher education.

Table 2

DSM-IV-TR Diagnostic Criteria 299.80 Asperger’s Disorder (APA, 2000, p. 84)

A. Qualitative impairment to social interaction, as manifested by at least two of the following:

a. Marked impairments in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body posture, and gestures to regulate social interaction

b. Failure to develop peer relationships appropriate to developmental level

c. A lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)

d. Lack of social and emotional reciprocity
Table 2 – continued

B. Restricted repetitive and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:

a. Encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus

b. Apparently inflexible adherence to specific, nonfunctional routines or rituals

c. Stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)

d. Persistent preoccupation with part of objects

C. The disturbance causes clinically significant impairments in social, occupational, or other important areas of functioning

D. There is not clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years)

E. There is no clinically significant general delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than social interaction), and curiosity about the environment in childhood

F. Criteria are not met for another Pervasive Developmental Disorder or Schizophrenia

Student Development

Student development is a term used widely in the student affairs profession. Rodgers (1990) defined it as “the ways that a student grows, progresses, or increases his
or her developmental capabilities as a result of enrollment in an institution of higher education” (p. 27). Evans, Forney, and Guido-DiBrito (2009) summarized the essence of student development theories as human growth along with environmental influences inside and outside of the classroom. According to Bloland (1994), student development is theory and philosophy based, and gives purpose to higher education and college student personnel work. Pioneers of college student personnel work were well documented by the American Council on Education (ACE) (ACE, 1937; ACE, 1949; Clothier, 1931; Hopkins, 1920) when they wrestled with how colleges and universities were developing the whole student. Student development tries to explain what the college student, at any age, might be experiencing in terms of growth and development. Bloland (1994) explained that models of student development used when creating a program or intervention in higher education are used to gain developmental progress from the students. Bloland argued that there was no single student development theory as it was claimed by student affairs professionals at the time. Instead, student development was based on a number of theories from other disciplines such as psychology and sociology.

There are four areas of theory in student development: cognitive-structural, typology, person-environment, and psychosocial development (Evans et al., 2009). Cognitive-structural development theories explore the development of the way people think, but not what they think. These theories highlight heredity and environment presented in stages that are in sequential order regardless of the cultural influence. Typology theories examine the differences in how students view and relate to the world as an individual. Person-environment theories study the relationship between the
environment and the student. These models are useful for student affairs professionals who are attempting to adapt theory to practice by creating deliberate environments to facilitate growth and development (Evans et al., 2009). Psychosocial development theory is the focus used for this study and the area we will review in more depth.

**Psychosocial Development Theory.** Erik Erikson (1980) was considered the forefather of psychosocial development and posited that there are eight stages of development that covered the human life span. These stages range from infancy to late adulthood. Erikson proposed five elements of identity resolution that young adults experience during maturation. Based on these elements of identity resolution, Arthur Chickering (1969) introduced vectors as a series of developmental tasks having both direction and magnitude. The original vectors were: a) developing competence; b) managing emotions; c) developing autonomy; d) establishing identity; e) freeing interpersonal relationships; f) developing purpose; and g) developing integrity. Chickering later revised his work with Reisser (1993) to propose these seven vectors or growth phases: a) developing competence; b) managing emotions; c) moving through autonomy toward interdependence; d) developing mature interpersonal relationships; e) establishing identity; f) developing purpose; and g) developing integrity.

The revision of the vectors came on the heels of many subsequent studies that questioned the nature and order of the vectors. Unfortunately, there were no studies conducted to refute the original vectors as they related to students with disabilities, and they are not included as a group in the revision of the vectors (Chickering & Reisser, 1993). This was a glaring hole in the literature until later addressed in research studies as
students with disabilities began to emerge on college campuses after the 1990 passing of the Americans with Disabilities Act (ADA).

One area of research that led to the revision of Chickering’s vectors challenged the order of the stages. Research by Straub and Rodgers (1986) supported the notion that *mature interpersonal relationship* task preceded the *autonomy* task. Kegan (1982) disputed the idea that the stages were linear at all. From these findings, Chickering and Reisser (1993) revised and concluded that the stages were not absolute, but instead very complex, especially with the changing demographics of the college student. The vectors were referred to as “maps” (p. 34), because the vectors give those in higher education paying attention to student development an idea of where the student has been and where they are going. They recognized the exclusivity of the original theory that left women out and ignored nontraditional students and minority students.

The longitudinal study by Foubert, Nixon, Sission, and Barnes (2005) used the Student Development Task and Lifestyle Inventory (Winston & Miller, 1987) and showed some support of the revised vectors (Chickering & Reisser, 1993); however, the study also concluded that the vector “developing purpose” does not just happen toward the end of the student’s academic career. The study found that significant development occurred during the first year of college and continued throughout the student’s academic career. This supports Kegan’s (1982) argument that the stages are not linear.

Foubert et al.’s (2005) study also showed women are more advanced in their development than men in the *mature interpersonal relationships* vector and have a high capacity for intimacy during their entire college years. Development along this vector involves re-evaluating those “assumptions about people we do not know. It means
moving beyond initial disapproval or impetuous labeling to try to understand the basis for the difference, and even to appreciate how it is a contributing part of a larger whole” (p. 150). The gender differences found in Foubert et al.’s (2005) study indicated that not only do women have a higher tolerance during the college years, they were more tolerant at the start of college than men were after four years of development in college. Maier (1998) explored how women are presented in psychosocial theories of college students including Chickering’s (1969). Unfortunately, she did not recognize the revised vectors (Chickering & Reisser, 1993) and the areas related to women that had already been recognized as omissions with regards to women.

**Chickering’s and Reisser’s Vectors.** The following is a review of the seven vectors as presented by Chickering and Reisser (1993); a series of developmental tasks having both direction and magnitude, based on the five elements of identity development first introduced by Erikson (1980).

*Developing competence.* During this stage of development, Chickering and Reisser (1993) posited that students learn to trust their abilities based on feedback from others they trust. They integrate the skills they have realized and honed to create a more confident self. Students with a better sense of competence will be more willing to take risks and pursue more difficult tasks because there is a perception that success is more likely. This vector is separated into three main areas: a) intellectual; b) physical and manual; and c) interpersonal. The overall sense of competence in any of these areas is personal and subjective. Intellectual competence involves mastering content, as well as, building a skill set to comprehend, analyze, and synthesize information from multiple
points of view. This provides the student with a variety of references to make sense out of experiences and observations.

Chickering and Reisser (1993) offered three areas of intellectual development. The first is subject matter knowledge. Studies are conclusive that students’ subject matter knowledge and skills in academic areas increase the more students study (Pascarella & Terenzini, 1991). The second area of intellectual development focused on cultural, aesthetic or intellectual attitudes and values. Hyman, Wright and Reed (1975) reported on a longitudinal study that educational level is strongly linked to a person’s receptiveness and openness to different points of view and further knowledge and lifelong learning. Finally, the third category of intellectual development involves the ways of knowing and reasoning. Communication skills, reasoning ability and able to understand more than one side of a complex issue is (Pascarella & Terenzini, 1991, pp. 115-160). This is not unlike Perry’s (1970) forms of intellectual and ethical developmental that suggested a person might move from one assumption to another increasing understanding along the way. Students who are developing along this vector become more interested in understanding the material than simply memorizing it (Chickering & Reisser, 1993). In order to the engage students fully in the learning process, colleges and universities need to teach students skills like how to listen, question, and reflect. Students need to be active listeners in class rather than just receiving information from the lecturer.

Physical and manual competence involves gaining strength and self-discipline through tangible accomplishments (Chickering & Reisser, 1993). When a student athlete develops athletically, there is evidence to suggest he or she also gains in critical thinking
skills as well. Earlier studies reported student athletes use athletics as a preparation for career development in areas such as teamwork and competitiveness.

Interpersonal competence involves skills such as listening, giving feedback, and working within a group (Chickering & Reisser, 1993). Students who have interpersonal competence know how to make appropriate choices like when to comment and when to listen. They understand the type of medium appropriate for the communication such as verbal, nonverbal, or in writing. Interpersonal competence is also associated with success in employment situations (Chickering & Reisser).

Managing emotions. Conceptualizing development with this vector started with the student becoming more aware of the variety of feelings and where those feelings come from. They then must learn control of those feelings and appropriately expressing them (Chickering & Reisser, 1993). Students who are moving through this vector find ways to balance negative or painful feelings with more positive emotions and ultimately integrate the feelings. Students who learn to manage aggression and anxiety are accomplishing developmental tasks required for mature self-regulation. Higher education professionals find the importance in understanding feelings that drive students’ behavior so they can be more skilled at helping them manage disruptive emotions that can block progress. Having mastery of this vector implies that the students use discipline to manage their emotions. Students begin to understand that it is not just about controlling emotions but bringing conscious awareness to the emotions and, if needed, seeking out positive emotions.

Moving through autonomy toward interdependence. Erikson (1980) emphasized the significance of separation and individuation in the development of identity; separation
being the physical distancing and individuation, meaning that the student is becoming his or her own person and taking responsibility for self-support.

Moving through autonomy toward interdependence has three components:

1) emotional independence – freedom from continual and pressing needs for reassurance, affection, or approval from others; 2) instrumental independence – the ability to carry on activities and solve problems in a self-directed manner, and the freedom and confidence to be mobile in order to pursue opportunity or adventure; 3) interdependence – an awareness of one’s place in and commitment to the welfare of the larger community (Chickering & Reisser, 1993, p. 117).

Disengaging from parents is the beginning of emotional independence. Students developing in this vector rely more on peers and role models and begin to balance the comfort of their own company. Recognizing and accepting interdependence is the essence of autonomy and cannot be realized until some independence has been established with a sense of where the person is in the community and the larger society.

*Developing mature interpersonal relationships.* In order for students to achieve the task in this vector, they must have a tolerance and appreciation of differences as well as the capacity for intimacy. The capacity for intimacy involves increasing tolerance and empathy, and having an openness to deep connections with others. Many students, who have left college, recalled far less about the content of their curriculum than about the experiences with the people they met while enrolled in college. These components require students have the ability to accept individuals for who they are while appreciating and respecting differences. Students developing along this vector are better able to see those they are close with more clearly, with all their assets and failings. Researchers
studying this vector have used the Student Development Task and Lifestyle Inventory (SDTLI) (Winston & Miller, 1987), which has a Mature Interpersonal Relations (MIR) scale. The scale measures students’ relationships with the opposite sex and peers, as well as, how the students respond to others as individuals rather than as schemas they may have created.

*Establishing identity, developing purpose, and developing integrity.* The last three vectors are all closely related and intertwined. Chickering and Reisser (1993) admit that all the vectors could be classified under the vector *establishing identity.* This is probably one of the easiest of the vectors to understand and to imagine taking place for students in college. Interactions with different people and ideas are important components to establishing identity. Students should to be able to examine themselves objectively and make adjustments as needed.

A student, who is accomplishing the task of developing purpose, increases his or her ability to assess interests and to clarify goals. Having a plan with a desired outcome becomes a map for moving from the current situation to a more desirable one. The plans for action integrate three major elements when a student is developing purpose: “1) vocation plans and aspirations; 2) personal interests; and 3) interpersonal and family commitments” (p. 212).

Developing integrity is closely related to establishing identity and clarifying purpose. Students bring to college a variety of core values and beliefs with assumptions about what is right and wrong, true and false, good and bad, important and unimportant. Students get these from their parents, their church affiliation, their school, from the media, or other areas.
Developing integrity involves three sequential stages:

1) humanizing values – shifting away from automatic application of uncompromising beliefs and using principled thinking in balancing one’s own self-interest with the interests of one’s fellow human beings; 2) personalizing values – consciously affirming core values and beliefs while respecting other points of view; and 3) developing congruence – matching personal values with socially responsible behavior (p. 237).

**Research on Students with Asperger’s Syndrome in College**

The emergence of students with Asperger’s Syndrome (AS) on college campuses has spurred new studies, mostly qualitative, in an effort to gain the insight needed to assist them. Several studies will be discussed here. Three of the qualitative studies are the most closely related to this study, Szentmiklosi (2009), Schlabach (2008), and Lee (2010), who sought to better understand AS students’ experiences in college; each using a different lens to examine the experiences. The remaining are also qualitative studies that reviewed the learning styles of students with AS and a peer coaching program to assess its success.

Szentmiklosi’s (2009) study looked for experiences that exhibited self-determination skills, while Schlabach (2008) used a case study method and interviewed college students with AS, as well as, the disability support providers at the college the student was attending to gain that perspective as well. Lee’s (2010) study was a phenomenology examining AS students’ experiences with friendship in college, which is an important component to one of the vectors, *developing mature interpersonal relationships*. 
Szentmiklosi’s (2009) qualitative study involved five community college students with AS. The phenomenology sought to better understand how community college students with AS utilize self-determination during their college experience. Self-determination is a term that emerged from special education to describe a set of personal or interpersonal skills that include acceptance of a disability and how it impacts learning (Getzel, 2008).

According to Wehmeyer, Agran, and Huges (1998), when a student is self-determined, the student is the primary agent in making life choices and decisions regarding the quality of life and is free from unnecessary external influence or interference. Self-determination develops over a life span, much like the stages of development that Erikson and Chickering have theorized. Elements of the behavior that this qualitative study looked for when interviewing these students were skills associated with: a) choice-making; b) decision-making; c) problem-solving; d) goal-setting and attainment; e) independence, risk-taking, and safety; f) self-observation, evaluation, and reinforcement; g) self-instruction; h) internal locus of control; i) positive attributions of efficacy and outcome expectancy; and j) self-awareness. When the students reported using these behaviors as younger children, positive adult outcomes, such as success in the college setting seemed to follow. Students with ASD have unique challenges and can acquire these skills with the right supports and accommodations; however, they are more likely to learn and practice the component skills of self-determination in more of a rote manner without realizing the relationship between acquiring these skills and applying them to everyday challenges.
Five major themes emerged from the interviews related to the college experiences of these AS students using self-determination skills. The major themes were: a) enjoyed academic success; b) found disability services and accommodations important; c) chose majors based on personal interests; d) relied on family members for support; and e) had difficulty developing social connections on campus.

Schlabach’s (2008) study explored the college experience through the perceptions of both students with AS and their disability support providers. The college experience included academic and extracurricular activities. The study focused on the AS students’ use of academic accommodations and how the student used the disability support office (DSO). It did not investigate experiences related to growth and development through a psychosocial lens.

One finding from the study indicated that students with AS were successful in college when it came to their academics and perceived college positively because it gave them an opportunity to study in their area of interest. The criterion for success was based on a grade point average that fell between 3.0 and 4.0. All of the students attributed their success to their own motivation, self-discipline, and determination. Academic and extracurricular activities were affected by the impairments of the students with AS and all of the student participants felt isolated from their peers. Key people to navigating the social aspects of college were family, disability support providers, and counselors. Another finding that was noted related to the DSO’s recognition of the retention risk of this population and the struggle to provide meaningful services for the growing number of students with AS. DSOs acknowledged that nontraditional approaches are needed to support AS students. This is critical since most DSOs use guidelines that only assist with
academic accommodations and not those outside the classroom where the AS students need the most assistance.

Findings from the study also revealed that group projects in classroom situations can be problematic for AS students. Students reported that DSOs provide a safe, nonthreatening environment. DSO professionals reported that parents often provided good insight and that an open relationship with the parents tends to be key to understanding the AS student. DSO professionals recognized the need to change its service delivery to include individual supports for AS students and that faculty education about ASD is extremely important. DSO staff also recognized that various staff around campus also need to be involved throughout the AS students’ tenure such as academic advisors and career counselors. Consistent with Astin’s (1984) theory that residency and persistence are correlated, this study recommended AS students live on campus whenever possible.

Lee’s (2010) 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. Using Goleman’s (2006) model of Social Intelligence as a theoretical framework, the cognitive, behavioral, and affective processes of interpersonal interaction between participants and college friends was examined. While this study reported on experiences, it was not through a psychosocial lens as this investigation proposed.

Participants from Lee’s (2010) study reported students having difficulties in the areas of social awareness and social facility that impacted their ability to accurately demonstrate empathic concern towards friends. While participants 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.

Because visual learning has been generally accepted with limited research as the preferred learning style for Asperger’s students, Greenleaf (2008) examined the learning styles of five students. This study examined responses from five adult participants with AS, searching for similarities in learning styles that were associated with subsequent perceived post-secondary success. A sixth participant was interviewed as a negative case study as a validation tool for measurement of saturation (Creswell, 2007). The visual method of learning was reported most frequently by all six participants as the most effective method of learning, along with auditory learning linked closely to the visual method and kinesthetic support often needed for comprehension and retention. Additional findings that were identified, which played a part in the discovery of best learning methods, may be related to actual brain function linked with the human aspects of perceived challenges, distractions, emotions (both beneficial and detrimental), family dynamics, fear, friendships, obsessions, and socialization, among others.

Eastman (2010) examined peer coaching of Asperger’s students. Entering freshmen students at a private institution in upstate New York were matched with second year graduate students. Peer mentors met weekly with participants to discuss academic success, socialization activities, and adaptive skills. Eastman used quantitative and qualitative methods to examine a peer coaching intervention program as it related to the adaption of students with AS to college. Eight undergraduate students with AS (seven
males and one female, 18-20 years old) completed a norm-referenced questionnaire at the conclusion of three academic quarters. Results showed all students’ ratings of adaptation to college were within normal limits across all quarters and areas of the questionnaire, and no significant improvements were found in the adaptation to college over the course of the academic year as they participated in the mentoring program. Qualitative methods explored the students’ adaptation to college in the context of the program through the thoughts, feelings, and perceptions of the peer coaches who completed a questionnaire at the conclusion of the study. Questionnaires were coded for common themes revealing that AS students had difficulty in these areas: (a) organizational and time management skills; (b) flexibility and adaptability; (c) social and communication skills; (d) self-advocacy skills; (e) adaptive skills; and (f) extracurricular involvement.

Student Development Theory and Students with Disabilities in College

Costello (1999) studied 210 students with (n=104) and without (n=106) disabilities in the Florida State University system. He reported the problem at the time of his research to be that higher education institutions knew little about the population of students with disabilities, specifically learning disabilities, coming to college campuses in increased numbers because of federal mandates of the ADA that barred discrimination and allowed for reasonable accommodations of the disability.

He used the Student Developmental Task and Lifestyle Inventory (SDTLI) developed by Winston and Miller (1987). The results of the quantitative analysis revealed significant differences between student groups in the areas of academic autonomy and managing mature interpersonal relationships. There were statistically significant positive correlations found between psychosocial development and three
predictor variables: cumulative grade point average (.95), total number of credits completed (.99), and utilization of campus support services (.96).

Overall, students with disabilities scored lower on psychosocial development as compared to nondisabled peers. Costello offered that it appeared that the disability was interfering with the development of psychosocial matters. He also offered an alternative explanation that students with disabilities may sacrifice development in other areas to focus on their academic success.

Buggie-Hunt’s (2007) quantitative study combined Identity Development Theory with SDTI theory to find differences between students with invisible and visible disabilities. Recruiting could not produce enough students with visible disabilities and the focus of the study changed to investigating the possible differences in psychosocial development for college students with disabilities in relation to a normed sample of college students. The 127 participants in the study were all students with disabilities who attend four year public and private institutions of higher education in a northeastern state. No differences were found between students with disabilities and the normative sample in each area measured.

Chapter Summary

The focus of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, concentrating on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving from autonomy to interdependence. The literature presented in this chapter supported the conceptual framework of disability as a social construct that has been introduced and supported through scholarly work in disability
studies. The literature also defined ASD and student development with a focus on Chickering’s and Reisser’s (1993) psychosocial development theory. Finally, recent studies were discussed that have concentrated on college students who fall within the autism spectrum, and studies that have used psychosocial student development theories to learn more about disabled students in college.

It is clear from this literature review that the psychosocial development of students with ASD has yet to be explored in a qualitative or quantitative study. The fundamental impairment of the disability suggests that moving along the vectors associated with developing competence, managing emotions, and moving through autonomy to interdependence present challenging experiences for ASD students. Because the psychosocial development of ASD students is largely under-investigated this study focused on capturing the experiences related to growth and development in these three areas of interest.
CHAPTER III

METHODOLOGY

Overview

The purpose of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, focusing on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions and moving from autonomy to interdependence. This study allowed six senior standing students with ASD to tell their stories as college students and share what areas within the higher education environment contributed to the development of different psychosocial growth phases. They were asked to describe experiences, such as events, persons, and/or devices, they found to be a catalyst for their growth in developing competence, managing emotions, and moving through autonomy toward interdependence.

This qualitative study used a phenomenological approach so that the participants could fully describe the phenomenon being studied: the experience of being a college student with Autism Spectrum Disorder (ASD). This approach allowed a better understanding of how the participants experienced growth in the areas of interest in their psychosocial development. The data for this study was collected from in-depth, face-to-face, one-on-one interviews with follow up communication (determined by participant) either by telephone, email, or face-to-face meetings for the purpose of clarifying or expanding after transcription occurred. The documentation of the participants’ ASD diagnosis and verification of their senior standing was pre-determined at their respective university since this was the criteria for participation in the study.
This chapter starts with an overview of the qualitative research tradition and the theoretical paradigm that shapes this research design. Included is a description of the subjects, sampling approach, setting, and access. Data collection methods are described in detail along with data management and data analysis.

**Qualitative Research.** The methodology I used for this study was a qualitative approach. Yin (2003) stated that qualitative research is the best method to use when the preferred strategy for the research involves “asking ‘how’ and ‘why’ questions and the researcher has little control over events when the focus is on contemporary phenomenon with some real life context” (p. 10).

Qualitative research is used when little is known about the phenomenon being studied (Leedy & Ormrod, 2010). According to Marshall and Rossman (2006), qualitative research is best used when the research questions cannot be answered through experimental means for practical or ethical reasons, and the relevant variables have not yet been determined. Creswell (2009) stated that in a qualitative study the researcher states research questions and specific goals for the research instead of a hypothesis.

**Theoretical Paradigm for Qualitative Research.** The methodology for this qualitative study is supported by a constructivist paradigm. Constructivism assumes that there are multiple realities, which is an alternative to the positivist paradigm in quantitative research that adheres to a single objective reality (Schwandt, 1994). Creswell (2009) used the term “worldview” (p. 6) interchangeably with paradigm to describe the various paradigms used for different kinds of research such as quantitative, qualitative, and mix methods.
The worldview for the qualitative researcher embraces a constructivist’s learning theory which argues that humans create knowledge and meaning from an interactive experience with their own ideas. The researcher looks for complex views because the meanings are varied and subjective (Creswell, 2009). From the view of the constructivist, learners construct knowledge from a unique perspective and arrive at their own account of the truth. Using this paradigm for research involving students with disabilities in college, allowed me to capture and interpret various interactions and perceptions with the college environment to better understand influences for growth and development in various psychosocial phases.

Constructivists use a hermeneutical approach, believing that meaning is hidden and, therefore, needs to be brought to the surface through deep, reflective inquiry (Moustakas, 1990). Reflection on the object of inquiry is accomplished through the interactive dialogue between the researcher and the participant. A central characteristic of constructivism is the actual interaction between the researcher and participant. Through this interaction the findings of the study are co-constructed from the dialogue and interpretation; supporting the argument that constructivists maintain that knowledge is constructed rather than discovered. The perception that is constructed is not easily categorized into themes because it is holistic. There are no value judgments as to the legitimacy of the perception and the perception is not absolute (Glesne, 2006). Creswell (2007) argued that the constructivist’s goal of research is to rely, as much as possible, on the participants’ views of the phenomenon. Rapport, reflexivity, and trustworthiness according to Glesne (2006) are the values of constructivism. This study embraced the
constructivist worldview by emphasizing the personal experiences that are unique to each person, but that also have parallels with others’ experiences.

**Research Design**

**Phenomenology.** This qualitative study used a phenomenological approach. Leedy and Ormrod (2010) described a phenomenon as a person’s perception of the meaning of an event instead of what might exist that is external to the person. In particular, Marshall and Rossman (2006) explained that a phenomenological study is best used when the focus of the study is on the lived experiences of the individuals. This qualitative approach to research produces rich and diverse findings, capturing deep meaning from participants’ lived experiences in their own words. Data is typically gathered from interviewing, diaries, journals, or blogs as they can serve as sources for lived experiences (Creswell, 2009). This methodology is not designed to support or refute other studies, but instead provide rich, thick data that can give insight to what has been experienced by the participants (Marshall & Rossman, 2006).

A phenomenology design offered an opportunity for people with disabilities to have a voice in the research being conducted regarding their experiences. According to Stone and Priestly (1996), people with disabilities are the experts on their own experiences. For those who do research regarding people with disabilities, the disabled persons should have an active part in shaping the project. It is also suggested that researchers provide preliminary findings to interviewees to guide the researcher’s conclusions. This method would not disperse the authority of the researcher since the researcher has the last word on the final text (Stone & Priestly, 1996).
Subjects, Sampling Approach, Setting, and Access. The subjects for this study were seniors who came to college diagnosed with an autism spectrum diagnosis. ASD is a developmental disorder that primarily affects an individual’s interpersonal and social skills. This group was the focus of this study because students with ASD are a growing population on college campuses and understanding what has helped ASD students persist in college may help entering ASD students with similar educational goals. The expected age for the participants was between 22-26, male or female. Traditional age seniors were desired for this study since Chickering’s and Reisser’s (1993) student development theory is based on the traditional college-age student (18-22); however, the traditional age of college students graduating is changing since students are taking longer than four years to graduate (NCES, 2007). The actual range in age of the participants was between 22-27. All participants were diagnosed on the autism spectrum from a qualified individual. All participants were enrolled in college with less than 30 credits remaining (or one year) to complete a bachelor’s degree.

Purposeful sampling was used to select the universities from which I recruited the student participants. This method of sampling was also used for the student participants. Gall, Gall, and Borg (2007) described purposeful sampling as choosing participants and sites likely to be rich with information related to the purpose of the study that therefore, can help answer the research questions. Creswell (2007) offered a strategy for purposeful sampling that involves the researcher’s decision making about who should be sampled based on the approach of the inquiry. The sites from which I recruited students were limited to four year public institutions in the state of Michigan. This type of sampling saved time and money for the research study, but may be a limitation to the study because
of credibility and information gathered for the study (Creswell). The geographic location of the universities was important since the research method involved interviewing participants face-to-face; therefore, having colleges and universities within driving distance made this feasible. Face-to-face interviews were important in establishing trust and rapport with the participants of the study because I did not have a relationship with the participants prior to the interviews. It was important to get to know and understand each of the students in a short period of time. By using a face-to-face method of interviewing, I was able to use my skills interpreting nonverbal messaging and evaluation to keep the interviews fluid and full of rich discussion. This could have only been accomplished through personal contact. Multiple universities were identified from which to recruit participants primarily because the retention of registered students with disabilities with less than 30 credits (or one year left) until graduation is lower than that of the general population of students; therefore, I anticipated that it may be hard to find participants if the study is limited to only one university (NCOD, 2007).

University and college campuses in Michigan provided the setting for the research study. The specific institutions were determined based on response from recruiting through the professional association called Michigan Association of Higher Education and Disability (MI-AHEAD). Individual members of this organization generally have the primary job responsibilities at their respective campuses of determining eligibility status of students with disabilities by collecting documentation and making appropriate recommendations for accommodations. This organization’s membership is open to any institution of higher education in the State of Michigan, public or private, community college, and four year traditional or technical school; however, from the MI-AHEAD
membership, the criterion sampling method was used to select four year public universities to recruit senior students with Autism Spectrum Disorder who attend their respective institutions. This type of institution is preferred for this study since the ASD students’ experiences at small liberal arts, and private institutions may be vastly different based on availability of resources and programming.

This study used criterion sampling when selecting participants from the institutions, meaning all participants who met the criteria were considered for the study. The inclusion criteria for the potential student participants were those with a documented Autism Spectrum Disorder (ASD), within the last 30 credits of degree completion, and in good academic standing.

Appropriate Human Subjects Institutional Review Board (HSIRB) applications were submitted and approved before any portion of the data collection was started. The purpose of an HSIRB on any campus is to ensure that human subjects participating in research are not mistreated and that local, state, and federal laws are followed during the research (Marshall & Rossman, 2006). Access to participants was gained through the university’s disability support office (DSO) after receiving approval from appropriate personnel or research review board at the respective schools. Contacting students through the DSO was necessary because the DSO is, generally, the only office at colleges and universities where students with disabilities register as having a disability. The roster of students registered in DSO is confidential to all inside and outside constituents; therefore, care was needed to send communication that did not jeopardize this trust with the registered students.
Since access to the students was gained through the DSO, documentation of the disability, senior standing, and academic success was already established. Participants meeting these criteria provided the study with the rich data from which to relate experiences and formulate themes.

Institutions from the professional organization MI-AHEAD, who agreed to help recruit participants for the study, were asked to send an email (Appendix A) to those students who have the ASD diagnosis, were senior standing, and in good academic standing. Students, who met the criteria and were registered at these offices, received an email that was sent confidentially through the respective DSO. The email asked the potential participants to respond to an email address that was set up for the purpose of the study. Participants were asked to submit a telephone number so I could read the recruiting script (Appendix B) with the details of the study and answer any questions. If the potential participant wished to continue, we made arrangements to meet to sign the consent form (Appendix C) and begin the interview.

Western Michigan University’s Human Subjects Institutional Review Board (HSIRB) approved the consent form and the protocol for conducting the study. The consent form included the title of the research, as well as, the name of the researcher, the purpose, description, benefits, costs, compensation, confidentiality, and voluntary nature of the study. The consent form also explained the limitations of the study and information about when results will be published. Potential participants were emailed in the order they contacted the study’s email address. The HSIRB approved 8-12 subjects; however, saturation occurred with six participants.
An alternative text format of all communications, including the consent form, was available for students with disabilities, who may have required assistive technology software to read documents. In-depth personal interviews followed the signing of the consents forms to gather more information about their individual experiences (Appendix D).

**Data Collection, Instrumentation, and Procedures.** Data collection took place at or near student’s respective university. An HSIRB approval was needed at each site. I established access first through the disability support office through my networking with the Michigan Association for Higher Education and Disability organization. A recruiting email was sent to the directors of all of the four year public institutions in Michigan. Those directors of DSOs who responded that they had students who met the criteria. I started the pursuit of gaining permission to recruit participants from the HSIRB.

For this phenomenological study, I digitally recorded the interviews, which ranged from 35 to 90 minutes in length. After the completion of each interview, I transcribed it. The digital recordings were destroyed following the transcription. I used field notes as a reflection tool in hopes that my biases and opinions could be put aside, so they would not interfere with the analysis process. To maintain confidentiality, the transcripts were redacted of any identifying information and pseudonyms were used in place of the participants’ real names.

Member checking was used for internal validity after transcripts were created. Participants were available to verify the accuracy of the transcripts and answer clarifying questions, if there were discrepancies.
Prior to the interview process, I wrote a full explanation of my own experience related to the phenomenon in an attempt to bracket off from those experiences of the participants. This exercise is called bracketing or epoche (Marshall & Rossman, 2006). The data for this study was collected from in-depth, face-to-face, one-on-one interviews. These interviews helped me gather information related to those experiences and factors that have led to growth and development in their psychosocial development. It was extremely important to gain the trust of the participants and create an atmosphere that was trustworthy to increase the validity of this research study.

Data management of the transcripts and other documents was backed up to a password protected network drive. The other documents that were stored throughout the duration of the study were: a) HSIRB protocol; b) approval documents for access at various sites; c) consent forms; and d) transcriptions. A notebook of the hard copy transcriptions was maintained and stored in a locked cabinet in my office. After the study is complete, the data will be stored minus identifying information for three years and then it will be destroyed.

**Data Analysis.** There are multiple ways to analyze data. Creswell (2007) claimed his analysis approach for phenomenology is a simplified version of Moustakas’ (1990) approach. When I analyzed the transcripts, I followed the stages as offered by Marshall and Rossman (2006) and Creswell (2007); organizing the data, immersion in the transcripts, creating categories and looking for themes, coding the data, offering interpretations and alternatives, and finally, writing a report to present the findings. I started by reading through the transcripts without doing anything more than reading. This gave me an opportunity to have a broad view of the stories being told by the
participants. It is recommended that researchers memo during the process to get the sense of the data. The second time reading the transcripts, I began to make notes in the margins and form initial codes (Creswell). I practiced epoche, which helped describe the essence of the phenomenon as I experienced it in the hopes that I could reduce bias. After I practiced epoche, it was important to develop significant statements and group the statements into meaningful units. I developed textual descriptions of what happened and developed structural descriptions of “how” the phenomenon was experienced. Finally, I attempted to further develop the “essence” of the phenomenon (Creswell).

The interviews were analyzed for themes for reflective and analytic reporting. Phase one in the analysis of the data included coding the transcripts with an emergent approach to identifying themes. During cross tabulations of the interviews, I looked for themes that transcended all of the interviews. This is when I found similarities and differences in the themes and began to formulate opinions about the findings; how the participants make meaning of their experiences and growth in these developmental areas while in college by identifying themes in the meaning they make. Through analyzing the data, five themes emerged as descriptions of the experiences of participants in college. These findings correspond to the first research question for this study: How did students with an Autism Spectrum Disorder (ASD) experience college, both academically and socially?

Phase two of the analysis involved comparing the emergent themes that came from the data and compared them to Chickering’s and Reisser’s (1993) student development theory.
Yin (2003) claimed that content validity is sometimes problematic in qualitative research. The inclusion of multiple sources of information is one way to achieve external validity (Yin, 2003). For this study, the only source for the data will be from the interviews.

**Chapter Summary**

The purpose of this qualitative phenomenological study was to better understand how students with Autism Spectrum Disorder (ASD) experienced college, and it focused on factors that contributed to growth in three areas of their psychosocial development. Six senior standing students with ASD told their stories as college students and shared what areas within the higher education environment contributed to the development of different psychosocial growth phases. A phenomenological approach was used so that the participants could fully describe the phenomenon being studied: the experience of being a college student with ASD. This approach allowed a better understanding of how the participants experienced growth in the areas of interest in their psychosocial development.

The following chapter includes the narratives of the six participants who were asked to describe experiences, such as events, persons, and/or devices, they found to be a catalyst for their growth in developing competence, managing emotions, and moving through autonomy toward interdependence.
CHAPTER IV

PARTICIPANT NARRATIVES

The purpose of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, focusing on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence. Finally, the purpose of this study was to analyze how the participants make meaning of their experiences and growth in these developmental areas while in college by identifying themes in the meaning they make. This chapter provides a narrative description of the six participants who were recruited to participate in the study.

Six individuals agreed to participate in this study. All were seniors in good academic standing and attending four different four-year public universities in the state of Michigan. Two universities are considered research universities, one is a master’s large institution, and one university focuses primarily on undergraduate degrees. The enrollment figures for these institutions range from approximately 7,500 to 35,000, which provided a good representation of the range of four-year public universities in Michigan.

A table noting the demographic information about the six study participants is presented in (Table 3). The participants ranged in age from 22-27 years old. There were four males and two females. They were all White. These demographics are not uncommon since males are five times more likely to be diagnosed with ASD than females (CDC, 2012). The Centers for Disease Control and Prevention (CDC) reported all racial, ethnic, and socioeconomic groups that were a part of the 2008 surveillance year had occurrences of ASD across 14 different areas in the United States; however, the
occurrences varied greatly among non-Hispanic white children (12.0 per 1,000), non-Hispanic black children (10.2 per 1,000) and Hispanic children (7.9 per 1,000). So while I feel fortunate to have interviewed two females for the study, I was disappointed that this study did not include an interview with a person of color to provide a broader representation of those affected by ASD. Four of the participants commuted to the university they attended and lived at home with parents, while two lived on campus. Their self-reported college grade point averages ranged from 2.39 to 3.3. Their majors were from six different disciplines: business logistics management, theatre, history, finance, computer science, and East European Area Studies.

Table 3

<table>
<thead>
<tr>
<th>Name</th>
<th>Age/Gender</th>
<th>Race/Ethnicity</th>
<th>Major/GPA</th>
<th>Residence</th>
<th>Employ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matthew</td>
<td>24/male</td>
<td>White</td>
<td>Business Logistics/3.0/3.2</td>
<td>Commuter</td>
<td>Meijer</td>
</tr>
<tr>
<td>Kelly</td>
<td>24/male</td>
<td>White</td>
<td>Theatre/2.8</td>
<td>Commuter</td>
<td>Campus</td>
</tr>
<tr>
<td>Mallory</td>
<td>27/female</td>
<td>White</td>
<td>History/3.3</td>
<td>Commuter</td>
<td>None</td>
</tr>
<tr>
<td>Andy</td>
<td>24/male</td>
<td>White</td>
<td>Finance/3.2</td>
<td>On campus</td>
<td>None</td>
</tr>
<tr>
<td>Richard</td>
<td>27/male</td>
<td>White</td>
<td>Comp. Science/2.39</td>
<td>Commuter</td>
<td>Campus</td>
</tr>
<tr>
<td>Anna</td>
<td>22/female</td>
<td>White</td>
<td>E. European/3.0</td>
<td>On campus</td>
<td>None</td>
</tr>
</tbody>
</table>

Narratives of the six study participants are provided below. Each narrative contains demographic information and some context regarding how they qualified to participate in the study (i.e. senior standing, GPA). These narratives could potentially lead to the identification of the participant; therefore, descriptive characteristics that
might indirectly identify the participant have been intentionally eliminated. Characteristics of the participants that could lead to stereotyping of the disability have also intentionally been left off of the narratives. My hope was to provide quotes derived from the interview protocol that gave insight into the characteristics and personalities of the participants.

In addition, these narratives include the stories participants told about their college experiences: describing themselves as a student and a student with ASD, what kind of interactions they had with other people or organizations while in college, and how they may have changed or been changed by their college experiences. Finally, if the participant made any central statements or synthesis about their college experience, this is provided as well. I listed the narratives in the order the participants were interviewed, using the pseudonym I selected for the participant. The interviews with the students ranged from 35 minutes to 90 minutes.

**Matthew**

Matthew is a 24-year-old White male. He graduated from high school in 2007 and spent four years at a community college before he transferred to a four-year public university in Michigan. He received special education services while in high school and currently uses the resources offered through the university’s disability support office (DSO). Matthew lives at home with his parents and commutes to his university. He has a job working in the garden section of the Meijer store near his home. He spends eight hours each week commuting in the car to and from classes. During the warmer months he rides his bike to work to save on gas because it is only two miles away. “Although a
straight shot is two miles westward…if there’s like a 10 degree mile per hour wind, I don’t think it’s worth it.”

Matthew as a student. His grade point average is “right around 3.0/3.1/3.2.” He maintains he was not always a good student. He forced himself through it. He said that reading a chapter from cover to cover was “highly ineffective. My brain is a thousand miles away while reading it. It turns out I get nothing out it. I find it best to read mostly…the first few pages and then the end.”

He originally thought he might go into acting, but came to the conclusion that only 1 in 100 people actually make a decent living doing that, so he took general education courses to start his academic career. His parents eventually told him after two years that he had to find a career path and that he needed to select some kind of major. So he sat down with a counselor at the community college he was attending and chose a relatively new field called business logistics management, which he described as being similar to a bachelor’s degree in business. It incorporates things like making sure equipment supplies get to the “right place, at the right time, at the right dock, at the right price.” It encompasses all the logistics involved with any form of business. His decision to major in this area came after taking the Myers-Briggs Personality Test and being sorted out as an administrative type person.

Views on his disability. Matthew confided that he has always been socially awkward and so his interactions with others during college have been limited.

I’ve been more of the quiet, shy type because of the Asperger’s Syndrome, as that comes with it. I have just been forced to offer myself out. Get involved with clubs and organizations. That’s a major part.
He has researched his disability online and watched videos of individuals with his ASD diagnosis.

(I’ve seen) people with my similar diagnosis and how they cope with stuff...and just networking with others. Have you ever heard of wrongplanet.com? It’s a networking site for people with Asperger’s Syndrome and stuff. I’ve also met a few other students with Asperger’s Syndrome and talked with them and seen how they have dealt with it and stuff...and basically networking with people.

He does not see any limitations with his disability.

I think the only limit is what you allow yourself. If you limit yourself, you’ll be limited...I just keep on aiming higher and keep on challenging myself to, you know, try new stuff. Keep on going out. I guess as the ol’ saying goes, ‘you can do anything as long as you put your mind to it.’

Experiences in college. Matthew had many opportunities that contributed to his college experiences, including joining a few different clubs and organizations. One experience that stood out was when he studied abroad in India for six weeks. He did not rank this experience as the highlight of his college career, but noted it was the “longest, biggest, and most expensive.” He said they received VIP treatment while they were there. He stayed behind for an additional three weeks to complete an internship where he stayed by himself in an apartment and had to do everything for himself. He missed not having access to his car and not being able to go somewhere without paying to get there. Rikishas were the most commonly used mode of transportation. The rikisha runs on natural gas and looks like a three-wheeled golf cart. Matthew said that when the drivers would see him, they would instantly double the price of the ride. “Anytime I wanted to go
somewhere, I had to negotiate with them, learn how to find a shared auto rikisha, which mostly has a fixed rate to get to the metro station to get somewhere else.”

As being a person with Asperger’s Syndrome, I’ve sort of taken a nontraditional approach to college. I’ve been known to take some classes during odd times I guess you could say. In college, I took the road less traveled I guess you could say. It was a traditional/nontraditional approach. That seems so much like an oxymoron.

Interactions with others in college. His college advisors were important in helping him sort out the details about his major and general education classes.

My academic advisors have been essential in finding what to do with my life, what classes to take. They have been an indispensable part of my college experience...they helped me with what classes were available, and what classes I should take and even give me stuff on what teachers maybe that I should avoid, what teachers I should take...

Matthew’s favorite interactions in his classes were in the form of group projects.

Group projects I really love because everyone...you sort of feed off of each other’s work ethic to get the job done. It really helps me. I’m a senior now and I still constantly deal with procrastination. I find it really helps (being in a group). You know everyone is trying their best to do the project, so you have to too. It really helps. I actually prefer to do group projects way more.

Matthew often sees his group members in other classes and it makes it easy to “group up” again.
He has been part of a bible study group and also organizations that are associated with his career path in business logistics management and the International Student Association. His interactions with group members from these clubs were limited to the activities associated with going to the meetings or planning and executing community service projects. Matthew’s experience at the four-year university was very different than the community college in this respect because the community college only had five clubs. He said he would have done more interacting outside of the regular meetings, but he could only afford to come out to campus on the days he had classes. “It’s been harder to have my own community out here and stuff and be involved (because of commuting).”

**Growing independent.** Matthew considers that he has fully assimilated to college “although it did take a bit longer.” The need to interact with and depend on the disability support office at the community college and university he attended was limited to early on in Matthew’s college career or if he had a difficult class such as math and media science where he used the services to get extended time on tests.

*But after a while, after I got all of my math and science classes out of the way, it just turns out...ya know, it comes to the point now where I can pretty much handle it on my own. Because I only needed those accommodations for my most difficult classes...the other ones I was able to get through fairly fine with and I just didn’t have a need to use it, so I just didn’t.*

*I haven’t had need to use the disability (office) much since last winter semester. Because I just made myself independent, I guess, of it...I just sort of learned to become more...striving for independence...not having a need to rely on it...sort of not using it as a crutch anymore.*
Matthew got to thinking about the future and realized that he was not going to be in college forever and that someday he would need to live independently. His plan at the time of the interview was to move out into an apartment.

*I actually plan on moving into an apartment on my own about three to six months after I graduate. I just want to save up a little bit of money for emergency expenses, security deposit, how much I can afford in rent...and after I get an internship or job that pays a decent wage, where I can get by on my own.*

He does not want to be like his siblings who came back after moving out. He wants to move out when he is financially ready and can remain out of his parents’ home. “I have my dad to make sure the door locks as I leave.”

Matthew admitted that along the way he has had to change some of his viewpoints. Either the goal was too unrealistic or it had…

*...zero chance of happening at all...basically, your only true limit is the one that you yourself allow to be limited to. But, of course, there are general realizations. You can’t just start flapping your arms and fly off into the air...aspirations that are grounded in reality.*

*You’re always constantly changing through your life. But definitely college is the most where change is accelerated, I think. Because you know you are becoming independent. You’re getting your life in gear. You’re finding out who you are. Your interests change. Your friendships change. I barely have contact with two or three people at the most I met from high school.*

**Emotional growth.** Emotional growth for Matthew came with facing his fears. While he could not provide an example he did relate:
I am just going to say that you just have to face your fear and if there is something that you’re terrified of, experience it in little bits…but also increasing the dosage of what you experience. So you can get over it or at least adapt to a point where you can live with it or tolerate it...if there is a fear you maybe have to overcome or some other bad habit you have to overcome, you have to face it head on.

Learn how to deal with it. Learn if you need help. I know for example, I pray a lot and that helps me get through a lot of stuff.

**Becoming more aware of others.** In Matthew’s high school there was not much diversity. He was grateful when he got to college to see people different than himself since almost everyone in his high school and those in his community were White.

Matthew met a Muslim student for the first time at the community college he attended. Through his interactions with others that are different than himself he became more culturally aware. He learned that people have different viewpoints and he enjoyed hearing his classmates’ stories in various presentations in his courses.

*Just about every kid in my high school was White. We had about 12,000 students in there; freshmen through seniors. And there were probably only about five black kids that I at least knew. And you know you are basically either a Christian or atheist, so generally there wasn’t a whole lot of diversity.*

*But I started out (in college)...and there was much more diversity there. It was like, ‘wow,’ I didn’t even know there was all this even so relatively close to home...back where I was in high school, it was...basically everyone was about the same. So, it was nice seeing much more diversity.*
Other thoughts from Matthew. Matthew recognized changes in his viewpoints and remembered that there were times in college when he was challenged by the discussions in class and sometimes the discussion conflicted with his beliefs.

*Your viewpoints will change. But I also know that, with going to college there’s also some academic garbage as well...because you need to constantly check yourself...identify your core values. For example, me and my Christianity.*

*That’s been one of the strongest things. Because, I have been approached with facts and statistics that claim my religion isn’t true. I found out there’s stuff debunking those facts. I’ve been approached with other ideas that are highly...that I find highly wrong with society.*

Matthew commented several times that he did not think college was for everyone. He is not completely sold that higher education is the key to success and living the American Dream.

*With college in America, we turned the college degree into some genie in a bottle that can magically guarantee our success. Because we have done that, we have gone through incredibly stupid extremes to get a college degree. A college degree does not guarantee success. It doesn’t guarantee wealth. It doesn’t guarantee happiness. All it guarantees is a person has passed an administered series of tests...realize that...because in our society, we sell college so much. You know. And I don’t think that that is particularly right. Seems like, you must go to college. You know. That’s what we tell ourselves. College really isn’t for everyone.*
Matthew’s advice for incoming freshmen with ASD.

Well, first off, college isn’t for everyone. It may turn out that college is not for you. Because with college, there are many different ways and you can easily get off track...you should at least try it. But I would recommend starting out at least at a community college. So, number one...realize that college isn’t for everyone and it may not be for you or you need to go for a certificate. Number two, on your career path...you’re going to be exposed to many different things in college...if you’re going. I can nearly guarantee you that what you go for isn’t what you’re going to come out of it with if you complete it. And also with your career path, make sure it’s an actual future and something useful because with a lot of college degrees these days, all of these fine art degrees, humanities, philosophies, and a few others...like linguistics...a lot of those fields you can get a Ph.D. and rack up a huge amount of debt. There’s almost no job market for it. Basically, make sure your career field has a realistic outlook and there is realistic employment in that field. Because now the main fields are engineering...a big one...the medical field, and basically accounting and finance or just about any business major. But other than those fields, there is not a whole lot. So make sure your career field has a potential outlook. Make sure that your major is something that is in demand, and something that is not going to be too difficult to find a job.

Don’t rush it, but don’t take too long to graduate either. Because I know some students that graduate that turn a four-year degree into a three and a half-year degree...college is more than just getting a degree. It’s fun. There’s a lot of
challenges. There’s a lot of frightening stuff, but it’s one of the most exhilarating times of your lifetime. You get a chance to explore yourself and see what you want to do. Don’t rush your degree by trying to cram it. Don’t say I’ll just go to school and take 15 credits each semester to graduate. You know to get out one semester early or in the summer in order to graduate in three years. You know...take your time...allow yourself to explore, but don’t necessarily come to the point where you have no idea why you’re there. Always have a meaning and goal that you are trying to reach. Realize that you may have to retake some of the courses that you have the most trouble with. You’ll gain a much more understanding. And also, try to fit in a study abroad.

Matthew has been in college since 2007. He had plans to finish his degree in business logistics management the summer following this interview. He is optimistic about living independently from his parents and finding a job in his chosen area of study in some kind of business.

Kelly

Kelly is a 24 year old White male whose hometown is in mid-Michigan. He currently lives with his parents and commutes to a four-year public university. He graduated from high school in 2008 and took classes at a community college for one year, and then transferred to the state university he is currently attending. He was not employed at the time of the interview but had worked for the food service on campus; a job he described as being “crappy” but admitted that it was nice to get a paycheck.

Kelly as a student. His grade point average is at 2.8 “maybe a 2.9 overall,” but he gets A’s in his major classes. Kelly considered himself a procrastinator when he
started college, with no future in mind, just hobbies. Initially, he was undecided about his major. He really liked to draw a lot and thought it would be good to get an education in that field. After taking some time off to be with his family after the death of his grandmother, he returned to school, but advisors could not “guarantee” him that art was going to get him a job. He considered all of the general education courses he needed to fulfill, so he figured he had time to decide.

He looked into simulation, animation, and gaming because he wanted to see if he could animate, but again it was too new of a program and too simplistic. He was also really interested in theatre and acting, but considered it a “precarious field,” so he decided on history and education so he could be a history teacher. Eventually, he changed back to theatre and feels very right with the decision. “It is my life.” He is involved with both acting and stage production. He is passionate about it because he is able to reveal his emotions on stage and be somebody else. He is able to, “embody someone else. Read a great play or literature and have that channeled through me. I like going outside the zone to portray things like that.” He is focusing on making it as an actor in professional theatres and plans to move closer to New York or Chicago. For now he is looking for an internship or apprenticeship in some professional theatre in Michigan. “We have a good theatre community here.”

His grades have improved even though his procrastination is still a barrier. The last two semesters he made the dean’s list and was hoping the semester during the interview that he would again make the dean’s list. Kelly starts his homework sessions listening to music. He listens to the same kind of music over and over as he starts to study.
Views on his disability. Kelly does not believe that having ASD has really affected his college experience a great deal.

Mainly, the social factor I’d say. I mean, I can still tend to be kind of shy. When I approach people, I can get nervous because I don’t know if they are listening to me or not and I don’t know if it’s appropriate time...to talk. I can’t be sure if they’re in a rush or preoccupied or what have you...for one reason or another, I don’t know why, but I have grown, I’ve been able to read people more easily.

Experiences in college. Kelly joined a club for actors. This experience has not only helped his chosen career but has also helped him with socializing with others on his team. The club actually competes with other universities with similar teams in tournaments.

You either make speeches for yourself or you take works of poetry or prose or an obscure play and you act it out. You interpret it while holding a small black binder...you stand in front of a bunch of judges and they evaluate your performance. And try to make it to the final round.

Kelly has participated in four such tournaments. He has not placed yet, but each time he goes, he is hungry for more. The teams get encouragement and feedback from the other teams as well as getting and giving feedback to each other. “Everybody around me has been nothing but encouraging.” He recognizes his parents as being his number one supporters and is aware of how he has changed because his mom has acknowledged the changes.

They talk to me positively about going out there in the world and getting work and how the forensics team is helping me grow as a performer. I mean, my dad, he
often tends to tell the harsh reality of it. Of how difficult it is to find a job in that field. I guess that’s the way it is for anybody going into that field. It’s partially the role of the dad to worry about bringing home the bacon, ya know?

**Interactions with others in college.** Kelly’s parents have been very instrumental in his college career. They are very encouraging of his theatre major. He also credited his faculty advisor with helping him break into the theatre. She is also an actress. “She has done so much for me. Helping me get my feet wet in this field and just telling me what the positives and negatives are of taking a certain class.”

He said he was a complete loner most of the time when he was in high school and that he has changed a great deal since then. And it is helpful that college has “slightly less @$holes” to deal with. He attributes his ability to interact with others in the university setting to the opportunities provided in the form of clubs and organizations to join.

A friend from high school, who was attending the same university, approached him about joining an organization called Inter-varsity Christian Fellowship. *He just referred me to that group and gave me his number and wanted to hang out sometime. And, so I was happy to meet someone that I used to know. And see somebody that wanted to converse with me...yeah and, for the record, I am still pretty tight with the Inter-varsity group to this day. I have several friends there.*

**Growing independent.** He really got serious about his future when his father encouraged him to be more “well read” and gave him some classic literature to read in the summer of 2010. So that summer he read *Catcher in Rye, The Story of Philosophy,*
and *Lord of the Flies*. The books impacted his thinking about the future and which people were going to help him make decisions.

*I realized that professors are really good and helpful people who have been our age, know what they are talking about, and can help me understand how great it is to have a passion in something.*

**Emotional growth.** Kelly has noticed that he is not quite as emotional when things upset him as he was when he first entered college. He admitted that sometimes he used to get…

...really, really upset because I never had a date in high school. And because I didn’t have a significant other and I thought so many other people did. And that made me feel mad. Thought that maybe there was something wrong with my personality.

Today he sees that kind of thinking as a huge waste of time. Kelly initiated contact recently with a woman and met her for coffee.

…back then, thinking about it would make my blood boil. And I didn’t have the best relationship when relating to women. I mean, I have tended to be awkward and nervous. I still can be a tiny bit, but not as much...right now, I actually have this girl who I went for coffee with and she wants to go see the play, *Urinetown*, with me. So where that will lead…I don’t know.

In high school he recalled trying to ask a girl out and “it came out totally incomprehensible. I was all just…well, I am a weird person. Or I was. It was just like, ‘Excuse me, Christine, do you want to (murmuring)? Yeah like that.”
He thinks his relationship building skills are improving and he is not as
discouraged about that aspect of his life anymore.

*I feel like I really do have a chance at this. And I’m not discouraged about it
anymore and I feel that things are looking up. And I mean, I don’t regularly…I
don’t talk to girls as much as the average...more outgoing guy my age would, but
I do every now and then. I’ve gotten several dates…I feel like I have definitely
advanced there."

**Becoming more aware of others.** Kelly has changed a great deal when it comes
to accepting differences in other people. He no longer looks down on people who do not
believe in God.

*And I don’t look down on people who dress weird. I don’t look down on people
who are gay…I mean, I’ve never looked down on another race certainly...Most
people in theatre and on the Forensics Team are like that (different race, sexual
orientation, religion).*

Through presentations and interactions with individuals at the university and in
the Forensics Team, Kelly learned that people who don’t believe in God can still be good
people and some of the bad stereotypes about race and sexual orientation are not true.
And he understands now that gay men will not come on to him if they know he is
straight.

**Kelly’s advice for incoming freshmen with ASD.**

*...stop, drop, and roll? Yeah that was just random. Okay. Well first of all, I
would tell them...one...keep an open mind. Two...only do it if you feel it...if you
feel it’s right. Go with your gut instincts. And, three...be able to balance the*
importance of a social life with being serious about the next step that you want to take in life...with not only your career, but also what type of road you want to go down. Know the variety and know what you are getting yourself into. And so making that decision is a pretty important change for you. Finding that passion...and if there could be a fourth...probably just keep looking ahead. Not too far into the future. Just look like you are confident with everything and each day is a new experience.

I learned that you don’t have to party a lot to be a good person or to be cool. I mean cool is whatever you define it as. And do not give up your independence no matter what. I mean when I was younger, I didn’t really do that. And your friends are your biggest influences. You need to surround yourself with the right crowd.

Kelly is a theatre major who has been attending college for six years. He is passionate about the possibilities and his future as an actor. He plans to initially start his professional career in the theatre community in Michigan, but is prepared to go to a larger city like New York or Chicago, if necessary, to find a job in a theatre.

Mallory

Mallory is a 27-year old White female. She lives with her parents and younger brother. She graduated high school in 2006 and started her college career at a community college. She reported her grade point average to be approximately 3.3. Mallory admits to being a procrastinator. She said she has improved in this area and can usually finish assignments a couple days before they are due; however, she gets distracted easily and is “noise dependent,” meaning that when things are quiet she gets edgy. She has improved
in her organizational skills by using her planner more regularly and the alarms on her
computer to remind her when assignments are due.

**Mallory as a student.** She is registered with the DSO, but uses it very little. She
gets some help with her test if the questions involve essay or long answers. She is
majoring in history and minoring in public history. Her long term goal is to go into
library science. She has experience doing archival work in a volunteer position at a local
organization. She likes doing research and being a guide. Her mother thinks she would
do well as a docent, a tour guide of sorts. “I will point people in the right direction who
are looking for help.”

Mallory described her new strategies to combat her procrastination and is pleased
that she now gets assignments completed a couple of days before they are due. Her
strategies include:

*Setting down and basically...setting goals. Say like, if I have a paper to
write...say okay I can’t do anything. I figured out how many words I need to get
approximately...for one page, I need about 350 words to type. So, basically, I’ll
say...okay, before you can get up and pace...before I can do anything else...I
want at least 300 words typed up. Or, I want to do at least 600 words. I mean,
when you go in words, it’s a little less...I tend to type in mostly double spaced.
But I type in single space because technically you only have to type half as
much...Well, I think I kind of kicked the whole...like I said, I’ve always been kind
of a procrastinator, but I’ve gotten to the point where I procrastinate until the
week or day before it’s actually due to do it, instead of actually not doing it at all.
Mallory has also changed her bad habits of forgetting to do assignments or forgetting to turn them in. She is using a planner now. She will ask for reminders from her parents, but part of the problem is remembering to ask for the reminders. She uses some technology like the alarm system on her computer, and she also uses her phone for alarms and reminders as well.

She does not consider herself much of a writer. The whole writing process is baffling to her. “I think part of the issue that I have is the way they teach technical writing. They don’t give a strategy. They don’t really give you a strategy for…well, my case is, I am either too specific or too general in cases…then I can’t decide what I want. I get all tangled up. I’ve gotten better at separating it all out.” She did not find the writing center on campus or the tutoring center helpful with her writing dilemmas. She did go to the tutoring center for math problems.

She considers herself an above-average reader and has consistently been at the top of her class in this academic area.

*I was probably the only one in high school and in my pre-college years, who got in trouble for reading. In elementary school we had 23 books in the back of the class. And I read them all. I was reading constantly.*

Her favorite kinds of books are mystery, science fiction, and fantasy. Academic books can be challenging because she reads the entire book. But she likes reading so much that she will read a boring textbook anyhow just for the sake of reading. She reads textbooks from cover to cover. “Because the books are written…basically the way most textbooks are written is the way to get to point A and take you along.”
Views on her disability. She was first diagnosed with ADHD in third grade and later diagnosed with Autism Spectrum Disorder. She described her symptoms as not being able to sit still and rocking a bit. She described the need to pace. She said it is like the feeling you get after sitting through a three or four hour movie, but that is how she always feels. And she makes noises. She admits that she does not connect well with others and doesn’t always know where the social lines are drawn, but can tell when she crosses one. People usually tell her when she is “out of it!”

Experiences in college. Mallory has not joined any club or organization associated with the university. She is an adult member of a venture crew associated with Boy Scouts.

I’m one of the...well given I’m an adult member. I’m over 21. Youth is 14-21. As one of the adult members...as one of the younger adult members...I tend to get tapped for labor and stuff. I’ve gone...I go to a lot of the meetings depending on what I’m doing or what I can drag along for homework. I go because...well part of it is my brother...I mean, I go to maybe a quarter of the meetings simply because one of my parents can’t be there and if the Doors can’t be there, the Woods can’t be there, and dad needs a second counselor. So, that’s part of the reason I’ve gone to some things because everybody else has plans and they need other adults.

Interactions with others in college. Mallory admits that she does not get along with people her own age. She relates better to older adults like her parents and grandparents or to children. She has enjoyed interaction with some peers in her classes, the advisors in the counseling center, and DSO office staff. She has also interfaced with
her professors, but she had others who rubbed her the wrong way. In those cases she simply dropped the classes.

But she was one teacher…it was a history and an English (combined class) and it wasn’t…but the problem with her was she was just way too intense. Unless you were specifically majoring in ancient history, you didn’t take her. I mean I finally dropped the class when she took 49% off…I think it was...60% is an E.

In group projects Mallory stated that she had a tendency to take over, but now she steps back and allow others to participate. “Part of it was because my group mates either didn’t understand the project or they were more interested in filing their nails…now I’ve learned to step back.” Mallory felt in high school she was not wanted and that doesn’t happen in college group work.

That doesn’t happen in college because...and part of it is because I think I’m on an academic level, I think I’m perfectly comfortable keeping up with people because there is no history. They haven’t had me for…and even if they have, there’s less...people have grown up. You’re past puberty. You’re at the very end of it. Your hormones are swinging...in college, unless you’re on the football team or one of the sports teams, you’re really not trying to impress the opposite sex.

Emotional growth. Mallory reported that she is pretty easy going most of the time. There were a couple of times in classes where she had to go outside of class to calm down and take a couple of deep breaths. She does remember an old saying: sticks and stones may break my bones, but words will never hurt me.

Whoever wrote that poem should be shot. Simply because, words can hurt a heck of lot more than sticks and stones, and they don’t leave any marks. If someone
throws sticks and stones at you, they can get into a heck of a lot more trouble than name calling. A lot of it was... 'take a deep breath.'

**Becoming more aware of others.** Group work and changing some of her strategies in the classroom gave her the opportunity to get to know other people and to hear different points of view.

Actually yeah, I think this semester was a breakthrough for me, I think. Well, I’m not shy in talking in class... Part of it... the issue is the other people like to talk and this is the first year... this semester... that I haven’t had a professor remind me of that... I usually had at least one professor remind me at the beginning of class... say, ‘Step back a little. You gotta pipe down a little bit.’ Yeah. I mean, I don’t like being the only one to talk, but I’m not shy about it. When you are trying to discuss something, one person is not a discussion. One, maybe two people, is not a discussion. Well, two people can be a discussion. One person... not so much... different points of view. I mean, just because I see one thing... different perspectives may be... you may catch something that I don’t.

Mallory has never had a problem with differences in other people. She is curious and often asks questions.

*I try not to be rude, but if I’m curious about something, I’ll... but race, gender, religion, physical capabilities... it doesn’t really bother me. I mean there was one girl I worked with in Girl Scouts that had cerebral palsy. She was either in a wheelchair or in braces sometimes. With scouts, I’ve met people with disabilities.*

Yeah. *With religion pretty much... with scouts one rule is you can’t be an atheist. But with religion, they’ll accept any. I’ve seen with the religious medals,*
there’s at least 20 different religions that had religious awards you can earn through scouts. With me, I believe in a higher power, but I don’t believe in religion. It just doesn’t really make sense to me and I think part of it is…I can’t sit still through the hour of…church services don’t really like you getting up and pacing through.

Mallory’s advice for incoming freshmen with ASD.

For academic advice, I would say know your styles. Know your testing styles. If you know you’re going to need…sort out what additional help you’re going to need prior. I’m high functioning, so I just need a place to go. I’m a good student for them to have simply because I don’t need any special or really fancy stuff. I just need a place to take tests and extra time. So, they don’t actually have to spend more money on me.

Well, I know I didn’t do this, but I probably should have…would be, look on the notice boards. Find a club that will fit with your schedule and at least go to one session.

Number three…try to work on getting a job now because the longer you go without getting one…and the more gaps you have in your history, the harder it is to get it…I haven’t really done that and I don’t know if I could get one now because I’m a senior and they prefer at least two years. Look into it (early). Try to get it now. Try to get stuff setup because it’s…the whole Catch 22 with experience as you look at every job and 90% of them say, even the burger flipper jobs, ‘experience required.’
When asked if incoming students should disclose their disability to those they socialize with or to employers when they are applying for a job, Mallory responded:

*Social, it depends. In my case, if you have something that is noticeable...I rock. I pace. It’s better to tell them that you have this and it’s not just a bad habit, it’s just something (I do)...In some ways, I get less strange looks if they know.*

*Basically, I like labels and I don’t like labels. My pacing...now, without someone knowing I have Asperger’s, they just think I’m odd. She’s a strange kid. But, if they come up and ask, and you tell them...if they know...that I have Asperger’s and it’s not something that I can really control. I try, but basically I found that if I don’t, my pacing tends to be worse if I try to suppress it. It builds up. I have actually gotten rid of it mostly...this odd sort of hop, skip, and a jump. I’ve mostly gotten rid of it, but part of it means I get up and pace a little bit more. So, instead of going back and forth once or twice, I keep it at a walk instead of running. It’s something I’ve learned to control. A lot of it is six of one, half a dozen of another.*

*Employers, they’re not always going to want...telling after you’ve got the job is okay, but it might be...better to withhold. Well, in the interview process. The thing is, if you tell them you have Asperger’s...I mean part of the thing is I was kind of upset about the big deal they made about the kid with Asperger’s (the one who shot the children in the elementary school)...say I go to an interview and they ask do you have any disabilities? Do you have any disabilities we should know? Now, I have a hard time not rocking...and if they ask about it...I say, well I have Asperger’s. They might say later on, well we have three candidates, and*
while this girl is really qualified, but she has Asperger’s and they might connect the kid who shot up school with the kid with Asperger’s diagnosis and they say...well, we’re not going to take the chance on her. She’s got a disorder and we don’t really want the problems that might come with it.

Mallory is 27 and has been in college for seven years. She is majoring in history with a minor in public history and has only a few more classes to complete her degree. She plans to attend graduate school to obtain a degree in library science. She admits to not connecting well with her peers; however, enjoys the company of older and younger people.

Andy

Andy is a 24-year-old White male. He graduated from a west Michigan high school in 2007. He started his academic career directly out of high school at a four-year state university and will be completing his degree at the same university. Andy lived on campus for his first three years and then off campus for a year.

My GPA after three years was 3.5. Then I had a really rough semester when I lived off campus...didn’t really focus on school. Got a little side tracked. My depression kind of started to take a toll on my schoolwork.

At the time of the interview Andy was living back on campus, which he claimed helped him focus better on his academics. His current grade point average was 3.2.

Currently it (his GPA) is a 3.2...I had a really rough semester before I realized I needed to get help... I kind of had a period where, I didn’t really know if I could be successful in life until I kind of find out who I am and got some help with some underlying things.
Andy as a student. He describes himself as pretty smart. He got his academics from his mom. For the first three years he lived on campus and academics were very easy for him and he was successful at getting good grades.

I don’t feel like I studied every hour of every minute that I was awake. I really didn’t. I’m pretty smart. I’m pretty decent at school. (Name of University) is not one of the easiest schools, but it’s not one of the tougher schools. But, I was pretty successful.

I didn’t have the best studies habits I guess you could say. I really don’t remember how I did so well to be honest. I made it to my classes. I took it very seriously. I didn’t skip class. I wasn’t out partying and drinking, or unable to focus the next day because of the previous night… I did take school very seriously. I knew it was very important. I did very well my first two years. Then, the third and fourth year I started to relax a little bit more living off campus.

The commute to campus began to take its toll on Andy and his performance in his classes to the point that he failed his first class in college.

It took me about a half hour just to make it to campus because of transportation and that sort of thing. So, I started to relax and my grades slightly slipped a little bit…it was...a statistics class. The teacher...I really don’t want to take it with the professor that’s currently teaching it. He likes to sound smart and, therefore, he is not good at communicating as a professor. He is very dry.

Views on his disability. Andy was not diagnosed with Asperger’s until about two years ago while he was in college. He had some mental health issues that he battled,
but admitted that he did not pay attention to his disabilities because he was actually ashamed of the challenges his disability caused him.

*I stumbled across...I really wasn’t looking for anything online, but I saw someone post something online and I was curious. I didn’t know anything about Asperger’s. I clicked on it and I started reading it. The first couple of minutes reading it, I kind of self-diagnosed myself and it took me about six months to maybe a year after I read that to get professionally diagnosed by (a clinic in Michigan).

Yeah, probably the last 10 years I was aware of it but I was really kind of ashamed of it. I was really embarrassed by the fact that I was different and I didn’t even tell my parents. I didn’t let anybody know. I kind of felt like it was my fault and I kind of blamed myself. I kind of internally dealt with it. Looking back at it, it was kind of the wrong way to go because there is so much help that I could have gotten. I never really reached out.

**Experiences and Interactions with others in college.** Andy said that he has a hard time making guy friends because he is more interested in girls. So he thought he would join a fraternity.

*I have a hard time making guy friends; I guess you could say because I am more interested in girls you know...naturally. I really focus on...I don’t know if it’s more subconscious that I’m focused on girls...but, I really don’t have a group of guys friends. I thought joining a fraternity might be a good stop. I really haven’t learned much from being in a fraternity. It hasn’t helped me in any way at this point. I’m open. I haven’t given up on it.*
Andy also joined a start-up student organization after running into an acquaintance who had a similar major.

*Yeah. I ran into this girl at this job meet and greet. We started talking. There again, great things happen when you talk to people and find out, ‘Hey what do you do? What interests are you in?’ She started the leadership organization.*

**Growing independent.** Andy’s break from college and his diagnosis of Asperger’s has given him pause to think about the future and becoming independent from his parents. Andy has been successful in college when he lives on campus and did well in terms of being independent from his parents, but liked the connection to campus to keep him focused on his academics.

*I feel like if I land a good career or start becoming self dependent, I feel like that’s when they will realize I’ve actually made a change. Until then…my mom was very doubtful because before I made this change, she saw me very stuck in this rut. So, she kind of looks at that and when I actually dropped out that fall semester, she was really wanting me to get back into school and that sort of thing.*

*When I broke the news to her, she was very negative and my parents really kind of came down on me for that. It all kind of came crashing down in one night.*

**Emotional growth.** When Andy’s academics started to slide, his parents insisted that he get some kind of help if he was not going to return to school the following semester.

*I said I was having a rough time and they told me if I wasn’t going to school, you should see a psychologist. I said, ‘Yeah, I will see a psychologist.’ I was very depressed and I hadn’t started taking my depression meds. Depression was really*
getting the best of me at that point in time. I was like, ‘You guys really just have
to trust me. You have to believe in me. You can’t keep bringing up negative, old
things because I’m trying to change the person. You can’t keep harping on me
and being negative.’ My mom does that a lot. I noticed when she talks to her
mom, she’s very negative and very condescending. She doesn’t realize it.

...I will never think of what bad can happen. I will be very real about the
situation, but at the same time, I will be the most positive person I can be. I think
positive attitude can really go a long way.

Becoming more aware of others. Andy’s hometown is an area in Michigan that
does not have much diversity. He loves people who are different because he is different
himself and loves the fact that people accept him for being different.

No. And I love diversity. I love it. This Asian girl that started the leadership
institute...we get along great. I really like the fact that people are different. I
really enjoy it. I really like talking to people who are from different parts of the
world. There are a lot of people at (this university) that are from different parts
of the world, and I’m always kind of picking their brains about what’s different.
I’m always kind of picking their brains to kind of learn.

Andy’s advice for incoming freshmen with ASD.

I would say, don’t feel like you are in a shell by yourself...in a bubble. There are
people that want to help you. There are great people on campus.

If anyone has Asperger’s in the area, I think that (name of therapist) is
somebody you’re going to want to talk to...even if you are just skyping with him.

He is very good at his job. He challenges you. He tells you what you need to do.
It really is ultimately up to you. You have to take the first step. I’ve always
looked at life like you can’t force someone to do something if they don’t really
want to do it. So, you really have to want to do it. It’s not going to be easy and
that’s why I waited 10 years because I knew it was going to be a struggle. I
didn’t want to admit to this and that…but there is no point in trying to pretend
you are someone you’re not. I recommend getting as much help as you can
because there is a lot of help out there for you.

Just try to wake up every day like something great is going to happen
because…don’t ever have a negative mindset. Nothing good ever happens to
negative people.

Andy is a 24-year old male majoring in finance. He was diagnosed with
Asperger’s only two years ago while attending college. Since then, he found lots of ways
to cope with the challenges his disability presents. He has been attending a state
university for six years and intended to graduate the summer after this interview.

Richard

Richard is a 27-year old White male. He has been attending a four-year public
state university for 10 years. He lives at home with his parents and siblings on the east
side of the state. He is a commuter student and has a part-time job working for the
university’s campus dining. Richard admitted that when he started out in college he had
trouble because he could not decide on a major. He also had trouble passing some of his
classes like math and English. He is currently majoring in computer science and has a
2.39 grade point average. Richard is registered with the DSO and uses accommodations
such as extended time and taking test in a separate location. Richard has only two classes left to finish his degree. He hopes to work for Disney someday as a “Disney Imagineer.”

**Richard as a student.** Richard describes himself as more vigilant of a student now that he has improved his study habits significantly. He considers himself to be a pretty good note taker. He takes notes to remember the discussions in class. He thought about recording the lectures but found it easier to pay closer attention and write down problems from the book that the professor writes on the board “so I have a better understanding of what is expected.” Richard has repeated courses before and one at least three times. He was a very good student in high school and did not have to take notes. When he came to college, he came to the realization (with the help of his mom) that he needed to write everything down. “I’m a lot more vigilant with my studies and everything and remembering all of the codes or what is expected of me by professors…repetition usually helps me better understand what I learned the first time through.” He recognized that just paying attention to the lecture and thinking he could remember it all mentally does not work in college.

**Views on his disability.** Richard admits to not knowing much about his autism. He equates it to some of the personalities he sees on television. He said that he thinks his autism is what stops him from asking for help. He tries to handle things on his own.

*Well, I think with my autism I have this notion to try to handle things on my own and not ask for help. That might be a matter of pride…now with my Calc II class, if I’m having trouble, I speak to my brother Kyle about it.*

Another barrier he noted with his autism was writing “off topic” for writing assignments and not meeting the requirements the professors have established.
Experiences in college. The DSO has a “club,” and Richard spent some time going to its meetings.

Mostly it was a chance to talk and socialize with other kids with disabilities.

Also, attend a little awards ceremony we have at the end of the year for kids who have shown progress in their classes, despite their disabilities.

Interactions with others in college. Richard has been able to interface with his professors if he needs help in a particular area of study. He also uses the DSO and regularly meets with someone in that office. He remembered that his advisor offered encouraging words and would suggest what classes he should take and advised him on what to do if he had to retake a course more than once.

Group projects have been helpful to Richard, although he had to be reminded to do his part during group assignments. One professor allowed him to do a project on his own as an independent study; however, another professor insisted he keep up with his “teammates.”

Sometimes when it comes to the group projects, I do my best to offer my participation effort in them. I used to lollygag and my teammates would do everything. So, I learned that I have to do more than that if I want to get points for the group participation...I ran into my partners in Dr. (name of professor) class and they were very thrilled to see I was bouncing back from how much I struggled in the fall.

Emotional growth. Richard feels as though he has improved and changed when it comes to recognizing and controlling reactions to unpleasant things that disturb us as adults.
I would have to say so because when I find myself getting angry or frustrated...I try (harder) to hold it...tell myself to not lose my temper. I keep trying to tell myself not to snap or anything or throw a temper tantrum because that just leads to me breaking my video game controller. If I get frustrated, I have just tossed them on the floor in anger...to sum that up: things don’t come cheap.

Richard related an example of emotional feelings not related to gaming when he would get his tests back in math and did not do very well.

I felt disappointed. I tried to understand where I went wrong so I didn’t make the same mistake again. I would go over solutions of the test in the math resource center with a tutor. I would make sure I wouldn’t suffer that same disappointment again. Sometimes, when it’s my first time taking a course, I would suffer from that disappointment at least on a couple of tests before I would make any signs of a comeback.

Richard indicated that his mom was instrumental in helping him learn to calm down when things get overwhelming. His past reactions to being overwhelmed have been clutching his head and screaming. He reported that now if he clutches his head and does “a growl move” his mother quickly comes to his aid.

_Sometimes when I get really frustrated when I’m given a lot of chores to do at home and I feel overwhelmed, she helps calm me down so I can ease into doing them one at a time. So I don’t feel like I have so much dumped on me at once._

If his mom is not around when he gets overwhelmed, he goes onto a computer or the “world-wide web” and watches videos of old children’s shows from the 90’s.
**Becoming more aware of others.** Exposure to differences in other people is a common occurrence for Richard, especially at the university he attends. He believes he is accepting of other people’s differences because he does not show any hatred or anger towards them and has even talked to them and befriended one person he believed to be of “Middle Eastern decent.” He has made it a point to ask questions of those he views as different in order to get better ideas about their religion or culture, because he only has television as a point of reference.

...whenever I go to college and I see anybody who looks to be of Middle Eastern decent, I don’t show any anger or hatred or prejudice against them. I know that unlike the terrorists, these kids just want to earn a decent education and make new friends...Like I said, given time, I don’t show any anger or hatred towards any kids of Middle Eastern decent or Muslim. I actually maybe even talked to them. I even had a student in my French class this past winter that I befriended. (I have) learned a little bit about their holidays and everything...some of the ideas that I have are from TV shows, and I wanted to ask them when they celebrate the Muslim feast of Ramadan.

**Richard’s advice for incoming freshmen with ASD.**

Make sure if you are having trouble you ask for help. Make sure you also make regular visits to your disability advisor or your professors or the dean. And, if you feel overwhelmed, seek out friends you think can help.

Richard is a 27-year old student majoring in computer science. He has been attending college for 10 years, commutes to the university he currently attends, and lives at home with his parents and three brothers. He has only two more classes left to
complete his bachelor’s degree. When he finishes his degree, his dream job would be to work as a “Disney Imagineer.”

Anna

Anna is 22-year old White female. She is in her senior year, majoring in East European Area Studies. She lives on the campus of the four-year university she attends in Michigan. She started out as a science major at another state university, but became interested in Russia when she did a study abroad through that university. She decided to transfer to a different state university to pursue a major more closely associated with her interests in Russia. In the summer months she lives with her parents along the eastern shore of Lake Huron in Michigan. Her grade point average is about 3.0. She is planning to attend graduate school to pursue a Ph.D. and research more about Russia.

Anna as a student. Language is Anna’s strong academic area although parts of language can trip her up when she concentrates on “how” something is said rather than the content. Math and/or algebra she reports as being harder for her to understand.

It was great for lower levels, until I got into Algebra. I just got confused because I couldn’t identify what they wanted, I think...I’m really good at story problems because I know what is going on and what I should be looking for, but I don’t necessarily get the answer with their specific strategy and that sort of got me in trouble because they wanted me to do it...you know what I mean? Yeah and then when it got to even more abstract things like matrices...I just couldn’t do it. I was just confused and the more confused I got, the more angry I got. Like I should know how to do it. Surprisingly, pre-calc was fun.
Anna is most proud of her senior thesis. She has been planning it for a year and has been working with one of her professors. She can’t say that she has changed much as a student in terms of getting better at her academics because she describes herself as always being an overachiever. She revealed that the “overachiever” part of her got the best of her when she tried to commit suicide a year ago. She has been working with her family and a therapist to be more realistic about her grades and tries not to stress on those subjects that are not her area of expertise, such as political science.

*I was more accepting of the grades that I got in political science because I kept reminding myself that this isn’t my area of study. This is something that I’m doing as an elective.*

**Views on her disability.** Anna said that her family always knew that she was different but didn’t really give it a name. She knows she does not always understand unwritten rules or nuances from movie plots. She is better now about asking others to explain what she might have missed from the movie.

*It was really frustrating for my dad because he didn’t understand why I was really shy, and my mom just kind of learned to adapt to what I needed. I was a four-year old with a planner and drawing clocks, so that I could look up at the clock and reference for any different changes. They never thought it was anything to diagnose. They just thought it was my personality.*

*Then a family friend who is a retired doctor said...that she has a spectrum disorder; the fact that she doesn’t make eye contact and she’s very routine-oriented. So my mom did some research on it and would ask people, ‘Read this and tell me what you think. Does it apply to Anna?’ They were all like, ‘Yeah, it
does.’ Then she gave it to me to read and I kind of threw it back at her. ‘There’s nothing wrong with me. Don’t say this.’

This was when Anna was about 16. When she was 18, she started to investigate ASD a little more and started chatting with others online.

*When I was 18, I began to realize that a lot of this does apply to me. So, I started talking to people online. ‘Can you tell me your experiences?’ The more that I talked to them, the more I realized, this is my experience. So, I got a diagnosis. I was 20 or 21, I think?*

*Other counselors were like, ‘Yeah, I can see it but I can’t give you a written diagnosis, but I can tell you that you fit what I know.’ I was having a lot of issues with housing (at university she is attending)...they weren’t giving me a private room. I was having a lot of stress and a lot of panic attacks from having a roommate.*

Anna does have some sensory processing issues and is currently trying to find ways to deal with them.

*The sensory thing was a lot. I was trying to find out more about how to deal with it. I am very sound oriented. Yesterday I was getting gas and the cashier was speaking and I was like, ‘your voice is just repellent, you’re no longer cute.’*

*...I just didn’t get that (the sensory issues). But after understanding Asperger’s, it’s been more like the sensory processing because you know my parents were trying to socialize me without knowing that I had Asperger’s. So, it was like I just copied my sister who was a social butterfly.*
Voices are very much...I like a person because of it or I don’t. For high pitch noises, I can’t stand it. Lights can sometimes drive me crazy. I actually used the Disability Services note so that I could wear sunglasses in a class that had...I have no idea what kind of lights they were.

Yeah. I don’t like a lot of smells. I felt kind of bad for my sister because she would get a new perfume and actually smelling it was...I told her you need to go wash that off, that’s too much. She’d be like, ‘I only spritzed it like twice.’ Anna has steered herself away from majors that would accentuate the sensory issues she has recognized as barriers to her success.

Academically, I think that I would be like if I was asked to do something hands-on and I don’t like texture or the smell of it will repel me. We were going to do a dissection in biology and I just said that I would write a paper.

Experiences and Interactions with others in college. Anna has a high regard for the other students who have the same major and has been able to get to know them through her interactions with them in class.

So, being with people passionate about their interests made it easier. Hey, you know what this is. I don’t have to explain it. Outside of my East European Area Studies friends, I am kind of unsure as to who is my friend now or if they are just an acquaintance.

Anna had a roommate when she first attended college but later asked the university to give her a single.

I prefer my own bedroom. I’ve only shared an apartment with one girl and that was a really, really uncomfortable situation. They originally put me in (name of
residence hall), but all of my classes were (far away), so I’d be on campus for most of the day. Then I’d have to take the bus which was overcrowded and people would be touching me, and I don’t like to be touched. That was the main reason.

Anna joined a club and found many unwritten rules and was confused about how to interact. When new people joined the club she decided she would assist them with some of the things she found difficult.

*I was part of the (name of club). It’s just kind of a fun way to give you more friends. You have chosen to do this and are voluntarily there, so you are going to meet people with the same ideas and interests and there aren’t any expectations except to have fun.*

When asked if she had ever mentored new members:

*I wouldn’t put the word mentor behind it, but as a member of (name of club)...my first year in it, there were all of these unwritten rules. When the next person came along to join us, I was like okay, I’m going to talk to them and I’m going to give them advice. For my initiation, I wore high heels. And we ran around, so I told her to wear flats. They are going to ask you these questions...this is the proper response.*

**Emotional growth.** Anna shared that the fall before she tried to commit suicide. She did not go into a lot of details about the incident, but was very open to sharing the strategies she is using to continue to help herself through this rough period in her life.

She also revealed that she is a recovering “cutter.”
I’d learned to keep it inside. Now I am learning to find the right ways to vent it because I am a cutter in recovery…so, I would take it out on myself. I would repress it...before I thought asking for help was a sign of weakness. Now, I just know that it’s not.

I’ve always kind of kept it inside. To me, a temper tantrum is loss of control. A meltdown is most definitely…I am out of control. There is no control over me. Get me out of this situation. I don’t really recall them. My mom can probably tell you more about it than I can.

**Becoming more aware of others.** Anna comes from a very small community without much diversity. She wasn’t aware of things like racism or how to react to differences.

*We didn’t have the problems that I’d have to react to, so if there were racist people, we didn’t know. It’s hard for me to understand racism because not only was my exposure very limited, but I didn’t fit in...so for me in college, it was much more of I don’t want them to think I’m racist. I was more concerned about how I come across to them than I am about my feelings for them, which are highly annoying, because I ask stupid questions."

She considers herself very open to the LGBT community because she has been more exposed to it.

*I just found out that like half of my classmates are gay. I didn’t know that there were lesbians in my high school class. I just said, ‘That doesn’t concern me.’ They are people just like me. At least they are doing something positive.*
One of my classmates...went to Siberia the last internship. So I got exposure to him. Besides the initial questions like: How does that (being gay) have an impact on our relationship? How do I address you? What are the things I should or shouldn’t talk about? How comfortable are you with me?

One person made a joke and everybody laughed in class about the gay guy, and I was very uncomfortable because I didn’t know if that was okay to say something. He’s laughing but I don’t know. I think I have become more accepting of people.

Anna’s advice for incoming freshmen with ASD.

For academics, know your progress and if you are having any difficulty, go talk to the professor first. They can identify the issue or maybe they can change up the way they are teaching. Or get tutoring.

For social...try and join a club. It doesn’t have to be related to your major.

Find sensory things that help you. I strongly recommend iPod. When you have a distracting sound that’s pleasant, it’s better...if something is just too obnoxious of a sound, I can just turn up my music and block it out because I like the music that’s on my iPod. It’s out of here. My senior year of high school, I noticed that when I started listening to it, I didn’t have as much anxiety and tension and issues in public, so I used it all over.

Anna is a fifth-year senior majoring in East European Area Studies. She is planning to go to graduate school to pursue a doctorate degree in the same area and continue her research on Siberia.
Chapter Summary

These narratives contained demographic information and the stories participants told about their college experiences: describing themselves as a student and a student with ASD, what kind of interactions they had with other people or organizations while in college, and how they may have changed in certain aspects. Finally, if the participants made any central statements or syntheses about their college experience, these are provided as well.

The next chapter of this dissertation describes the findings of this study. It provides emergent themes that were identified and uses quotations from the participants. It also examines the themes focusing on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence. Finally, this chapter provides suggestions for future research as well as suggestions for university personnel who are working with students with ASD.
CHAPTER V
RESEARCH FINDINGS

The purpose of this study was to better understand how students with Autism Spectrum Disorder (ASD) experience college, focusing on factors that contributed to growth in three areas of their psychosocial development: developing competence, managing emotions, and moving through autonomy toward interdependence. It was also the purpose of this study to analyze how the participants make meaning of their experiences and growth in these developmental areas while in college by identifying themes in the meaning they make.

There were two distinct phases of the data analysis. The first phase focused on the experiences of the participants. Through this data analysis process, five themes emerged as descriptions of the experiences of the participants in college. These themes were then used to answer the main research question for this study: How do students with an Autism Spectrum Disorder (ASD) experience college, both academically and socially? As well as sub questions: a) What experiences do students with Autism Spectrum Disorder (ASD) associate with their learning and academic success?; and b) What kind of meaning do they attach to the experiences and how far do they perceive they have moved in their development?

The five emergent themes that will be described in this chapter are: a) coming to terms with an autism spectrum diagnosis; b) using the “campus compass” to find purpose; c) being aware of diversity; d) participating in purposeful social interactions; and e) being aware of emotional growth.
Theme one: Coming to terms with an autism spectrum diagnosis: “We always knew that I was different.”

All of the participants of the study related some issues about their Autism Spectrum Disorder (ASD). Some participants were more familiar with ASD and the challenges for people on the spectrum, and described ASD more globally at times. The effect the disability had on the participant’s ability to be a student in college varied. During most of the interviews, the participants and I referenced Asperger’s Syndrome, since that is what many of the participants were diagnosed with and they were comfortable referring to Asperger’s. One participant knew about the impending changes being published in the DSM-V (2013) the summer following the interview. She worried that this research would be outdated before I wrote it. Richard said that he had autism and so I continued to reference his disability as autism throughout the interview. Richard articulated the least about ASD and admitted that he did not know very much about it, except for what he saw on television.

Similar to the Stages of Acceptance of a Learning Disability, developed by Higgins, Raskind, Goldberg, and Herman (2002), coming to terms with any disability involves a certain amount of self-awareness of the disability as it relates to oneself. All of the participants referred to themselves as having a disability and responded to the invitation to participate in the study that called for students with ASD. The participants also described events that involved their disability but later ignored the disability in subsequent responses to questions, which might suggest they only considered it a portion of their identity and did not allow the disability to define them as a person (Higgins, et al., 2002).
They described a range of challenges as well as a range of descriptors or characteristics about ASD that seemed intertwined; the characteristics were generally related to the challenges the students were facing. Participants were asked toward the end of the interview, what, if any, challenges they faced being a college student with ASD. In most interviews the participants had already relayed stories about their disability and its challenges. Being aware of the challenges seemed to make them more comfortable with having ASD.

**Characteristics and challenges described.** The word *procrastination* was mentioned several times during the first three interviews and was a focal point for Matthew, Kelly, and Mallory as they described how they overcame some academic challenges inside and outside of the classroom.

> ...*It really helps me. I’m a senior now and I still constantly deal with procrastination.*

> *I find it really helps.* (Matthew)

> *Well, I can be a real procrastinator.* (Kelly)

> *Well, I think I kind of kicked the whole...like I said, I’ve always been kind of a procrastinator, but I’ve gotten to the point where I procrastinate until the week or day before it’s actually due to do it, instead of actually not doing it at all.* (Mallory)

Academic procrastination is estimated to affect up to 70% of college students, and 50% who procrastinate do it regularly with problematic results (Schouwenburg, 1995). The results of chronic procrastination suggest that students underperform academically, are more anxious throughout the entire semester, and have negative health and financial issues (Sirois, 2004; Tice & Baumeister, 1997). These studies also suggest that procrastination impairs the general development of students in college. Therefore,
finding the answer to why students procrastinate has been the question for researchers as well as finding interventions to this widespread phenomenon.

Four participants described themselves as being “awkward” socially. Similar terms are used to describe social impairments in several books about Asperger’s (e.g., Attwood, 2008; Gillberg, 2002; Wolf, et al., 2009). It was interesting to hear this term used repeatedly when they described themselves in relation to ASD. This indicated to me that they had done some research on Asperger’s to find out more about themselves and others with Asperger’s. “Different” was also used as a self-descriptor.

Well, I’ve always been socially awkward. I’ve been more of the quiet, shy type just because of the Asperger’s Syndrome, as that comes with it. (Matthew)

It’s kind of social awkwardness. (Anna)

I mean, I have tended to be awkward and nervous. I still can be a tiny bit, but not as much. (Kelly)

‘If your daughter weren’t so different, other kids wouldn’t tease her.’ My middle school experience and teacher’s quote to my mom. (Mallory)

So, it kind of is really a snowball effect and some anxiety started to develop. I was pretty self-conscious about me being awkward, for a lack of a better term. It was a challenge, and I wish I would have gotten help about 10 years ago because I feel like I could have enjoyed life. But, you know you can’t look to the past, you just have to look forward. I’m pretty thankful I did get the help I did. (Andy)
Andy and Anna were not officially diagnosed with Asperger’s until they were in college. They were also the only two participants who lived on campus and had roommate interactions prior to officially being diagnosed with ASD.

*I went in as a freshman and didn’t really connect with anybody on my floor. I didn’t have really anybody except my roommate from that year. I really didn’t talk to anybody. I was very focused on school, and I didn’t really think it was a bad thing...got good grades. (Andy)*

Andy struggled with the idea of calling it something other than just being a little different and didn’t want a label put on him. Andy had been an athlete in high school and played on a variety of teams. He recognized that the team provided all the socializing he needed and gave the appearance that he had friends.

*Yeah, I was very...if I hadn’t been involved in sports, I think it would have been a little more apparent. But, I was always involved in sports. I played a sport and I was always busy with sports, and with that you kind of have a group mentality. It appears on the surface, that you do have friends. I did have friends...not like I didn’t talk to anybody...but I never had a connection.*

*I never felt like I was really good friends...and it was kind of like a snowball effect because when you can’t connect with people...people don’t enjoy your company, and in turn it’s hard to form a relationship. You’re not giving to them what they expect out of you pretty much. It’s kind of a snowball effect because when you are isolated, you kind of don’t have any people to hang out with and do activities with, and just do all of the normal things that people do.*
It's tough to realize this if you don’t have Asperger’s, but what it really does is, it limits your ability to just talk to people about really anything.

Andy researched the characteristics of Asperger’s and later sought assistance from a professional after he dropped out of college and his parents insisted he get some help from a therapist. It was while he was getting help that he learned more about himself and the disability. He credits his therapist and the work in the clinic for helping him return to college and improving some of his social and interpersonal skills.

Anna’s “come to realize plot” started when she was 16 after a family friend self-diagnosed herself and passed on the characteristics of Asperger’s to Anna’s mother to see if Anna might have some of the traits listed in the criteria. Anna’s mother immediately saw some similarities but Anna didn’t want anything to do with it, and refused to acknowledge the potential that she may have Asperger’s. When she entered college, she really wanted to have a room by herself and told the University Housing Office that it was not working with her roommate. By this time, she was acknowledging that she probably had Asperger’s but had not been officially diagnosed.

I just couldn’t relate to my roommate. The more I tried, the more it seemed like I wasn’t getting anywhere. I told her I had Asperger’s and after she messed up my schedule several times, I said to her that, ‘I need you to tell me if there’s going to be a change.’ You know, I shower at a specific time. Since normally, she would be in class at this point...she had it off or something. She was in the bathroom, and I don’t know when I’m going to get a chance to use the bathroom. I don’t know how to rearrange it and there was no notification. She kept doing that day
after day. I was shaking when I spoke to her and said, ‘There’s going to be a change.’ After that I didn’t really see her. She voluntarily avoided me.

Anna was unable to get a single room based on her disability because she did not have any documentation to support her need to have a room by herself. In order to satisfy the university’s requirement, she had to provide documentation of her Asperger’s and her need for a single room, so she sought a diagnosis with a qualified professional.

I prefer my own bedroom. I’ve only shared an apartment with the one girl and that was a really, really uncomfortable situation. They originally put me in (name of housing unit). Then I’d have to take the bus which was overcrowded and people would be touching me, and I don’t like touch. (Anna)

The participants seemed comforted in calling their challenges and social awkwardness - something. Mallory said she was more comfortable disclosing her Asperger’s to people on her own. She felt the need since she exhibits some quirky behaviors such as pacing.

In my case, if you have something that is noticeable…I rock. I pace. It’s better to tell them that you have this and it’s not just a bad habit, it’s just something that…in some ways, I get less strange looks if they know...Basically, I like labels. Labels, in some ways is...my pacing. Now, without someone knowing I have Asperger’s, they just think I’m odd. She’s a strange kid. But, if they come up and ask and you tell them...if they know...that I have Asperger’s and it’s not something that I can really control. I try, but basically I found that if I don’t, my pacing tends to be worse if I try to suppress it. (Mallory)
Mallory didn’t always have an Asperger’s diagnosis. She was first diagnosed with ADHD when she was three. It is common for persons with ASD to also have attention issues, either hyper focused or distracted easily, (DSM-V, 2013). Mallory felt she was misdiagnosed with the ADHD and that the Asperger’s diagnosis was more appropriate.

_It kind of fits better than ADHD. I don’t really have concentration issues. Well, in classrooms, I don’t have. I may need to move a bit, but that doesn’t really affect my concentration that much._

Mallory was very aware of the outward signs of her disability. She knew that stress was a big contributor to the pacing she described.

_Stress. With stress or listening to music sometimes, I tend to get into when I move around a lot. I tend to pace a lot. Basically, have you ever sat through a really long movie and not gotten up at all? Like a three, four hour movie? That’s kind of like that all of the time for me. That’s the best way I can describe it. It’s just I need to move. It’s hard to sit still. And, I tend to make noises sometimes when I’m thinking. I can catch on to stuff pretty fast._

Mallory also had a good sense and was able to articulate how she connected with others.

_Socialization...it’s kind of hard. I don’t connect well. The way I’ve seen it...the best way to describe it is...I’m considered high functioning. I don’t always know where social lines are drawn but I can usually tell when I’ve crossed one. I’m pretty good at catching on when people are like, ‘Okay, you’re getting a little out of it.’ I can catch on a little faster once I’ve crossed it. Usually people’s_
reactions are like, ‘okay, you’re really not supposed to do that.’ I’m pretty okay at backtracking, but I don’t always know when I’m getting close.

Kelly attributed his social awkwardness with his inability to interact with others effectively. But then followed that thought with his strategy to overcome the challenge by continuing to “put myself out there,” and making more opportunities to interact. Kelly is certain his chances at forming a long term relationship with a mate (female) are looking up. He spent a lot of years in high school feeling inadequate because he did not have a date or girlfriend.

Yeah. I feel like I really do have a chance at this. And I’m not discouraged about it anymore and I feel that things are looking up. And I mean, I don’t regularly…I don’t talk to girls as much as the average...more outgoing guy my age would, but I do every now and then. I’ve gotten several dates, so...

Andy informally surveyed his friends to see if they thought he was different.

Getting feedback is going to be the only way you are going to make any progress. So, I asked everybody, all of my girlfriends, and all of my friends that I became close with, and all of them kind of said, ‘There’s nothing wrong with you.’

The participants all seemed to be coming to terms with the ASD diagnosis. They were all aware the differences they felt because of their disability, and according to Higgins, et al. (2002) that is the first stage of acceptance. Many of the participants also described moving through the second stage, the labeling event. This is when parents, teachers, and doctors worked to identify what is different about them. Anna and Andy both were diagnosed in college and described how they struggled with the diagnosis process. They were pushed by their parents to get help or be identified with “something”
to make sense out of the difference. All six of the participants had moved through stage three which Higgins, et al. explained as understanding and negotiating the label by understanding what is needed in order to function in the classroom. In stage four, the student compartmentalizes the disability to the extent that he/she minimizes the importance but begins to explore special talents. All seemed to be up to stage four, having focused on a major in college and trying to find their special talent, as Higgins, et al. described being a pivotal part of this stage. The fifth and final stage is transformation, which is described as the person considering the disability as being a positive force. Andy was the only one who articulated these kinds of sentiments; however, all of the participants were in the process of coming to terms with their ASD diagnosis and seemed to be moving toward this acceptance.

Theme two: Using the “campus compass” to find purpose: “It is great to be serious about something and that you have a sense of direction in your life.”

A university’s mission is to help its students find what they want to do in life by way of educating them in a field of study to support a vocation. The academy has evolved and the modern day university has many tools it uses to help students navigate and find direction – a “campus compass.” These come in the form of student services, housing and residence life, academic programming, career services, on-campus student employment, and a host of other opportunities that help students find their identity and purpose.

Astin’s (1999) engagement theory and Kuh’s (2008) high impact practices are both linked to student success and retention, which ultimately intersect with student development. Astin explained that his engagement theory is appealing because it is easy to explain the empirical knowledge about environmental influences on student
development. He explained that “involvement” is the amount of physical and psychological energy that the student devotes to the academic experience. Kuh’s high impact practices focus on teaching and learning, and gives institutions of higher education guidelines for programming depending on the institutions’ priorities and focus. These high impact practices include: first-year seminar courses, common intellectual experiences, learning communities, writing-intensive courses, collaborative assignments and projects, undergraduate research, diversity and global learning, service learning, internships, and capstone courses.

All of the participants reported using parts of the “campus compass” or breadth of programming and resources to enrich their experiences at their respective universities. Matthew and Kelly used their academic advisors to help in this way. Both reported the academic advisors and career guidance office at their community colleges helped pick out classes. Matthew’s counselor also helped him discover his interests by administering a test to Matthew that highlighted his areas of interest. From there, they found a major to match his interests at the four-year university he was planning to attend. He transferred to the four-year university and connected with faculty advisors in his area of study for more assistance with choosing classes in his major and making the connection to a club associated with his major.

*My academic advisors have been essential in finding what to do with my life, what classes to take. They have been an indispensable part of my college experience.*

(Matthew)

He was a member of a student organization and had the unique opportunity to study abroad. After the study abroad program he stayed for three additional weeks for
an internship, getting some experience in his major area of study while living independently.

    *I have just been forced to offer myself out. Got involved with clubs and organizations. That’s a major part.*

    ...I had so many experiences that contributed so much during college...but the study abroad has to be one of the most noticeable ones because it was the longest, biggest, and most expensive...take a study abroad and learn to see how they do things in a culture very different from your own. Or even if it’s somewhere over in Europe, just get out and make sure you travel to a different continent and see how they do stuff.

Kelly’s faculty advisors in theatre were instrumental in encouraging his talents in acting and backstage skills. His advisors also helped him join an acting club where he was able to experience the theatre community near the university. This experience not only helped his chosen career but also helped him with socializing with others in his club. The club competes in tournaments with other universities that have similar clubs.

    *You either make speeches for yourself or you take works of poetry or prose or an obscure play and you act it out. You interpret it while holding a small black binder...you stand in front of a bunch of judges and they evaluate your performance. And try to make it to the final round.*

Kelly was by far the most enthusiastic about his chosen career of theatre. He was excited to have his purpose and passion.
I’m just realizing this now. That helped me to know that I needed to be serious about making a definite plan for myself in my life, and find something that you can really hold dear to your heart and would hate having taken away from you.

Andy and Anna lived in on-campus housing and were the beneficiaries of living in close proximity to their classes. Studies support the theory that students who live on campus have higher retention and graduation rates (Tinto, 1993). While the socialization part of the housing experience did not appear to benefit either one of them, the location of the housing (eventually for Anna), and the support from the housing staff appeared to help Anna and Andy, if for no other reason than they didn’t have to commute, and could find more time to study and do other things.

Andy sought the help of the DSO office after he was diagnosed his junior year after receiving outside counseling. He registered with DSO and used that to help him get back into campus housing, which he attributed to a better performance academically. While living on campus, he was able to get to classes on time and didn’t have other things to worry about, such as grocery shopping or how to manage his time since the commute was longer.

About two weeks before school started, I was looking for a place because I was planning on coming back. I really didn’t have anybody to live with or plans of that sort of nature. I met with the housing director and I said, ‘I’m in the (disability office).’ They said they were able to find me a room. So, that was kind of a blessing in disguise now that I look back on it. I was actually trying to live off campus again…and I could have lived off campus…but I waited about one day
too long to sign a lease. That ended up being the best decision I’ve ever NOT made, you know.

Mallory implied numerous times of her involvement with the DSO, but changed topics when asked more specific questions about her interactions with the DSO staff. She admitted that she was not a fan of counseling with a therapist because of the turnover in personnel she had experienced, and she didn’t like starting over with people every six months. While she did not join a club at her university, she thought it was important enough to mention that incoming freshmen should consider going to at least one session.

Well, I know I didn’t do this, but I probably should have…look on the notice boards. Find a club that will fit with your schedule and at least go to one session.

(Mallory)

Richard used many resources at his university. He networked with the Career Office to begin the application process to Disney for employment or an internship. He was employed at the time of the interview by campus dining. Richard used the DSO regularly for extended time on tests and getting tutoring help for math. He knew his DSO advisor by name and said she was helpful navigating university policy when it came to picking out courses and repeating classes. And with her urging he joined other students with disabilities to celebrate different accomplishments in what he termed a “club.”

Well, she offered me encouraging words and everything. She would suggest what classes I should take or what I should do if I had to retake a course more than once. She also suggested I join a local club with kids with disabilities.

Finding a path, a passion, and a purpose is an important developmental stage in a student’s academic career. The participants in this study used the tools and guiding
instruments offered at their respective colleges and universities to find their purpose. Finding purpose is the sixth vector that Chickering and Reisser (1993) proposed, and although it was not the focus of this study it emerged as a theme.

**Theme three: Being aware of diversity:** “I liked it a lot more because there was more variety…it was different…in high school…everyone was about the same.”

Colleges and universities design intentional teaching and learning practices to help students explore cultures and worldviews that are different from their own. Creating curriculum and opportunities for students to engage in a more diverse environment helps students become more culturally competent. Graduating students who are culturally competent has a number of advantages for institutions who are trying to prepare students to work in a global society.

Campinha-Bacote (2002) presented a model of how one becomes culturally competent. It starts with those wishing to become culturally competent acknowledging that they are *becoming* culturally competent, rather than already considering themselves competent. The process involves the integration of cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. Developing cultural competence involves the ability to understand and communicate effectively with people across cultures.

When asked about accepting differences in others, every participant acknowledged that they came from very homogenous communities. All six of the participants are White. They relayed that their hometown communities or the high schools they attended had very few persons of color.

*Well, where I went to high school, it was pretty much…there wasn’t much in terms of diversity. Just about every kid in my high school was White. (Matthew)*
The town I come from, my high school, there were only like four black students tops. It was all White. (Kelly)

I come from a very small community. Because it was a small community, we didn’t have the problems that I’d have to react to, so if there were racist people, we didn’t know. It’s hard for me to understand racism because not only was my exposure very limited, but I didn’t fit in...so for me in college, it was much more of I don’t want them to think I’m racist. (Anna)

They all had different interpretations of the “acceptance” part of the question. As they reflected on the question of accepting differences, it became evident that some of the participants had never considered the subject of differences before college, especially when they shared their lack of exposure to diversity in high school and their hometowns. It was also interesting that many indicated that if they had questions regarding the person’s difference, they would simply ask questions of the person. It was unclear whether the recipients of the questions were receptive to the questions or were obliging and answered.

I try not to be rude, but if I’m curious about something, I’ll...but race, gender, religion, physical capabilities...it doesn’t really bother me. I mean there was one girl I worked with in Girl Scouts that had cerebral palsy. She was either in a wheelchair or in braces sometimes. With scouts, I’ve met people with disabilities. (Mallory)

I asked about them. Yeah, because some of the ideas that I have are from TV shows and I wanted to ask them when they celebrate the Muslim feast of Ramadan. (Richard)
I was more concerned about how I come across to them than I am about my feelings for them which is highly annoying because I ask stupid questions. (Anna)

When I meet someone that is different from me, I absolutely love it because I am extremely different. I am an extremely accepting person because I love the fact that people can accept me for me being different. (Andy)

Well that would be an easy question to answer because whenever I go to college and I see anybody who looks to be of Middle Eastern decent, I don’t show any anger or hatred or prejudice against them. I know that unlike the terrorists, these kids just want to earn a decent education and make new friends. (Richard)

It seemed that all the participants achieved some level of awareness of their own culture and worldview. I am uncertain if their awareness is to the level of acknowledging that they are becoming culturally competent, as Campinha-Bacote’s (2002) model stresses, rather they are recognizing their own differences, making the comparisons, and asking questions. Further development would be needed for the integration of cultural awareness and cultural knowledge to move participates to a competency level that would include understanding and effective communications with people from other cultures.

Theme four: Participating in purposeful social interactions: “I actually prefer to do group projects way more.”

The participants of this study took advantage of opportunities to interact socially with peers, professors, and others by participating in purposeful social interactions such as group work, clubs and organizations, and class discussions. These opportunities were not always successful, but they gave the students a chance to explore the boundaries of the interaction and make adjustments as needed to be more successful on the next try.
One of the purposeful social interactions that seemed to rise up almost as a sub theme was that the students liked engaging in group work. Teaching professionals use group work as a pedagogical tool to help students discover things about themselves and others while working in group dynamics. One of the high impact practices that Kuh (2008) discussed was how collaborative assignments provide students with goals to learn to work and solve problems with others, as well as, sharpening their listening skills to hear the views of other students in the group.

Liking group work surfaced initially because of Matthew’s response to questions about what helped him learn, adjust, and grow as a student with Asperger’s. He declared he had to learn to adjust because he was not social and, specifically, he sometimes had a hard time finding a study partner. As a probe to this question, I asked about group projects:

*Group projects I really love because everyone...you sort of feed off of each other’s work ethic to get the job done. It really helps me. I’m a senior now, and I still constantly deal with procrastination. I find it really helps. You know everyone is trying their best to do the project, so you have to, too. It really helps. I actually prefer to do group projects way more. (Matthew)*

Hearing first hand that Matthew found so much value in group work seemed contrary to the standard impression that ASD students prefer to work on their own when it comes to group work. Group work from the teaching professional’s perspective might be difficult to facilitate when ASD students are factored in, but it became clear that the students in this study appreciated the opportunity to interact with their peers and contribute to the overall intellectual discussions. For instance, Mallory admitted that she
had to tone down her contributions during group work, and was glad because she was
beginning to listen more and liked hearing others’ perspectives.

One thing I’ve gotten better at is not taking over the entire project...Well, because
in high school, I had a tendency to take over the group projects. Part of it was
because my group mates either didn’t understand the project or they were more
interested in filing their nails... I’ve learned to step back (in college). (Mallory)

Richard found value in group work. He was able to articulate that he learned
what was expected of him in group work and made some changes to meet the
expectations of the professor. He remembered one professor who allowed an individual
project when he had trouble with other group members.

Other students, they are a great help, especially if I had them for group projects.
Sometimes when it comes to the group projects, I do my best to offer my
participation effort in them. I used to lollygag and my teammates would do
everything. So, I learned that I have to do more than that if I want to get points
for the group participation...I had to keep up with my teammates. (Richard)

Anna’s experience with group work was positive and she continued to work with
some of her group members in other projects.

We do group projects for a specific professor. It worked out fine. I usually ended
up with the same people. For 302 our final project I thought it was going to be a
disaster and it actually turned out pretty well. We all went over to someone’s
house and drafted plans for scripts. We were the only group who actually turned
in our project...In high school I didn’t really have a lot of friends. I was much
more wary of people and I didn’t want to talk to them. Now I challenge myself more to talk to them. (Anna)

Mallory also was feeling better about contributing to discussions in the classroom and not being judged. She spoke about her confidence being charged because she was at the same level intellectually and that there weren’t a lot of other factors to deal with from her classmates. She appears to have recognized her place in the classroom and how she helps the discussion move along or even get started.

That doesn’t happen in college because…and part of it is because I think on an academic level, I think I’m perfectly comfortable keeping up with people because there is no history. They haven’t had me for…and even if they have, there’s less…people have grown up. You’re past puberty. You’re at the very end of it. You’re hormones are swinging…in college, unless you’re on the football team or one of the sports teams, you’re really not trying to impress the opposite sex. Actually yeah, I think this semester was a breakthrough for me I think. Well, I’m not shy in talking in class. Part of it…the issue is the other people talk and this is the first year…this semester…that I haven’t had a professor remind me of that. I think I’m not getting to the point where…although, I’ll still put my hand up on occasion still. In some ways, it’s more of a prompt than anything because I know that people are more likely to talk if someone else is...(Mallory)

Clubs and organizations provided social interactions for all of the participants with varying degrees of involvement. Matthew’s bible study group participation was successful, and he seemed to understand the influence the group had on him. He indicated that he was still involved with the club and remained in touch with some of the
members. Andy’s experience with joining a fraternity was not quite as successful as he would have liked. He thought it aligned pretty well with him because it was not too social. He joined the fraternity to gain more “guy” friends.

*I have a hard time making guy friends, I guess you could say because I am more interested in girls you know…naturally. I really focus on…I don’t know if it’s more subconscious that I’m focused on girls…but, I really don’t have a group of guys friends. I thought joining a fraternity might be a good stop. I really haven’t learned much from being in a fraternity. It hasn’t helped me in any way at this point. I’m open. I haven’t given up on it.*

Kelly’s theatre club interactions were a focal point of his discussion for a good portion of the interview. He announced his membership in the group during our phone conversation when I called to set up the meeting place and time for the interview. Membership to the club has helped to give him his direction and provided him with friends that he otherwise would not have made. His professors, who are also actors, also participated in the club and offered feedback on his skills as an actor. Kelly enjoyed the interaction and could predict that the social interactions would be positive because he knew the boundaries or the rules of engagement, so he persisted and continued to participate with eagerness.

Mallory did not join a club associated with her university, but she was involved as an adult advisor with a group associated with Boy Scouts. She liked getting out of the house and said she did well relating to youth. She saw herself as a fill in at times for other adults who couldn’t be there. Her brother is a member, and she claimed to have fun helping the members of the group plan events.
So, that’s part of the reason, I’ve gone to some things because everybody else has plans and they need other adults. I like helping and going to stuff, but some of things I’ve had to go to simply because I’m the only. It’s either I come along or we don’t go at all... Meetings are pretty much just planning meetings. Part of our venture is a youth run organization, meaning the kids are supposed to do most of the planning. Actually, as adults we are not supposed to... we are guides, not leaders I believe is the term.

Making an intentional effort to engage in social interactions emerged as a theme in this study. The participants regularly practiced interfacing with peers, professors, and others in purposeful social interactions. The learning that took place during these interactions provided understandable boundaries or sets of rules that the participants were able to use in the future.

**Theme five: Being aware of emotional growth. “I don’t react to every little thing.”**

All of the participants had a pretty good awareness that they had changed when it came to emotional triggers or reactions to things that may have upset them in the past. Two of the participants were seeing therapists at the time of the interviews, and two others mentioned therapists, but were no longer seeing someone on a regular basis.

One student revealed that she had stopped out of school for a period because she tried to kill herself. She recognized that her strategy for coping with stress was not productive. She also shared that she was a “cutter,” a term used to describe a person who cuts his or her own body deliberately when they are experiencing stressful situations. The wounds are usually superficial in nature. She said she was a “recovering cutter” for two months at the time of the interview.
Matthew was not sure what I meant by the question at first and was not free with his answer. He asked to come back to it. When we did come back to the question later in the interview, he referred to a time when he read a book as a child and how it upset him. At the time of the interview, he still could not really articulate why it upset him. He thought maybe it had to do with a part of the book that referenced separating from parents. What he remembered more was his reaction to the book and that he did not react as severely to things anymore.

*I do have one thing in mind. It was a major...it emotionally distraught me for no apparent reason or maybe there was a reason. I think it was when I was in seventh, eighth or ninth grade, I had this strange emotion of leaving home or something. It sounds ridiculous right now. I don’t know. It was very unsettling for some reason. I guess maybe I blocked it out. My mind has either learned to accept it/block it out because it is maybe not even healthy to refer back to. It was all centered around this one book that I read. It was a very short book.*

*Basically, it just messed me up in my brain or something. I guess it was just learned from acceptance from growing up and stuff. I saw the book at a bookstore. It’s mostly a children’s book I think. I don’t know, but it really caused great mental strife in my mind for no apparent reason. Obviously, that wasn’t the point of the book, but with me and my Asperger’s, as you know, my mind is wired differently; it was really, really bad. (Matthew)*

Kelly was able to relate a couple of different ways he improved his emotional upheavals. He was primarily concerned with his relationships with other people, and in some instances, the lack of friends from the opposite sex.
I guess when I don’t make a big deal out of how I’ve related to other people. I don’t…I probably don’t…go on a swearing tangent quite as much as I used to.

Which is better if you’re in public…I don’t think about my personal problems at random times during the day and just sit there feeling mad about them like I did as a teenager.

Mallory’s references to emotionally upsetting times took her back to middle school and high school. She was definitely the victim of bullying and had a number of stories that related to how she coped with the cruelty of her classmates. Her parents were her biggest resource when it came to developing strategies to get past the obvious bad treatment of her peers while in middle school and high school.

I think it was mostly my parents because at the time…well, middle school basically…you know the standard, they say, ‘Just ignore the kids. ‘One of the things I honestly hate…you’ve heard the phrase or poem, ‘Sticks and stones may break your bones, but words can never hurt you?’ Whoever wrote that poem should be shot. Simply because, words can hurt a heck of lot more than sticks and stones and they don’t leave any marks. If someone throws sticks and stones at you, they can get into a heck of a lot more trouble than name calling. A lot of it was…take a deep breath.

I think middle school was probably my most emotional time, simply because that was when…well, basically the thing is, the kids didn’t act…if the kids in any environment know…I mean I don’t consider college students kids because we’ve already grown up. We already know that this isn’t appropriate.
...But, in middle school, I mean if the kids know that the teachers aren’t going to do anything...when we do this and the teacher does nothing, or the teacher tactically doesn’t do anything, turns her back, then they’re going to escalate.

Andy practiced a lot of self-talk. He received a significant amount of therapy and appeared to be at point in his life where he has been able to apply the advice and help he received.

*I’m actually a lot better at dealing with negative things because if something bad happens, I just say, ‘Well, I learned something. I learned what not to do.’ I take everything that happens as a learning experience. I look at myself as a very different person. I used to think I was so unlucky to have this disorder. How did I get so unlucky? My mind has shifted a complete 180 degrees.*

Richard recognized a shift in his emotional responses. He described the self-talk he used to refrain from reacting severely to emotionally disturbing situations. He described his mother and others who he trusted as people who have been able to help him deal with situations that upset him.

*When I find myself getting angry or frustrated, I try to hold it. Tell myself to not lose my temper. I keep trying to tell myself not to snap or anything, or throw a temper tantrum because that just leads to me breaking my video game controller.*

Anna’s emotional growth has also been with the help of a therapist. Her desperate act a year earlier to end her life resulted in her getting some intensive counseling. She recognized the importance of talking about her frustrations as opposed to keeping things bottled up inside her.
I’ve always kind of kept it inside. To me, a temper tantrum is loss of control. A meltdown is most definitely...I am out of control...

I’ve learned to keep it inside. Now I am learning to find the right ways to vent it because I am a cutter in recovery. So, I would take it out on myself. I would repress it. I think the reason I wasn’t able to get far with that story was he was supposed to be happy. He was supposed to get through it and I couldn’t get through it for him because I couldn’t get through it for myself. Before, I thought asking for help was a sign of weakness. Now, I just know that it’s not.

The participants of this study were aware of the emotional growth they have and are experiencing. Some participants are further along, using self-regulation and control. But emotions are not always easy to control for any student, especially when other issues surface that students are not prepared to handle.

**Chickering’s and Reisser’s Vectors**

The second phase of the data analysis compared the findings from this study with Chickering’s and Reisser’s (1993) student development theory. They established a framework that described elements of student development commonly found during the traditional years a student is in college. Chickering and Reisser recognized the limitations of sequential models, knowing students are infamous for not progressing through an institution according to a planned schedule. Hence, they posited that the order of the stages suggested building blocks to make a good foundation, but that movement along any one stage or “vector” can occur at different rates and can interact with movement along another. For purposes of this study, we presumed that it is likely that a college, by virtue of its mission, will move students along the first three vectors helping
to construct identity. This part of the analysis is intended to answer the research subquestion: How do the experiences they talk about reflect growth in their psychosocial development; specifically, developing competence, managing emotions, and moving through autonomy toward interdependence?

**Developing Competence.** Developing competence is the first of seven vectors proposed by Chickering and Reisser (1993) as developmental stages that students in college usually progress through. A quick review of this vector suggests that students who are developing along this vector are learning to trust their abilities and are relying on feedback from others they trust. They start to integrate the skills they have acquired and refined, creating a more confident self. Students with a better sense of competence will be more willing to take risks to pursue more difficult tasks because they have the perception that they will be successful. Competence also involves synthesizing information from multiple points of view, providing the student with a variety of references to make sense out of experiences and observation (Chickering & Reisser).

There are three areas of competence: intellectual, physical, and interpersonal (Chickering & Reisser, 1993). Many of the themes from this study support the first vector offered by Chickering and Reisser. The participants in this study described changes in their thinking with regard to their ASD diagnosis and presented as confident senior students in college. They made opportunities for themselves to interact socially with others, and in doing so, discovered boundaries for interacting appropriately to improve their social skills that are often barriers for ASD students. And they learned about personal differences and diversity directly from other students, and started to appreciate the complexity of the world outside of their own.
Developing competence is an appropriate developmental task for students with ASD in college. The participants of this study seemed to focus on the academic and interpersonal skills and did not show much evidence of growth physically. One of the biggest challenges for students on the autism spectrum is to gain social skills to be able to interface with others. The participants in this study described changes in their thinking with regards to their ASD diagnosis. As the students described different ways they were coming to terms with their ASD diagnosis, it was clearly a fundamental step that helped them build on other areas of competence. Students in this study are finding their place in the world and because the disability has been such a big part of their lives, the students needed to know what ASD is and how it affects them.

Many of the participants researched Asperger’s to find out more information about it, and how it was being described to the rest of the world. They made generalized statements about Asperger’s from their research and asserted the characteristics they had in common with the information they discovered. For two of the participants, it came down to finding out what it was that made them different. Getting diagnosed with ASD in college for Andy and Anna had a profound effect on their ability to move forward and be successful students. They both stumbled in their academic work and were trying to get answers. Anna wasn’t able to cohabitate with a roommate successfully because of the inflexibility she had with her set schedule. Andy moved off campus, and then had no routine and fell into a pit when he found himself in charge of a schedule that didn’t exist. When it was no longer manageable, and he was doing poorly in his studies, he withdrew from the university. He was guided to self-discovery by his parents who urged him to seek help from a therapist. As a result of their self-discovery, Anna and Andy described
changes in their behaviors when it came to becoming a better student and improving interpersonal relationship with others.

The other four participants also described similar changes to their behavior as they discovered more about their ASD diagnoses. One participant admitted the need for perfection, and then finally began to accept her performance in class if it wasn’t perfect. Development along this vector for these participants included the realization that in order to develop intellectual competence in the higher education setting they would have to ask for resources because of the disability. Determining what is needed to be academically successful is a focus for the students and their parents, and has been for many years. Part of coming to terms with the disability is knowing and being able to articulate what you need, as Mallory explained in her interview. What she didn’t say, but it goes hand in hand with knowing what you need, is knowing how and when to ask for what you need as a student with a disability. Their success in the classroom is tied to the accommodations they have asked for, such as extended time on tests or tutoring services. And the protocol for students who ask for resources from their professors generally starts with registering through DSOs.

Participants described their understanding and recognition of the need for assistance in order to develop academically. Matthew, Kelly, and Richard described the help they received in subjects that they traditionally struggled with. They further described the tutoring or assistance from DSO and that they were able to pass the classes eventually. They also recognized when they were able to function at a successful level in the classroom, and did not need or want accommodations. Some participants acknowledged this as a step toward independence and becoming more confident.
Anna and Mallory did not need much assistance academically; however, Anna could not function in her living situation and it was affecting her academic performance. She asked for accommodations that were external to the classroom in order to function on a college campus (having a single room). Mallory’s assistance from DSO came early on in her academic career for a few classes like math and writing. And then what might seem like even bigger developmental progress, some participants reported their decisions to stop asking for help in order to move toward independence. It almost seemed like a badge of honor to disassociate with the DSO; for the students who elaborated on independence from assistance from DSO, it was an honorable thing.

*Participating in purposeful social interactions* helped students in this study gain the confidence they needed to develop along this vector. The students learned what worked for them and how to be successful at purposeful social settings. Social interactions are not intuitive for students with ASD, so they must learn from exposure and exploration. They made opportunities for themselves to interact socially with others to find boundaries or sets of rules in order to learn to improve their social skills that are often a barrier for ASD students.

Many participants recognized the value in collaborative assignments. Matthew was the most introspective about these experiences, but all appeared to see the value of group work and how it contributed to their learning and adjusting experiences. Mallory took a step back to listen during group work because she recognized her habit of monopolizing the conversation or “taking over the project.” She previously judged her counterparts as not knowing as much as herself, and was now acknowledging the value of others’ opinions and contributions. Richard’s experience with group work helped him to
realize when he was slacking and not participating. He responded to the professors who gave him more instruction on how to be a contributing member of the team for the project.

The data suggests that by rethinking the approach to group work and collaborative assignments for ASD students with clearer definitions, professors should be able to use this teaching and learning tool for all students. Because we know that ASD students respond best to concrete directions and clear guidelines, it will be important that the collaborative assignments have these elements, especially if it is known that an ASD student is in the classroom. This technique of having clear expectations for group members and transparent instructions for the assignment are aspects that will most likely benefit all students, and should be considered universal design in nature.

The data also suggests that disclosing to other group members is helpful for the ASD student as more awareness of ASD becomes available to the general population. As Mallory stated, she discloses to classmates and group members so that she can just be a part of the group. She feels her group members can relax because now they know she has Asperger’s, and they can get on with the assignment and stop wondering why she is pacing.

*Being aware of diversity* supports the participants’ appreciation of the complex world. They appeared to be in very early stages of becoming culturally competent. This may be because before college their world was very isolated. Matthew and Kelly described almost identical high schools that they attended, although they attended different schools. They described their schools as being made up of nearly all White students with very little diversity when it came to race and ethnicity. Matthew made
meaning of his growth in this area by proclaiming that he no longer thought people who
didn’t believe in God were bad people. According to Kelly, his friends in the theatre club
and his classes were all members of the LGBT community. Through his acting
experiences and interactions with these individuals, he explained that some of the
stereotypes he understood before were not true. The participants may have had different
interpretations of the question regarding accepting of differences in others; however, they
recognized their own differences, which is the first step to becoming culturally
competent.

Using the “campus compass” to find purpose theme supports the first vector
because finding identity and purpose are all intertwined with developing competence.
Matthew and Kelly used academic advisors to navigate the complex academic world.
Matthew’s counselor helped him discover his interests through a formal assessment in
order to help him chose a major. Kelly tapped into his advisors and professors heavily as
he wrestled with his passion (theatre and acting) with the more pragmatic major – history
with a teaching emphasis. He eventually gave way to his passion and relished in the idea
that he had found direction, and he did not want to be without it; a threshold of sorts that
he described when he finally made the decision to go with his intuition and passion.
Anna found her direction when she participated in a study abroad program. She then
changed her major and her university to fit the unique interest she gained from the study
abroad experience.

The participants were developing competence similarly to the way Chickering and
Reisser (1993) described traditional age students in college who develop along this
vector. There was abundant data to support growth in intellectual and interpersonal
competence, but little to support growth in physical competence. Motor deficits and sensory sensitivity are characteristic of individuals with ASD (DSM-V, 2013). Either of these physiological aspects of the disorder may explain the lack of development in physical competence.

**Managing Emotions.** The development along the second vector, *managing emotions*, was supported by a couple of the themes that emerged as experiences in college as the participants in this study described. As a review, Chickering and Reisser (1993) explained that conceptualizing development along this vector starts with the student becoming more aware of the variety of feelings and where those feelings come from. Students who are moving through this vector find ways to balance negative or painful feelings with more positive emotions and ultimately integrate the feelings. Students who learn to manage aggression and anxiety are accomplishing developmental tasks required for mature self-regulation.

Developing along this vector was apparent for the participants. Each person articulated and recognized areas of emotional instability from the past and what steps they took to move forward to have more introspection when it came to their emotional health. Several of the participants described how they had managed to curb the explosive aspects of an emotional upheaval. The challenging part for them is to understand why the emotions are rising to the surface and then working on attitudes and behaviors related to the reason (Chickering & Reisser, 1993).

*Being aware of emotional growth* was an experience the participants described, and it emerged as a theme and directly supports this vector. The participants demonstrated through their stories that they had a good grasp of their current emotional
stability. They gave examples describing self-regulation, awareness, and changed behaviors and attitudes.

Mallory described being bullied in middle school and high school. She told one story in great detail about a boy who trapped and taunted her in their classroom when the teacher and other students weren’t around. She eventually pushed and punched her way past him in order to separate herself from the situation. Separating and compartmentalizing was a method her parents had taught her. They said just ignore the kids and taught her the rhyme about sticks and stones. This was repeated to the degree that she no longer appreciated that saying because she realized that words really do hurt.

At the time, she relied a great deal on parental intervention with the schools. Mallory’s reflection of the situation presented a mature recollection with insight. She recognized where the feelings originated and how to control them or avoid those kinds of situations. But she also admitted that she couldn’t always control her reactions to things she wasn’t prepared for.

Richard described being mad and having almost fits of rage in which he would throw things and clutch his head. As a 27-year old college senior, he has developed new coping strategies. He described his mother as being instrumental when he was younger in helping him calm down and think things through. He now retreats to the “worldwide web” or watches old television shows from his childhood that brings him comfort. He mentioned global issues that upset and contribute to his anxiety such as the terrorist attack on the World Trade Centers and the lack of fire and police protection in his hometown.
When Anna shared her extreme emotional trauma when she tried to kill herself, she related how she had changed and recognized an unhealthy method of dealing with her frustrations. She changed behaviors because of this realization and was using new strategies, such as discussion of her feelings, rather than keeping them to herself. She described how she was able to change her perspective on things she previously thought were extremely important. She was beginning to prioritize.

*Coming to terms with an autism spectrum diagnosis* and learning more about the ASD diagnosis was directly related to being able to regulate emotional upheavals for the participants. Once they found out more about themselves and the disability, they learned how to cope and used strategies to succeed. For most participants the disability is directly related to needing to develop alternative reactions to things; therefore, learning more about ASD was essential to being able to develop emotional maturity.

*Participating in purposeful social interactions* also supports this vector in that socialization is the “place” where students can test their control and mastery of the task. Integration is necessary and can be strengthened when positive emotions are the result of the interactions (Chickering & Reisser, 1993). Students described being confident in the purposeful social interactions, knowing in certain circumstances they will be respected and listened to. According to Chickering and Reisser, colleges provide ideal environments for developing capacities for commitment and passion through intellectual interchanges. The anxiety of being “different” is placed on the sidelines when they are the expert and can demonstrate to peers or others in the group or club that they have skills. Mallory noted big differences between high school peers and college peers and how she was more respected; therefore, more confident to express herself in class. She
received positive feedback, which in turn produced positive emotions to build on for future interactions.

Mentors or fellow classmates are also key factors, according to Chickering and Reisser (1993), to help students when they go through emotional trials in contemporary life. Several students described other students whom they had met in class, group projects, or clubs who had mentored them to better understand certain aspects of different interactions or situations. Several of Kelly’s friends from the acting club were able to give him support as he honed his skills in acting. These positive reinforcements produced a wealth of emotions that countered any negative emotions he may have had in the past. The same was true for Mallory as she worked through leaving her middle school and high school experiences behind to build on the positive interactions she had with classmates and professors.

Andy was still experimenting and finding his niche with social interactions, but he was definitely receiving positive feedback in the attempts he made. His attitude was not fight or flight if the situation did not go as positively as he wanted. Instead he described continuing to look for the next opportunity. He specifically described a chance encounter he had with group of women recently in a restaurant after he left a party that he was not enjoying. They asked for napkins from his table, and he decided to simply strike up a conversation with them. The group continued with the conversation until they parted with him asking for a number from one of the women. He reported later that he sent her flowers and was planning a first date with her the Friday following the interview. Another reach for Andy was at a meet and greet for job interviewing, and it landed him
with a casual friend who was forming a student leadership organization that he eventually joined.

Having mastery of this vector implied that the students used discipline to manage their emotions. Students began to understand that it is not just about controlling emotions, but bringing conscious awareness to the emotions and, if needed, seeking out positive situations that will produce positive emotions.

**Moving through Autonomy toward Interdependence.** The third vector explored in this study was moving through autonomy toward interdependence. A review of this vector reminds us that students who are progressing along this vector have emotional independence (Chickering & Reisser, 1993). The three components of this vector are noted as: “a) freedom from continually needing reassurance, affection, or approval from others; b) ability to carry on activities and solve problems in a self-directed manner with the freedom and confidence to be mobile in order to pursue opportunity or adventure; and c) an awareness of one’s place in and commitment to the welfare of the larger community” (Chickering & Reisser, 1993, p. 117).

Disengaging from parents is the beginning of emotional independence (Chickering & Reisser, 1993). Students developing in this vector rely more on peers and role models, and begin to balance the comfort of their own company. Recognizing and accepting interdependence is the essence of autonomy and cannot be realized until some independence has been established with a sense of where the person is in the community and the larger society.

Development along this vector was mixed among the participants of this study. Some of the participants had clear goals to separate from their parents, or had been living
independently while attending college. Other participants still had very strong ties to their parents, and the parents still had strong influences over daily activities.

From the participants’ experiences in college, both academically and socially, that were explored through this study, only two of the emerging themes seem to support development along this vector. *Coming to terms with an ASD diagnosis* supports the vector, but only as a form of self-discovery with an implied goal to be independent and autonomous. However, individual participants had varying degrees of goals for autonomy. Chickering and Reisser (1993) differentiate separation and individuation in the development of identity, explaining that separation is physical distancing and individuation means becoming your own person with increasing responsibility for self-support. The two who lived on campus, Anna and Andy, separated physically from their parents. And while they mentioned them in the interviews, they did not reference them as much as they mentioned their peers and others at the university who they were dependent upon for human interaction and support.

Four of the participants were living at home and commuting, and frequently mentioned parents or quoted parents when they answered questions. They had never been physically separated from their parents, with one exception. Matthew went on a study abroad trip for a total of six weeks, and was the only one of the four who articulated plans for physical separation from family after graduation.

*Coming to terms with an autism spectrum diagnosis* supported this vector, although more as a building block to autonomy and interdependence. The students described a desire to be independent, but their reported actions did not always match the goal of seeking autonomy. Primarily, it seemed this theme emerged because of the
challenges of the disability, like social awkwardness and not connecting with others, rather than goals to be independent. Dependency on family and parents was apparent. Mallory admitted that she did not connect with peers. Instead she related better to older adults and children. Her social interactions with the Boy Scouting group had a direct connection to her dad and brother. Richard still used his mother to help with emotional upheavals.

*Using the “campus compass” to find purpose* connected somewhat to development along this vector, but is better explained supporting the sixth vector, developing purpose, as described below.

**Developing Purpose.** It has been mentioned several times that the vectors Chickering and Reisser (1993) proposed are not sequential and this concept was first introduced by Kegan’s (1982) study which posited that the stages are not linear. Furthermore, the longitudinal study by Foubert, et al., (2005) used the Student Development Task and Lifestyle Inventory (Winston & Miller, 1987) which concluded that the sixth vector “developing purpose” does not just happen toward the end of the student’s academic career. The study found that significant development occurred during the first year of college and continued throughout the student’s academic career.

This study intentionally looked at the first three vectors to narrow the scope of the study; however, because the theme, *using the “campus compass” to find purpose*, emerged and is so directly related to the sixth vector, it is worth discussing in more depth.

A student, who is accomplishing the task of developing purpose, increases his or her ability to assess interests and to clarify goals (Chickering and Reisser, 1993). Having a plan with a desired outcome becomes a map for moving from the current situation to a
more desirable one. The plans for action integrate three major elements when a student is developing purpose: 1) vocation plans and aspirations; 2) personal interests; and 3) interpersonal and family commitments.

In order to have a plan, the students in the study needed ideas of what the outcome of the plan might look like. The ideas the participants constructed about what their future lives would look like or what job they would eventually be doing after they graduated came from the knowledge they accumulated about themselves, and the world they live in while they were in college using the campus compass. Specifically, they tapped advisors in academic offices, career advisors, DSO advisors, and professors. With them they explored the career possibilities and what it meant to be committed to these vocations. They participated in learning experiences, such as study abroad, which helped one participant discover her major, and another to learn self-reliance, to the degree that he formulated a detailed plan to separate from his parents after graduating and finding a job. Clubs and organizations helped other participants clarify that the majors they had chosen made sense for them, and that they were passionate and excited to begin a career in the discipline they studied in college.

All of the participants reported using parts of the “campus compass” or breadth of programming and resources to enrich their experiences at their respective universities. In doing so they started to formulate the plan needed to move along the vector developing purpose. The participants of this study had various degrees of developing purpose, but the theme supported the perception that development was occurring for the ASD students who participated in this study.
Summary of Findings

The participants of this study changed some their understanding of their ASD diagnosis and presented as fairly confident senior students in college. They used the tools offered by their university to find goals and create a plan for the future. They made opportunities for themselves to interact socially with others, and in doing so, found boundaries for interacting appropriately to improve their social skills and become better students. They learned about diversity directly from other students, and started to appreciate the complexity of the world outside of their own. Finally, they recognized the need to self-regulate their emotions and adapted strategies for more mature approaches to unpleasant or disturbing circumstances.

Advice for incoming freshmen: “Find your passion.”

The advice the participants gave to incoming freshmen turned out to be a significant piece of data. It did not directly answer the research questions; however, it did show signs of developmental growth in the students’ reflection on their own experiences when asked to articulate advice to freshmen. This advice demonstrates an understanding of growth and development. The table below shows how the participants searched for new knowledge, approached challenges, explored social situations, and managed their ASD.

Asking the participants to give advice to incoming freshmen was an emergent question and my style of ending the interview on a positive note with Matthew, who was the first participant of this study. Matthew started his advice with the interjection that college might not be for “you.” So I gave the question a little more detail and explained that the advice would be for students who were already entering college. He talked a
little about the things that are wrong with higher education, and how the emphasis that is placed on a degree is not all that is promised. Eventually, he came back to the advice and restated that college is not for everyone. In total, he said that phrase five times. I reflected later on this in my field notes, as I did hear many things from Matthew and others that sounded rote. Since Matthew’s phrase was repeated so often by him in the context of advice for incoming freshmen, I wondered how many times he may have heard this on his journey to enter college.

My second interview was the same day with Kelly, so I decided to continue asking the question and give all of the participants the same opportunity to pass on advice to incoming freshmen. The information in the table (Table 4) is grouped into four areas: a) starting out in college; b) philosophical views; c) other things to consider; and d) your ASD.

The advice is thoughtful and insightful. The students were told through the consent form that a possible benefit of this study might be to help other students with ASD who are considering college. The list of 30 different items from these six participants suggests to me that they were interested in contributing their insights on how they had grown and developed to become college seniors.

Some advice from the participants was practical and reflected the successful path they had taken (attend a community college; finding a major that will help find you a job). And some advice included lessons learned from their mistakes (join a club because I didn’t; realize you may not end up majoring in the same thing you start majoring in). A majority of the advice could have been given by neurotypical students. Neurotypical is a term that originated in the autistic community to described people who are not on the
autism spectrum. Fully one third of the advice is directly applicable to ASD students, and it gives good insight from six students who reflected on their experiences in college, both academically and socially.

Table 4

*Recommendations for Incoming Freshmen with ASD from Study Participants*

Starting out in college

1. Consider starting at a community college
2. Know what additional help you may need academically prior to entering college; know your needs
3. Realize that what you start majoring in may not be what you end up getting your degree in
4. Make sure your degree is something useful and in demand, something that will help you get a job later
5. Don’t rush your college career, but don’t take too long either; allow yourself time to explore
6. Find your passion

Philosophical views

7. Always have meaning and a goal to reach
8. Keep an open mind
9. Try to wake up every day like something great is going to happen, nothing good ever happens to negative people

Table 4 - Continued

10. Only do it if it feels right, trust your instinct
11. Balance the importance of a social life with being serious about what next step you want to take in life

12. Look like you are confident with everything and each day is a new experience

13. You don’t have to party to be a good person or to be cool

14. Don’t give up your independence no matter what

Other things to consider

15. Your friends are your biggest influence, surround yourself with the right crowd

16. Find a club or organization and go to at least one session

17. For social experiences, try a club unrelated to your major

18. Try to fit in a study abroad

19. Work on getting a job while in college

Your ASD

20. Seek the help of a professional therapist to assist with issues that challenge you related to your ASD

21. Disclose your disability socially if you have something noticeable, such as rocking, pacing, or flapping; it helps others to understand

22. Only disclose for a job if necessary, otherwise withhold

23. Find sensory things that help you

24. Don’t feel alone, there are people on campus who want to help

25. Ask for help

26. Make regular visits to the DSO and to your professors to check in

Table 4 - Continued

27. When you are overwhelmed, seek out friends who can help
28. Know your academic progress
29. If you are having difficulty, seek the help of your professor
30. Realize college may not be for you

**Recommendations for Improved Practice**

The results of this study, along with my experience in higher education and knowledge of the barriers students with ASD face when they enter college, leads to several recommendations for different constituents at the academy. Some of these recommendations transcend all disabilities and some are specific to ASD. Below is a quick review of the characteristics of Asperger’s or ASD which support my recommendations. A reminder that these are impairments the person diagnosed on the autism spectrum may be experiencing and not a personal choice. While they can learn to recognize these impairments in themselves and make adjustments, it is generally not intuitive.

**Characteristics of ASD.** Students on the autism spectrum tend to: a) lack empathy; b) be naïve and inappropriate, or have one-sided communications; c) have emotionless repetitive speech and poor non-verbal communications; d) be intense in certain subjects; e) have few or no skills to form friendships; and f) be clumsy and have uncoordinated movement (Wing, 1981). Johnson (2005) described that persons with ASD tend to socially isolate themselves, lack intuition, and find it difficult to read facial expressions and body language. Students on the autism spectrum sometimes have academic difficulties, sensitivity to sensory stimuli, and motor-skill impairments. They may interpret things very literally and will struggle when routine is changed. They can
be perceived as distant, uninterested, and not meeting the emotional needs of those they interact with because of the inability to recognize thoughts and feelings of others (Johnson).

**Disability Support Personnel.** DSO professionals are committed to providing reasonable accommodations for students with disabilities as the adjustment relates to what is needed in the classroom, depending on the nature of the disability. The ADAAA is an anti-discrimination law that guides our practice. It is largely unfunded and because of this, it gives disability support offices pause to do anything more than the scope of the ADAAA and our obligations to serve as resources for students with disabilities.

Providing reasonable accommodations for the nearly limitless types of disabilities and situations that arise from those accommodations is by itself a huge undertaking for DSO personnel, whose offices are, generally, low on budget and staff. So to suggest that we do more for our students with ASD that is outside the scope of higher education institutions’ legal responsibilities might stretch the rubber band a little thin. Instead of creating new programs to specifically address the social struggles students with ASD encounter, I am suggesting that DSO personnel find their partners on campus who are already facilitating programming to help with many of the social nuances of college life; programs that are intended to help all students grow developmentally.

This study suggests that creating new ways to help students become more independent to foster growth along the third vector, moving from autonomy through interdependence, is needed. This is a critical vector for students to master if they are going to live independently of family and contribute to their own lives and society through meaningful vocations. Encouraging on-campus living for ASD students could be
the beginning of this independent endeavor. Housing and Residence Life personnel are highly trained to assist with the adjustments of living away from home. With a better understanding of students with ASD, Housing staff become great partners. In consult with the student, DSO staff can make recommendations for a private bedroom (not necessarily a single) as this has proven to be a successful solution on my campus. With a private bedroom, the student on the spectrum has a place to decompress but is not isolated from socialization. If roommate issues arise, DSO staff are good resources; however, encourage housing staff to use the systems they already have in place to negotiate agreements between the roommates.

Another way to partner with Housing staff and other departments, and encourage on-campus living for students with ASD, is to create a Living Learning Community (LLC). LLCs provide a compact approach to providing resources for students with ASD. With coordination from the DSO, the LLC can provide a system of accommodations and resources from the DSO and other service offices for the students with ASD. The goal of the LLC should be to facilitate a positive environment for academics and respond to the individualized needs of the students. Additional components could also be established within the LLC, such as peer connections, training and workshops, and a common academic course. LLC support can help the students’ transition to the college atmosphere while creating networks with faculty, staff, and peers to maintain throughout the students’ college experience and beyond.

Be mindful of parent involvement. On my campus, we encourage parent input during the initial intake appointment, and even parts of the first semester, until we have a good understanding of the student, and his or her learning and interpersonal skills.
During the intake process with parents and the students, try to glean past classroom behavior so you can get a better idea of what to expect throughout the semester from the student with ASD in the classroom. While parent input is valued and important, it is best to set limits and have goals that put more emphasis on the students making independent decisions so they become accountable for their own success.

Make meaningful referrals to other offices on campus. Understand that your college or university system is a complicated one and may not be easy to navigate. Be prepared to help students with ASD by picking up the phone and paving the way for them initially. They are excellent with follow through and understand how particular resources will benefit them once they have made the connection.

Help your students with ASD find jobs on campus. Find out what departments may have knowledge of ASD and could provide an atmosphere that is safe and welcoming. If possible, hire them as a student worker in your DSO. They make great student workers. They are on time, dedicated, hardworking, and direct in their communications. They follow directions, complete tasks on time, and don’t generally get involved with office gossip. It provides the student with ASD activities to fill their time besides coursework, and is another purposeful social interaction to learn the boundaries for socialization.

**Student Affairs Professionals.** From experience, disability support and student affairs personnel know that not all students with ASD disclose their disability to the university formally. Disclosure may be presented in an informal way because some students may not have received services for their disability in their K-12 system. If a student does disclose and they have not been to the DSO to receive a formal memo to
assist them with disclosing, encourage them to seek the guidance from the DSO. They may be unfamiliar with the kinds of assistance that is available to them.

Do not provide accommodations informally. If the student is in need of an accommodation, it is best that the DSO is involved. If the student discloses and presents you with a memo, read it and consider it an opportunity for you to better understand the student you are supporting on campus. While many of the things listed may be directly related to academic accommodations, you will learn more about the student and be able to assist more effectively.

Education and awareness of ASD for college personnel is critical. Student affairs professionals need to become more familiar with the characteristics of ASD. Those who are better able to recognize persons on the spectrum will go a long way to helping students with ASD make the transition to and succeed in college. Make it a priority to use professional development time to learn more about all students with disabilities.

Students with ASD are like other students in that they are growing and developing in college. They are using the intentional opportunities that colleges and universities have provided such as clubs and organizations, study abroad, and on-campus living. Encourage students who you know are on the spectrum to continue to engage in purposeful social interactions and to use the “campus compass.”

**Faculty.** Familiarize yourself with different learning challenges that accompany various disabilities. Your teaching and interactions with students will become more effective with stronger learning outcomes if you know more about the students who have disabilities and the different ways in which students learn.
If you are approached by a student who discloses that he or she has a disability, he or she should have some kind of verification in the form of a memo from the disability support office (DSO). If the student does not have the memo, it is important to be an empathetic listener and then refer the student to the DSO. If you suspect the student may be on the autism spectrum, be patient. Generally, the nature of the disability is not disclosed in the memo; however, some DSOs encourage students with ASD to disclose the disability to better explain behaviors that might be evident in the classroom, such as pacing, rocking, or self-talk. Students with ASD who are in college are qualified to be there and have very interesting ways of thinking. They can contribute a great deal to classroom discussions.

As the facilitator of the discussions in your classroom, feel free to set boundaries or class rules if you find the student with ASD is asking too many questions, not allowing others to comment, or is going off on a tangent not related to the topic of discussion. Be aware that sometimes when students with ASD interject thoughts on topics that seem unrelated, there may be meaning if the student with ASD is probed gently to connect the train of thought that got him or her to that point in the discussion. If a student with ASD displays inappropriate classroom behavior that you have not been able to resolve, seek the advice of the DSO. They can help with establishing classroom guidelines with the student or providing an informal mentor to modify the student’s behavior. Informal mentors are generally volunteers that are already enrolled in the course. Your help may be needed in identifying a student in your class with the skill set that can balance assisting a student with ASD and successfully taking the course.
Remember to tap into your DSO for strategies. Most likely your DSO has had some experience and can help facilitate an intervention, if necessary. If you suspect the student has ASD or another disability and he or she has not presented with a memo about the disability, a referral to DSO is NOT appropriate, but a call to the DSO from you could help with strategies to help you and the student without inferring a disability.

Do not negotiate with parents regarding accommodations for your course requirements. This is the responsibility of the DSO office. Parents have a big role in the lives of their students with ASD. They are their students’ biggest champions and advocates, and have been for many years. As DSO professionals, parents provide us with much insight when it comes to how their student learns and interacts with others. However, they are not experts on higher education and should not be contacting professors directly to negotiate accommodations for their children based on the disability presented.

Give clear and concise assignments with few or no changes. If you do have a change in directions on the assignment, allow some time for students to adjust to the change. This will be appreciated by other students in your class as well. For the student with ASD, it will be essential. Be prepared that you may need to rephrase or explain a concept if it is not an absolute or concrete concept. “Thinking outside the box” might prove to be a difficult task for a student with ASD.

Be deliberate in assigning groups if you know you have a student with ASD in your class. By this I mean, either hand pick the groups based on the known strengths of the students or make random assignments of the groups to eliminate the student with ASD from being left out. And if you are experiencing difficulties in classroom with a
student with ASD with regards to discussions and interactions with others, this will not disappear in group work with other students. So some work will be needed to clarify roles within the group and help set up boundaries. This may just involve simply lending the group more guidance and giving directions on who is responsible for what part of the project, and explaining how it factors into the grading of the project.

**Future Research Possibilities**

There are four areas I have recognized for future research. These areas are: a) exploring development of students with ASD in Chickering’s and Reisser’s remaining vectors; b) comparing the growth and development of students with ASD who live on campus with those who commute; c) exploring the experiences of students with ASD beyond the bachelor’s degree; and finally, d) exploring experiences of college students of color with ASD.

This study was one of a few qualitative studies that explored the experiences of students with ASD, and the first to look at growth and development of students with ASD through Chickering’s and Reisser’s (1993) psychosocial development theory. While this study looked at the first three vectors to narrow the scope of the study, more research is needed to explore the remaining vectors. Movement along the sixth vector, developing purpose, emerged directly from a theme that represented the experiences of the participants as they used the campus compass to explore, define, and clarify their interests and goals. Developing mature interpersonal relationships, establishing identity, and developing integrity are the remaining three vectors that have not been explored with this population of students. We know that development along the vectors are not sequential (Kegan, 1982); however, exploring movement in the remaining vectors will
give those in higher education paying attention to student development an idea of where students with ASD have been and where they are going.

The participants in this study described many experiences connected to their development in the first two vectors, developing competence and managing emotions. The participants’ experiences did not directly indicate they had made progress in moving through autonomy toward interdependence. The participants’ experiences did reflect development along the vector, developing purpose. Research should focus on what is happening to students with ASD in regards to the third vector, moving through autonomy toward interdependence. Is there another way they are developing in this area? Are there programs or other interventions in place at colleges that support students with ASD to move through autonomy?

Comparing the growth and development of students with ASD who live on campus with those who commute might examine if living on campus is making a difference in the development of autonomy and movement toward interdependence. Part of the challenge for ASD students is that there are often not enough opportunities prior to college to navigate on their own and make decisions. Four of the six participants from this study commuted to the university. Only one of those participants articulated plans to move out and live independently. Does living on campus promote movement from autonomy toward interdependence? Are there other factors involved in the lack of development in this area for students with ASD?

Capturing the experiences of students with ASD beyond the bachelor’s degree would explore what students with ASD are doing after graduation. How is their college degree helping them move along Chickering’s and Reisser’s other vectors? We know
that the data regarding students with ASD in college is limited, as are studies of adults with ASD. What kind of employment are ASD students finding, and how have the students matriculated into society? If they go on to graduate school, how are they making choices to do so and how are their experiences at this educational level similar to or different from their experiences at the undergraduate level?

A study focused on the experiences of college students of color who have been diagnosed with ASD would be a more inclusive and representative of other populations. It was not unexpected that all of the participants of this study were White. The DSM-V (2013) acknowledged cultural and socioeconomic factors that may effect when a person is diagnosed. Therefore, in an effort to be inclusive to other populations and to get a better understanding of the experiences of all college students, research is needed that represents different races and ethnicities who have been diagnosed with ASD.

**Insights from the Researcher**

This process was an enriching experience for me. I felt honored to present the stories of the participants of this study. My background as a student affairs and disability support professional gave me the experience and knowledge I needed to create a positive rapport with the participants which allowed for the in-depth interactive dialogues. I prepared for each interview using epoche to remain as objective as possible so I could really hear their experiences as they presented them through my interview protocol. I knew there was a possibility that the interviews would not produce rich, thick data based on the population I was interviewing. And I was prepared to interview as many students as I needed to reach saturation. As it turned out, the first four participants had a lot to say and I was fortunate that they chose me to tell their stories to. My interviewing skills
helped to capture the essence of the experiences, and the discussions provided an ample amount of data. The last two interviews confirmed that saturation had occurred. They also added to the richness of the data; having two more stories of success.

The participants were from six different areas in the state of Michigan. They went to four different four-year public universities. They were majoring in six different disciplines; each with a unique story about how they came to be qualified to participate in my study, namely being seniors in college with less than 30 credits to go before graduation. I felt so privileged that the participants came forward and shared their experiences. I feel the emerging themes best represent the experiences of these participants. They provided me with the untapped insights from six students with ASD and their experiences in college, both academically and socially.

**Final Conclusions**

Broadly, I think the results of this study provided a better understanding that colleges and universities are doing a lot of things right with regards to intentional student development opportunities, and the charge for higher education institutions is to continue to create programming that leads students to self-discovery and development. This study has contributed to the knowledge about and highlighted the importance of understanding what makes students with ASD successful in college. By exploring the college experiences of senior students diagnosed with Autism Spectrum Disorder (ASD), and the meaning they make out their development in three areas of psychosocial growth, I was able to identify areas of development that are progressing as well as areas that are not as strong. The findings from this study support development in the first two (of seven) vectors from Chickering and Reisser (1993), developing competence and managing
emotions, but did not directly support the third vector, moving through autonomy toward interdependence. In addition, participants’ experiences reflected development along the sixth vector, developing purpose. Conclusions from these findings have provided good discussion about what universities are doing well to promote student development, as well as, what more can be done to assist the growing population of students with ASD to grow more independently while in college.
REFERENCES


American Psychological Association (APA) (2013). Diagnostic statistical manual V (DSM-V)


American Psychological Association (APA) (1994). Diagnostic statistical manual IV (DSM-IV)


http://search.proquest.com/docview/527988308?accountid=15099


Appendix A

Communication for Recruiting Participants
Dear Student,

My name is Kathleen VanderVeen. I am a doctoral student at Western Michigan University in Kalamazoo, Michigan. I am conducting research to learn more about college students with Asperger’s Syndrome (AS). The purpose of the research is to gain a better understanding of the college experience of students with AS.

If you are a senior in college, in good academic standing and have an Asperger’s diagnosis, I would like to interview you, face-to-face, for approximately 90 minutes. I will come to your campus to interview you. During this interview I will ask you about your experiences as a college student and what areas you feel you may have grown and developed, both academically and socially. There may be a need for a second communication for clarification from things mentioned in the first interview. This communication exchange will not necessarily be face-to-face; we can determine how we will communicate at the end of the first interview.

I will record the interview so I can transcribe every word we say. Recording the interview helps me recall exactly what was said. I will destroy/erase the recordings once I have transcribed the interview. The recordings will be locked in my office as well as the typed transcripts. The transcripts will not include your name or the name of your university.

Thank you in advance for considering this study. Please send your note of interest to the following email researchstudy20122013@gmail.com as well as a telephone number so I can give you more details about the study. If you decide to participate in this study, you will be contributing to the body of knowledge about college students with AS. If you have any questions about the research, please direct them to the email provided.
Sincerely yours,

Kathleen VanderVeen
Appendix B

Detailed Script for Recruiting
“Thank you for your interest in this study. You have been invited to participate in a research project titled "Psychosocial Development of Students with Asperger’s Syndrome in Higher Education." This project will serve as my, Kathleen VanderVeen’s, dissertation, for the requirements of the Ph.D. in the Educational Leadership Program at Western Michigan University. I am also the current director of Grand Valley State University’s Disability Support Resources.

“I would like to go over the purpose of this research project and all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project.

“We are doing a research study. We want to find out how students with Asperger’s Syndrome disabilities experience college, both academically and socially.

“If you want to be in this study, you will be asked to take part in an in-depth interview that will take approximately 90 minutes. You will be asked to answer questions honestly and fully to best your ability. A week or two after the interview, you will be asked to verify the accuracy of the transcribed interview. If there are discrepancies, you may be asked clarifying questions. The time and place of the interview will be determined on an individual basis. This study will take place on the campus on your university.

“To be eligible to participate, you must be a college senior in good academic standing with an Asperger’s Syndrome diagnosis.

“To our knowledge there are no known potential risks for being in this study. Please note that participation in this study is completely voluntary and has no connection
to the services you receive at your university. If you believe otherwise, please feel free to call the university representative noted at the bottom of this page.

“There may be no benefits to you for engaging in this study.

“There are no costs associated with participating in this study.

“There is no compensation for taking part in this study.

“This study will be submitted to the Educational Leadership, Research, and Technology Department at Western Michigan University and will be published as a dissertation. Parts of this study may also be submitted to national journals for publication. Your identity will be concealed.

“You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study. We, the researchers, can also decide to stop your participation in the study without your consent, for example if the coordination of interviewing time is delayed or rescheduled too frequently.

“If you are still interested in participating in this study, I need you to reply in an email to researchstudy20122013@gmail.com that you are giving consent to continue and provide a telephone number so arrangements can be made for you to read and sign a consent form and then begin the interview.

“Thank you for considering participation in this study.”
Appendix C

Consent Form
Western Michigan University
Department of Educational Leadership, Research and Technology

Principal Investigator: Andrea Beach, Ph.D.
Student Investigator: Kathleen VanderVeen, M.Ed.
Title of Study: Psychosocial Development of Students with Asperger’s Syndrome in Higher Education

You have been invited to participate in a research project titled "Psychosocial Development of Students with Asperger’s Syndrome in Higher Education." This project will serve as Kathleen VanderVeen’s dissertation for the requirements of the Ph.D. in the Educational Leadership Program. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?
We want to find out how students with Asperger’s Syndrome experience college, both academically and socially.

Who can participate in this study?
To be eligible to participate, you must be a college senior in good academic standing with an Asperger’s Syndrome diagnosis attending a 4-year public college or university.

Where will this study take place?
The time and place of the interview will be determined on an individual basis. This study will take place on the campus your university so you will not need to travel.

What is the time commitment for participating in this study?
If you meet the criteria and want to be in this study, you will be asked to take part in an in-depth interview that will take approximately 90 minutes. It may take approximately 60 minutes of your time to make clarifications a week or so after the initial interview.

What will you be asked to do if you choose to participate in this study?
Participants will be asked to answer questions honestly and fully to the best of their ability. A week or two after the interview, participants will be asked to verify the accuracy of the transcribed interview. If there are discrepancies, participants may be asked clarifying questions. This second communication could be in a different format, such as email. It may take approximately 60 minutes of your time to make these clarifications.
What information is being measured during the study?
We are trying to understand students with Asperger’s Syndrome (AS) and their experiences in college; focusing on factors that contribute to growth in three areas of their psychosocial development: achieving competence, managing emotions, and moving through autonomy toward interdependence.

What are the risks of participating in this study and how will these risks be minimized?
To the Investigator’s knowledge there are no known potential risks. Please note that participation in this study is completely voluntary and has no connection to the services you receive at your university. If you believe otherwise, please feel free to call the university representative at the bottom of this page.

What are the benefits of participating in this study?
There may be no benefits to you for engaging in this study, but we are hoping that your participation will help other students with Asperger’s Syndrome who will attend college.

Are there any costs associated with participating in this study?
There are no costs associated with participating in this study.

Is there any compensation for participating in this study?
There is no compensation for taking part in this study.

Who will have access to the information collected during this study?
The data collected during the study will be stored on a secure, password protected server that will only be accessible to the investigators of this study. The interviews will be recorded and transcribed verbatim leaving names and identifiable information out. This study will be submitted to the Department of Educational Leadership, Research and Technology at Western Michigan University and will be published as a dissertation. Parts of this study may also be submitted to national journals for publication. The identity of all participants will be concealed.

At the close of the study, the data will be stored for three years on a password protected secure server at Western Michigan University. The data will only be accessible to the investigators of this study.

What if you want to stop participating in this study?
You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study.

The investigators can also decide to stop your participation in the study without your consent, for example if the coordination of interviewing time is delayed or rescheduled too frequently.
Should you have any questions prior to or during the study, you can contact the primary investigator, Kathleen VanderVeen at 616.481.1036 or researchstudy20122013@gmail.com. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant’s signature
Appendix D

Interview Protocol
1. Tell me about your college experience.
   a. What is your major area of study?
   b. What are your long term goals?
   c. What is your timeline for accomplishing these goals?
   d. What have been the greatest challenges and barriers to meeting these goals so far in college?

2. Describe yourself as a student.
   a. Your GPA, your study approach, interactions with your academic advisors, interactions with other college staff, inactions with other students.
   b. Tell me about something you are most proud of that you have accomplished while being a student at your university.

3. Do you think you have changed as a student while at your university?
   a. If so, describe how you think you have changed as a student.
   b. What was your previous method compared to the way you approach your coursework now as you are finishing your degree?
   c. How did you know that a change occurred?
   d. What/who were important people/things that helped in this change?
   e. What were your feelings as you went through this change?

4. When students are in college they typically change the way they interact with others; they create new long friendships and relationships, and also create many special memories with people they meet in college.
a. Can you talk a little about that and your experiences interacting with others?

b. What was your previous method compared to the way you approach interacting with others now that you are a senior in college?

c. How did you know that a change occurred?

d. What/who were important people/things that helped in this change?

e. Please describe what the person did to help you shift in your method.

f. What was the experience that caused this shift for you?

g. What were your feelings as you went through this change?

5. One of the challenges we have as we get older is recognizing feelings and controlling reactions to unpleasant things that disturb us. Can you talk a little bit about that and your experiences in college related to strong feelings?

   a. For example, do you remember a time when you were a freshman when something upset you?

   b. Do you think that same situation would upset you as a senior?

   c. What was your previous method compared to the way you handle situations that might have triggered an emotional response in the past?

   d. How did you know that a changed occurred?

   e. What/who were important people/things that helped in this change?

   f. Please describe what the person did to help you shift in your method.

   g. What was the experience that caused this shift for you?

   h. What were your feelings as you went through this change?

6. A big part of college is meeting people who are different from ourselves.
a. Can you speak a little about how you may have changed when it comes to accepting difference in other people?

b. What was your previous method compared to the way you approach differences now that you are a senior in college?

c. How did you know that a change occurred?

d. What/who were important people/things that helped in this change?

e. Please describe what the person did to help you shift in your method.

f. What was the experience that caused this shift for you?

g. What were your feelings as you went through this change?

7. Describe how being a student with Asperger’s Syndrome effects your experience in college.

8. Is there anything more that you would like to share with me about your experiences in college?
Appendix E

HSIRB Approval
Date: December 6, 2012

To: Andrea Beach, Principal Investigator
    Kathleen VanderVeen, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project 12-11-24

This letter will serve as confirmation that your research project titled “Psychosocial Development of Students with Asperger’s Syndrome in Higher Education” has been approved under the expedited category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may only be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., you must request a post approval change to enroll subjects beyond the number stated in your application under “Number of subjects you want to complete the study”). Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: December 6, 2013