

Supporting college students with autism spectrum disorder:
College counselors' perspectives

A Dissertation
SUBMITTED TO THE FACULTY OF
UNIVERSITY OF MINNESOTA
BY

Drew D. Benson

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Dr. Sherri Turner, Adviser

August 2017

© Drew D. Benson 2017

Acknowledgements

I would like to, first, thank my advisor, Sherri Turner, for her support, guidance and nudges along the way. Thank you for everything, I surely couldn't have done this without you.

To the rest of my committee, Tom Skovholt, Caroline Burke and Amy Hewitt: what a gift it has been to be touched by your wisdom. Thank you for being such important teachers, mentors and guides along the way.

Jo, Opal, Mica and Heather, my amazing cohort, I've learned so much from you and am so grateful for your encouragement throughout this journey.

Nick and Tim, my fellow interns, for your contributions to this project and for making the past year so much fun.

I'm so appreciative of the time and perspectives of the psychologists who shared their experiences with me during our rich conversations.

To my colleagues, supervisors and clients who have helped shape me into the clinician and researcher that was able to so deeply engage with this work.

And, of course, to my friends and family, who have celebrated each step along the way with me.

Dedication

This thesis is dedicated to the amazing community of support that has surrounded me over the past seven years as I have embarked upon this incredible journey of learning. Most importantly, though, to my parents, whose constant love and encouragement every step of the way has been humbling.

Abstract

Over the past decade, prevalence rates of Autism Spectrum Disorder have risen dramatically (Frieden, Jaffe, Cono, Richards, & Iademarco, 2014; Lord & Bishop, 2015). As a result, an increasing number of students with ASD have been identified on college campuses (X. Wei, Wagner, Hudson, Yu, & Javitz, 2016; White, Ollendick, & Bray, 2011). Despite a tradition deeply tied to both research and practice relating to the social and emotional support and development of college students, counseling psychology has contributed little to this specific topic (Bishop, 1990; Kitzrow, 2003).

This research is a qualitative examination of the experiences of university counseling center psychologists who provide counseling to college students with ASD. A semi-structured phone interview was completed with eight licensed psychologists who work in university counseling centers and have worked with at least three students with ASD. An Interpretive Phenomenological Analysis (IPA; Smith, 2015) approach was used to analyze the data. Results indicate that participants had limited experiences in their training related to ASD. They identified benefits of working in the college context, such opportunities for collaboration, as well challenges related to the highly social nature of the college or university setting. Participants identified several considerations they take into account when approaching their work with clients with ASD, such as conceptualizing disability through a cultural diversity lens rather than a deficit-based model, and adapting their treatment modality to emphasize a strengths based approach that also includes some direct teaching of skills, to better suit the needs of these clients.

Participants identified joys of their work such as appreciating the unique ways in which clients with ASD approach and think about situations as well as reporting challenges with clients' rigid thinking patterns and slower rate of change. Counselors also stressed the importance of consultation with colleagues and accessing outside resources, both on- and off-campus, as ways in which they find support to remain energized to work with students with ASD. Implications for training and practice are discussed.

Table of Contents

Acknowledgements	i
Dedication	ii
Abstract	iii
Table of Contents	v
List of Tables	vi
Chapter 1: Introduction	1
Chapter 2: Literature Review	12
Chapter 3: Methodology	34
Chapter 4: Results	40
Chapter 5: Discussion	61
References	76
Appendix A: Recruitment Email	88
Appendix B: Information Sheet	89
Appendix C: Interview questions	91

List of Tables

Table 1: Final Domains and Themes	58
-----------------------------------	----

Chapter 1

Introduction

Broadly defined, Autism Spectrum Disorder (ASD) is characterized by challenges related to social and communication skills, and rigid and repetitive patterns of behavior (American Psychiatric Association, 2013). There has been increasing consternation recently over the increasing proportion of children being diagnosed with Autism Spectrum Disorder (Blumberg et al., 2013; Rice et al., 2013) and the response by some outside the scientific community to characterize this rise as an epidemic (Gernsbacher, Dawson, & Goldsmith, 2005; Liu & Bearman, 2015; Russell, 2012).

Prevalence rates of ASD in the United States have risen from 1 in 110 in 2006 to 1 in 68 in 2010 (Lord & Bishop, 2015). This may be due to an increase in public attention to ASD, or to changes and improvements in screening and diagnostic processes (Blumberg et al., 2013; Pinder-Amaker, 2014). Nevertheless, these increases in prevalence along with the associated need for educational, medical and public health services warrant a call to action, which includes further research within these domains. (Blumberg et al., 2013).

Consequently, research on autism has also risen dramatically over the past decade (Dawson, 2013). Little of this research, however, is focused on autism among college aged individuals and adults. The research that does exist, however, paints a grim picture of these students' opportunities to succeed. For example, researchers estimate that only

20% of college students with ASD complete their degrees within six years (VanBergeijk, Klin, & Volkmar, 2008) (compared to 53% of students in the general college population; National Student Clearinghouse Research Center, 2015). A majority of adults with ASD either are or will become unemployed or underemployed, and many will not receive the services needed to maintain employment (Gerhardt & Lainer, 2011). As they continue transitioning into their adult roles, they are likely to have difficulties accessing vocational and other support services, adapting to new responsibilities related to their increasing independence, and resolving challenges to their vocational and educational futures (First, Cheak-Zamora, & Teti, 2016). Thus, the research described in this dissertation was conducted in order to begin to address these challenges so that college students with ASD can obtain professional counseling services. Hopefully, counseling then works as a catalyst for the successful pursuit of their educational and vocational dreams and goals.

In the next sections of this chapter, Autism Spectrum Disorder will be defined, the historical and current conceptualizations of ASD will be examined, and research evidence regarding Autism's course and trajectory, and the social, behavioral, and educational experiences of college students with ASD will be introduced.

Autism Spectrum Disorder Defined

Given the challenges of college students with ASD, and how psychologists can assist them in their educational and mental health endeavors, it is critical to first examine the evolution of Autism Spectrum Disorder as a psychological construct and as a clinical diagnostic label. The history of autism as a formal clinical presentation, is typically traced back to the work of Leo Kanner in 1943 (Scahill, Turin, & Evans, 2014). Kanner

identified 11 children who he characterized as developing “without a disposition to be social” (Volkmar & McPartland, 2014, p. 197). In addition, Kanner observed that these children seemed to display a number of repetitive behavioral characteristics and seemed to possess a resistance for change and a reliance on sameness in their activities and daily routines.

In the years following Kanner’s initial paper, researchers slowly began to pay greater attention to “infantile autism.” Much of this early research, however, focused on the role of parental psychopathology in the development of autism as well as the belief that autism was a manifestation of childhood schizophrenia (Volkmar & McPartland, 2014). It was not until the early 1970s that some of these views began to shift. Based on the work of Rimland (1964), Kolvin (1972), Rutter (1972) and others, scientists began to recognize that autism had a unique neurobiological profile that was distinct from schizophrenia. Moreover, research on twins suggested that there was a strong genetic component that had not previously been identified (Folstein & Rutter, 1977).

At almost the same time that Kanner was completing his observational study, Hans Asperger published a paper in 1944 describing four children who possessed what Asperger characterized as “autistic pathology” but who also had average to above average intelligence and age appropriate language skills (Scahill et al., 2014). Asperger noted that his subjects tended to have difficulty with reciprocity in social interactions, narrow interests, and delays in their motor skills. Unlike Kanner’s work, Asperger’s paper did not receive much attention until 1981 when Lorna Wing published a paper in which she described a group of children who were similar to those Asperger had

identified almost 40 years earlier (Wing, 1981). Following the publication of Wing's (1981) paper, use of the label "Asperger's Syndrome" began to emerge among clinicians who identified patients with a similar profile (Frith, 2004). Because it was not a formalized clinical diagnosis, however, controversy surrounded the distinction and use of the term (Volkmar & McPartland, 2014).

Thus, while Kanner (1943) and Asperger (1944) identified groups of children who shared characteristics such as social differences, behavioral rigidity, and sensory and motor challenges, these groups also differed in their cognitive abilities and use of verbal language (Wing, 1991). Drawing upon the initial work of Kanner and Asperger, researchers (Wing, 1981; Wing & Gould, 1979) began to recognize that autism may be better understood as occurring on a spectrum. This construct has carried forward to the current conceptualization of Autism Spectrum Disorder (Volkmar & McPartland, 2014).

History of Autism as a Diagnostic Label

Based upon many of these early contributions to the research base, autism (then called 'infantile autism') became officially recognized as a clinical diagnosis with the publication of DSM-III in 1980. Infantile autism was included under the category of pervasive developmental disorder, a term adopted to emphasize its unique characteristics and impact on early development (Volkmar & McPartland, 2014). The initial criteria were thought by many to be highly limiting, and as a result they were broadened in DSM-III-R (Scahill et al., 2014). In 1994, Asperger's Syndrome became officially recognized in DSM-IV under the category of Pervasive Developmental Disorders, which continued to include autism, which was then classified as "autistic disorder." While many saw the

framework of DSM-IV as a significant step forward in developing a more standardized approach to diagnosing autism, the distinction of Asperger's Syndrome as a separate clinical label led some to question whether clinicians could accurately distinguish Asperger's Syndrome from autism in their practice (Daniels et al., 2011).

In response to some of these challenges and criticisms, the researchers and clinicians tasked with updating the criteria for autism in the most recent version of the DSM (DSM-5), opted to combine the five disorders previously housed under the category of Pervasive Developmental Disorders into a single diagnosis of Autism Spectrum Disorder. Not surprisingly, this decision once again led to controversy, especially among those who had been previously diagnosed with Asperger's Syndrome (Volkmar & McPartland, 2014). Some individuals previously diagnosed with Asperger's Syndrome were concerned that they might no longer meet clinical criteria for a diagnosis and, as a result, would no longer be eligible to receive services and supports they had come to rely upon (Galligan, Feinstein, Sulkes, Bisagno, & Stein, 2013). Others expressed concern about the impact for researchers whose current and future projects may have been affected by these changes given potential difficulties comparing research finding pre- and post-DSM-5 (McPartland, Reichow, & Volkmar, 2012).

Given the difficulties of comparing research that was conducted using the DSM-IV, and later DSM-IV-TR, criteria with research that used the DSM-5 criteria, this paper will primarily utilize the term ASD to describe the diagnoses of individuals who participated in DSM-IV, DSM-IV-TR and DSM-5 studies. It is a common practice for the authors in recent years to utilize the term ASD to describe both the current (DSM-5)

singular diagnostic label, Autism Spectrum Disorder, and the DSM-IV category of Pervasive Developmental Disorders, Autism Spectrum Disorders. To lend credence to this practice, a recent study found that 93% of individuals who were characterized as high functioning and had received a DSM-IV research diagnosis of ASD also met criteria for Autism Spectrum Disorder using the DSM-5 (Mazefsky, McPartland, Gastgeb, & Minschew, 2013). Therefore, following the convention of previous authors, in this dissertation I will utilize the term ASD, as a more stringent distinction seems unwarranted.

Autism Spectrum Disorder: Current Conceptualization

As it is currently conceptualized clinically, Autism Spectrum Disorder (ASD) is characterized by deficits in social communication and social interaction, and by restricted, repetitive patterns of behavior, interests or activities (Scahill et al., 2014). These deficits must be present from early childhood, and must significantly impact one's functioning across settings (APA, 2013). In order to accurately describe the various presentations of ASD that are now categorized under a single diagnostic label, the DSM-5 includes descriptors which depict the level of support individuals need with respect to both their social-communication skills and their restricted and repetitive behavior (APA, 2013). Moreover, clinicians can specify if ASD is accompanied by an intellectual or language impairment or is associated with a known etiological factor such as a medical or genetic condition or an environmental exposure (Volkmar & McPartland, 2014). To address concerns of those previously diagnosed using the DSM-IV framework and criteria, DSM-5 also includes notes that individuals with a well-established DSM-IV

diagnosis of Pervasive Developmental Disorder-Not Otherwise Specified or Asperger's Syndrome should be given a diagnosis of ASD (Volkmar & McPartland, 2014).

Autism's Course and Trajectory: Social, Behavioral, and Educational Challenges

As scientists continue to better understand the onset and trajectory of Autism Spectrum Disorder, there is growing consensus that although the social and behavioral differences associated with ASD emerge early in development, they tend to persist throughout the lifespan (Cederlund, Hagberg, Billstedt, Gillberg, & Gillberg, 2008; Philip, Dauvermann, Whalley, Baynham, Lawrie, & Stanfield, 2012). Children and adolescents diagnosed with ASD often have difficulty forming and maintaining friendships and, as a result, may experience higher levels of depressive symptoms than peers who do not have an ASD diagnosis (Whitehouse, Durkin, Jaquet, & Ziatas, 2009). In addition, children diagnosed with ASD may experience more academic struggles and bullying than their peers (Russell et al., 2012).

As they get older, individuals who live with ASD can have difficulty developing and maintaining relationships leading to feelings of isolation and loneliness (Muller, Schuler, & Yates, 2008). Moreover, an increasing number of students with ASD are being identified on college campuses (White et al., 2011). Jobe and White (2007) found that individuals with ASD may experience greater levels of loneliness in college due to a lack of social skills and social understanding. Furthermore, Farrell (2004) asserts that many students with ASD may confront difficulty adjusting to the social norms and demands of college.

Researchers have begun to highlight the social difficulties that students with ASD experience beyond the classroom. In their review of literature, VanBergeijk, Klin and Volkmar (2008) noted that 70-80% of individuals diagnosed with ASD as children will experience marked social impairments as adolescents and young adults. They go on to highlight the importance of both social and academic supports in order to provide these young people with the “complete college experience”. Dillon (2007) asserts that despite academic and intellectual strengths that young people with ASD possess, the social and behavioral challenges they can experience may prevent them from being successful in college. Furthermore, as Newman and her colleagues (2011) highlight, data from a national longitudinal study (the National Longitudinal Transition Study-2 [NLTS2]) suggests that within six years of graduating high school, 44% of young adults with ASD pursue postsecondary education, with 39% of these students earning a degree. In comparison, enrollment and completion rates for all young adults with disabilities were 60% and 41%, respectively, and for young adults in the general population, 67% and 52%, respectively (Newman et al., 2011).

The presence of these students has confounded student services staff given the highly variable abilities and needs individuals with ASD have (Farrell, 2004). Consequently, research has begun to explore how young people with ASD are being supported as college students (Dillon, 2007; Barnhill, 2014). Most of these studies, however, have focused on the academic accommodations and supports that students with ASD receive through Disability Services offices (Smith, 2007). In one such study, Barnhill (2014) examined how institutions that have programs specifically designed for

students with ASD are serving these students. Of the 45 colleges and universities identified by the author (with the institution itself identified as the unit of measurement), 30 had a Disability Services staff member who completed a 20-question phone survey that included questions about the services provided to students with ASD and outcomes for these students. Results of this study indicated that:

- 1) All of the institutions provided some sort of academic accommodations for students. The most commonly identified accommodations included additional time on tests ($n = 29$), tutoring ($n = 29$) and note taking assistance ($n = 28$).
- 2) A smaller number of institutions offered social skills instruction ($n = 23$) and assigned peer mentors ($n = 22$), and
- 3) The most cited services available to students with ASD were supervised social activities ($n = 17$), social skills groups ($n = 15$), and individual therapy ($n = 13$).

Thus, it appears that while most institutions have adequate academic support in place for students with ASD, many may not have support services in place to address the non-academic needs of students.

As part of her survey, Barnhill (2014) also gave the Disability Services staff members who responded on behalf of their institutions, an opportunity to answer open-ended questions relating to two issues: their perceptions of the helpfulness of the services at their institution and their recommendations to other institutions that may wish to implement programs for students with ASD. From the qualitative research analysis, several key themes emerged. Most importantly, taking a flexible, individualized approach

and incorporating student input were identified as two of the most helpful strategies. The staff members did report, however, that this type of approach could be difficult to implement given staffing limitations and an increasing demand for services.

On many college and university campuses, counseling centers have a long history of promoting the growth and development of students, aiding in the transition to college and supporting students' mental health needs (Bishop, 1990; Kitzrow, 2003). Furthermore, research has shown that participation in counseling is associated with higher levels of retention (D. Lee, Olson, Locke, Michelson, & Odes, 2009; Wilson, Mason, & Ewing, 1997). Not surprisingly, some have suggested that college counselors could play an important role in supporting the students with ASD (Graetz & Spampinato, 2008; Pillay & Bhat, 2012; Pinder-Amaker, 2014), although no research has specifically addressed this topic. Nonetheless, it seems that more research is needed that addresses if and how students with ASD are receiving much needed social and emotional support throughout their college experience.

Rationale for the Study

Given the increasing number of students with ASD on college campuses, researchers have begun to explore how to best support these students in such settings. Despite a tradition of providing counseling services to students in university counseling centers, little is known about the role that university counseling psychologists play in providing professional services to college students with ASD. Accordingly, the present study will examine the experiences of college counselors who provide counseling to college students with ASD. Individuals who are licensed psychologists and work

primarily in university counseling centers were recruited to participate in one semi-structured phone interview to discuss their experiences in training and practice with students with ASD.

Conclusion to Chapter 1

In this chapter, the issue of increasing numbers of individuals with ASD enrolling as college students was introduced and the associated struggles that colleges and universities are confronting as they seek to provide services to these students. I also provided an overview of autism spectrum disorder as a clinical construct. Finally, I provided an overview of some of the research within this domain. In Chapter 2, I will provide a more in-depth analysis of the extant literature on this topic.

Chapter 2

Literature Review

In Chapter 2, the extant literature from within and outside of the profession of counseling psychology that is related to this current research topic will be discussed. Then, the relevant published studies related to the college experiences of individuals with ASD will be summarized. Finally, I provide the rationale for this study in the Purpose of the Study section will be provided, and the research questions that guided the study will be identified.

Review of the Literature

As stated in Chapter 1, the purpose of this current study was to examine psychologists' experiences providing counseling services to students with ASD in university counseling centers. Given that counseling psychology is founded upon a developmental, strengths-based model, the field of counseling psychology has traditionally viewed disability as a facet of diversity and culture (Peterson & Elliott, 2008); yet unlike other diversity issues that are relevant to psychological processes, ASD has been almost completely ignored by the counseling psychology field.

Little attention has been paid by counseling psychology researchers to how to support and provide services to college students with ASD. An example of this can be seen in a recent review of five major journals within counseling psychology (Foley-Nicpon & Lee, 2012). In this review, these researchers found only 55 articles published in the previous 20 years related to disability. A similar search of these same journals

yielded only 2 articles related specifically to ASD. However, given the presence of counseling psychologists in many university counseling centers, as well as a robust history of research relating to counseling interventions with college students, this topic is very important to counseling psychologists as they will very likely encounter clients with ASD during their work in university counseling centers.

Although a thorough review of the literature yielded no studies of how college counselors provide counseling interventions to students with ASD, corollary lines of research have emerged in education and disability studies literature bases (e.g., Briel & Getzel, 2014; Cai & Richdale, 2015). This corollary literature falls into three broad domains. The first domain reflects experiences of the students themselves. This data was gathered via interviews, surveys and focus groups (Briel & Getzel, 2014; Cai & Richdale, 2015; Gelbar, Shefyck, & Reichow, 2015; Gelbar, Smith, & Reichow, 2014; Van Hees, Moyson, & Roeyers, 2014). A majority of these studies were qualitative in design; and together, they provide insight into the lived experiences of students with ASD at institutions of higher education within the United States and abroad. The second domain reflects others' (peers', professors') experiences and interactions with college students with ASD. One group of studies is comprised of investigations of factors that affect peers' acceptance of classmates with ASD (Gardiner & Iarocci, 2014; Gillespie-Lynch et al., 2015; Nevill & White, 2011; Tipton & Blacher, 2014). A second, smaller group of studies examines faculty experiences with students with ASD (Gobbo & Shmulsky, 2014; McKeon, Alpern, & Zager, 2013; Taylor, 2005). These studies identified faculty perceptions of student behavior and performance within the classroom. A third domain of

research examines the experiences of therapists who provide counseling to other specialized populations (Jones, 2014; Kothari, Hardy, & Rowse, 2010). These populations included individuals with learning disabilities and individuals struggling with substance abuse. This current review of literature, although germane to the field of counseling psychology, drew almost exclusively upon research published outside of the primary journals in the field (e.g., *Journal of Counseling and Development*; *The Counseling Psychologist*; *Journal of Counseling Psychology*).

First-Hand Accounts of Students with ASD

In order to develop a more comprehensive understanding of the experiences of college students with ASD, Gelbar, Smith, and Reichow (2014) completed a systematic review of the current research. To be included in the review, studies had to meet three inclusion criteria: (a) studies that sampled individuals with ASD who were attending degree-granting universities, (b) studies that contained “first-hand accounts of the services, supports, or experiences of one or more individuals” (Gelbar et al., 2014, p. 2595), and (c) studies that were published in English in peer-reviewed journals.

Overall, 20 studies that described the experiences of 69 individuals with ASD were included. Of the included studies, 10 were published after 2010; 11 sampled individuals from the U.S. The authors noted that of these 20 studies, only two were experimental and the remaining 18 were case studies of individuals with ASD who were attending college. A majority (68%) of those studied were male and the mean age was 21.20 years-old (Gelbar et al., 2014).

Across the 20 included articles, the researchers coded for mental health, socio-emotional, and relationship self-report variables. They also coded for students' reports of the supports and services (e.g., academic accommodations) that they received. Results showed that anxiety was the most commonly reported experience (with anxiety reported in 12 of the studies). Loneliness was the second most often reported experience (in 9 of the studies), with depression (in 8 of the studies), and peer rejection in the form of bullying and roommate concerns (in 7 of the studies) also reported. In 3 studies, students reported that their primary concerns included academic challenges and time management struggles.

In terms of the supports provided to students, students in 12 of the 20 studies described receiving academic supports, such as modifications to their assignments, tutoring, extended times for tests, and lecture notes. Students in 9 of the studies received non-academic supports. Most commonly cited non-academic supports were peer mentoring programs and an assigned liaison/counselor/aide. The involvement of college counseling centers was not highlighted in any of the studies and of the 5 studies that mentioned the involvement of a counselor; only 2 were from within the United States. Thus, despite the prevalence of social and emotional concerns identified by these students, in a large majority of the cases, students were not receiving social, emotional, or mental health support from counselors or counseling center psychologists.

Gelbar et al. (2014) provided a helpful synthesis and critique of the studies within this area. These authors also highlighted several limitations of the extant literature. First, the generalizability of the findings from most studies is limited by a very small sample

size. The largest sample identified by Gelbar and his colleagues was 12. Half of these studies were interview studies and employed single or two subject designs. Thus, broader conclusions from Gelbar et al.'s work cannot be drawn. Moreover, 18 of the studies were qualitative in nature and as such findings are unable to be generalized. Second, 9 of the studies examined the experiences of students outside of the United States. While this information may be useful in making comparisons between American and non-American institutions in terms of their provision of academic and non-academic supports to students with ASD, inferences about how students with ASD are being supported on college campuses in the United States could not be made.

To address some of the gaps identified in their review of the extant literature initial, Gelbar, Shefyck, and Reichow (2015) conducted a follow-up study in which they further examined the experiences of individuals with ASD in higher education settings. Thirty-five individuals with ASD who were current or former students completed an online survey that asked about their experiences in college as well as the supports they received while enrolled as students. In addition, these researchers asked questions regarding clients' histories, such as the age at which individuals had received a diagnosis of ASD, and the special education supports they had received in high school.

Gelbar and his colleagues (2015) found in the survey results that among the respondents, a majority reported being academically successful, and earning cumulative grade point averages of 3.0 or higher. Additionally, many of these individuals identified academic supports such as extended time on tests and meetings with disability counselors. The authors highlighted a disparity between students' perceptions of their

academic and social success while in college. Less than half of this sample felt as though they had the social skills necessary to be successful in college, and many of the students surveyed reported feeling lonely on campus as well as having difficulty getting along with their roommates. Moreover, a majority of the respondents reported not feeling as though they could cope with stress and anxiety in college.

Gelbar et al. (2015) made several important contributions to the extant literature on this topic. First, they identified a potential gap between the academic and social functioning of individuals with ASD during their time in college. Additionally, while those surveyed reported receiving a number of academic supports, none mentioned receiving counseling or other formal social-emotional supports on their college campuses. The authors did note that by targeting students who were strong self-advocates, their sample might not have been representative of the broader population of students with ASD who are or have been in college. They also described a potential bias in their sample toward those students that had been more successful in college choosing to complete the survey.

In another study that aimed to understand the academic experiences of college students with ASD, Cai and Richdale (2015) conducted focus groups with 23 students with ASD as well as 15 family members. In the semi-structured focus groups with students, the researchers inquired about various aspects of college life including academic functioning, use of support services, social life, and daily living. In the family member groups, the researchers asked questions related to parental concerns about their child,

views of the support their child received and support needs of the caregivers. Transcripts of the focus groups were qualitatively analyzed to identify themes.

Among the key findings of Cai and Richdale's (2015) study, students with ASD generally felt as though their academic needs were met, although they did not feel as though they received adequate social support. As a result, many students reported struggling with group work and with asking for assistance when needed. In addition, the students in this study reported not feeling adequately prepared for college. Similarly, parents reported needing to provide continued financial, organizational, and emotional support to their children during the time they were enrolled in college. Lastly, students with ASD often chose not to disclose their condition, which delayed or prevented these students from accessing support through disability services or other resources on campus.

Cai and Richdale's (2015) study is limited by several important factors. First, as a qualitative examination, the results of this study are not generalizable to other populations. Moreover, given that this study examined college students in Australia, it may be of limited use to those working in the United States given differences in the ways that educational services and supports are structured and delivered. In addition, the use of focus groups may have inadvertently created an uncomfortable social situation for the participants with ASD, which may have affected the willingness of some individuals to participate in the discussions.

In a similar study, Van Hees, Moyson, and Roeyers, (2014) conducted semi-structured interviews with 23 students with ASD attending college in Belgium. The interviews were focused on three main domains: education, student life, and daily

(independent) living. Utilizing a Grounded Theory approach, the researchers identified a number of themes and subthemes related to these students' experiences in higher education settings. The main themes identified were related to difficulty with new situations and changes, navigating social demands, disclosure, broader mental health issues, and support recommendations.

Among the key findings of their study, nearly all of the participants in Van Hees et al's (2014) sample reported difficulty with new situations and unexpected changes ($n = 22$) and struggles with the social contacts necessitated by living on a college campus ($n = 21$). All of the participants indicated that they dealt with mental health concerns including stress ($n = 23$), anxiety ($n = 22$) and loneliness ($n = 20$). Most of these students ($n = 19$) reported being resistant to disclosing their diagnosis for a variety of reasons including fear of rejection, stigmatization and prejudice, and concerns about privacy. Students who did choose to disclose typically did so in order to receive accommodations through their institution's disability services office. In spite of the number of challenges these students identified, they also noted a number of perceived strengths related to their ASD. Among these were academic strengths, such as a strong memory ($n = 20$) and analytic skills ($n = 17$), and interpersonal strengths, such as sincerity ($n = 17$) and willingness to listen to others ($n = 18$).

Van Hees et al. (2014) also identified a number of support recommendations. First, nearly all of the participants ($n = 20$) identified the importance of adequate psychosocial support. This came in the form of both professional support through a psychiatrist or psychologist and through family support provided by parents and other

caregivers. Of note, while some students reported working with an ongoing mental health provider, others reported difficulty finding an available therapist on or near their college campus. Additionally, students identified academic accommodations ($n = 20$), a personalized approach to support and accommodations ($n = 22$), and educational and psychosocial coaching ($n = 21$) as beneficial supports during college. Similar to the findings of Gelbar et al. (2015), Van Hees et al. reported that the students in their sample were more concerned about dealing with the social rather than the academic challenges of college.

While this study provides greater insight into the experiences of a group of individuals with ASD in a college setting, its results cannot be generalized given the qualitative nature of the study. Moreover, given that the researchers studied students in Belgium, their findings may be of limited usefulness to those interested in understanding the experiences of students with ASD in the United States. Lastly, the researchers note that relying solely on self-report may limit their findings given the difficulties with the perspective taking and reflective thinking that many individuals with ASD possess. In critiquing their own study, Van Hees et al. (2014) suggested that including the perspectives of others, such as parents and support staff, may have provided a more complete picture of the experiences of the students they studied.

In order to better understand how students with ASD are utilizing career planning services, Briel and Getzel (2014) conducted semi-structured interviews with 18 students attending community colleges and universities in Virginia. The interviews focused on areas such as choosing a major, utilizing career planning and other career services, and

self-disclosure. Within these domains, responses were qualitatively analyzed for themes. Broadly speaking, these students reported seeking input from family members, and high school and college staff members about major and career choices. A majority of students did not access career services available on campus and many were unaware that such services existed.

An important finding highlighted by the authors was that most students with ASD had little to no work or other career related experience during college. As a result, many of these students lacked important information that might assist them in choosing a career path that was both interesting and a good match in terms of the work environment and day-to-day demands of particular jobs. Several students discussed their social limitations and concerns about needing more support in a work setting in order to be successful. Most of the participants ($n=14$), however, did report a desire for more job shadowing, internships and other career-related learning opportunities. The authors highlighted the importance of these experiences in teaching soft skills, such as appropriate communication, problem-solving, and teamwork which are often keys to success in a work environment (Briel & Getzel, 2014). These types of skills are often addressed by psychologists in the course of career counseling in university counseling centers.

While providing important insight into the vocational exploration and career planning of college students with ASD, Briel and Getzel's (2014) study is limited by a few key factors. First, given the qualitative design of their study and the small and geographically limited nature of their sample, the results of their study are not generalizable. Additional research is needed to support the authors' findings.

Additionally, the participants in this study were primarily White ($n = 16$) and male ($n = 15$), which further restricts the generalizability of the results. Follow-up studies may seek to include a more diverse sample in order to better understand how factors such as gender and ethnicity affect the vocational development of students with ASD.

More specifically, a few studies have examined the effectiveness of interventions designed to assist students with ASD in various realms of functioning germane to a college or university setting, such as social-communication (Mason, Rispoli, Ganz, Boles, & Orr, 2012) and problem solving (Pugliese & White, 2014). Although limited by small samples and generally inconclusive results, these studies may be useful in highlighting the need to tailor interventions to the specific needs of students with ASD. For example, Mason et al. (2012) adapted a treatment modality (video modeling) that has empirical support for children and adolescents with ASD and adapted it to fit the context of a higher education setting. Similarly, Pugliese and White (2014) modified an empirically supported cognitive-behavioral problem solving curriculum to meet the needs of a group of college students with ASD. Further research of this type may be beneficial in identifying evidence-based interventions that college support staff may be able to implement with the aim of promoting skill development for students with ASD.

Another group of studies utilized a large, national database to explore the relationship of ASD to several outcome factors relating to college preparation and success. Using data from the National Longitudinal Transition Study 2 (NLTS2), Shattuck et al. (2014) examined the effect of disability identification on self-efficacy in college students with ASD. Overall, they did not find a relationship between disability

identification and self-efficacy. Students with ASD felt relatively confident that they could get information and get school staff to listen to them when needed, although they responded less positively when asked if they could handle most things that come their way. Among the students with ASD in their sample, Shattuck et al. (2014) reported that a majority (69.4%) self-identified as having a disability or special need. The authors did find, however, that self-identification of a disability was lower for Black students and for those with higher scores on a functional skills scale. Moreover, Black students with ASD felt as though it was more difficult to get school staff and others to listen to their concerns. As the authors note, the differences between White and Black students highlight the need to examine racial disparities in relation to ASD and the college experience.

In another study utilizing the NLTS2 dataset, Xin Wei et al. (2014) examined the relationship between Science, Technology, Engineering and Math (STEM) majors and college persistence. Within higher education, persistence is often assessed by a student enrolling at that same institution the following term (Leppel, 2001). For students with ASD, Wei et al. (2014) found that STEM majors with ASD were significantly more likely than non-STEM majors with ASD to persist in college, which is notable given that students with ASD have less persistence overall in college than students who do not have ASD. Another finding was that a majority (81.3%) of students with ASD attended a community or 2-year college. Further, among the students who did not transfer to a 4-year institution, STEM majors were again significantly more likely to persist than non-STEM majors were. In discussing their results, the authors hypothesized that a STEM

major may be a better career fit for many students with ASD given the higher degree of structure within these types of fields.

A third study explored the role that goal setting and participation in transition planning has on college enrollment for students with ASD. Once again utilizing the NLTS2 dataset, Wei, Wagner, Hudson, Yu, and Javitz (2016) found that both participation in transition planning as a high school student and setting the goal of attending college were associated with higher rates of college enrollment. Although these results may seem rather trivial, Wei et al. (2016) noted that only about 40% of students with ASD had participated in transition planning and only 24% of students with ASD had a goal of attending college in their formal transition plan. Despite these findings, the authors reported that 84% of students with ASD expect to attend college at some point. Thus, it may be of particular importance to more actively engage high school students with ASD in their transition planning and to work with these students to explore their beliefs and expectations about college enrollment in order to support their fulfillment of their goals.

The studies of Shattuck et al. (2014), Wei et al. (2016) and Wei et al. (2014) have much greater external validity given their use of the same large, more representative sample. As such, they are able to provide insight into some of the ways that race may intersect with disability for students with ASD. Additionally, given the longitudinal nature of the data, these studies have the benefit of being able to make connections between the high school and college experiences of students. While these studies have the benefit of a larger sample and longitudinal design, they are limited by the fact that

researchers used archival data, and thus were not able to choose the measurement strategies for the specific variables they utilized. For example, to measure self-efficacy Shattuck et al. (2014) had to rely on a small number of questions they hypothesized were related to self-efficacy without being able to validate their use of these items. Using this type of research design and measurement strategy may lead to biased results given that the questions selected were not validated as being specific measures of self-efficacy. Moreover, because the studies were correlational, no causal relationships could be inferred.

Peer perceptions of students with ASD

A second body of literature has explored peer perceptions of students with Autism Spectrum Disorder. Previous research has identified peer mentoring as a helpful support for students with ASD (Gelbar et al., 2015, 2014), and peer acceptance of ASD has been associated with greater likelihood to volunteer for such programs (Gardiner & Iarocci, 2014). Greater openness towards peers with ASD was found in students who had a first-degree relative with ASD (Nevill & White, 2011), and higher levels of acceptance were found in students who had characterized their first-hand interactions with individuals with ASD as being higher in quality, as measured using a previously developed rating scale (Gardiner & Iarocci, 2014). Thus, it seems important to provide opportunities for students with ASD to develop relationships with their peers outside of the classroom to encourage more of these positive interactions.

Despite its increasing prevalence, research has shown that while many students without ASD are knowledgeable about ASD, a number of misconceptions persist. Using

an online version of the Autism Awareness Survey, Tipton and Blacher (2014) found that among 1057 members of a college community, almost 70% believe that autism is caused by vaccines, even though in other domains of the survey, it was shown that they had good general knowledge about ASD. Moreover, in a sample of 365 college students, Gillespie-Lynch et al. (2015) found that autism was often confused with learning disabilities and other disorders and that Autism Spectrum Disorder was viewed as a “cognitive difficulty.” In a cross-cultural comparison, Obeid, Daou, and Denigris (2015) found that despite higher levels of knowledge about, and lower levels of stigma toward ASD, students in the United States held these types of misconceptions more than students from Lebanon. Consequently, knowledge alone did not eliminate misconceptions.

In order to understand the effectiveness of an online training program to improve knowledge of and decreased stigma toward ASD, Gillespie-Lynch et al. (2015) conducted a pre- and post-test study of autism stigma and knowledge with a sample of college students. The researchers found that after completing the training, which consisted of an overview of research related to ASD across the lifespan, post-test scores for stigma were significant lower and post-test scores for knowledge were significantly higher in their sample. Open-ended items, which asked participants to define autism in their own words and identify two challenges related to autism, did not yield significantly different results when coded and analyzed for themes. Thus, even after completing a structured training module, misconceptions about ASD persisted among the college students in this sample. These findings seem to further reinforce the importance of

finding ways for students with ASD to interact with their peers in the broader social context of the university or college.

Faculty Experiences with Students with ASD

A small number of studies have examined the experiences of faculty members working with college students with ASD to better understand the strengths of needs of students in the classroom. Gobbo and Shmulsky (2014) conducted focus groups with eighteen faculty members at a small, private college that serves a high proportion of students with ASD, ADHD, and learning disabilities. Questions were targeted at faculty perceptions of students' strengths and weaknesses, critical thinking abilities and challenges, and effective instructional strategies for working with students with ASD. Gobbo and Shmulsky (2014) identified a number of themes within their data. First, faculty cited social difficulties and student anxiety as major challenges. Students with ASD often struggled to understand social cues and social rules in the classroom, resulting in challenges participating in discussions and group projects. In addition, the faculty members reported that students often needed additional support understanding the "big picture" when learning new concepts and managing frustration around more ambiguous topics. These social and cognitive factors contributed to high levels of perceived anxiety in students with ASD that faculty members reported needing to address with students. Participants also identified several student strengths. They found students with ASD to be generally quite compliant with classroom rules, such as showing up to class and appointments on time, and following procedures for assignments and lab work. Participants also reported that they were able to capitalize upon the passionate interests of

their students with ASD, especially if it related to the material being addressed in the course. In terms of instructional recommendations, the authors highlighted the importance of providing structure for and attending to the emotional climate of students with ASD in order to more successfully meet the needs of these students.

Gobbo and Shmulsky's (2014) findings support previous research in this area. In a case study of three students with ASD, Taylor (2005) found that instructors needed to take a modified and more individualized approach to instruction and assessment when working with these students. Similarly, in McKeon, Alpern, and Zager's (2013) study, faculty members reported that students with ASD struggled most with the social and executive functioning aspects of courses. They often needed assistance during classroom discussions and group assignments and struggled to manage time effectively.

Experiences of Therapists with Other Specialized Client Populations

While no research, to date, has examined the experiences of therapists who work with individuals with ASD, there is a small body of literature that explores the experiences of therapists who work with other specialized populations of clients. Jones (2014) conducted a qualitative study aimed at understanding the therapeutic relationships between counseling psychologists and individuals with learning disabilities. The author conducted semi-structured interviews with eight psychologists with experience working with individuals with learning disabilities. Several key themes emerged from these interviews. Participants spoke to the importance of the therapeutic relationship as well as challenges developing these relationships and navigating boundaries within the relationship. They also reported needing to adapt therapeutic approaches to meet the

individual needs of their clients and to provide increased reassurance to these clients.

Lastly, the psychologists saw their work as difficult and highlighted the importance of supervision, consultation, and seeking out additional knowledge. Although limited in terms of generalizability, this study provides important insight into the experiences of psychologists working with a specialized client population.

In a similar study, Kothari, Hardy, & Rowse (2010) examined the experiences of therapists working with clients struggling with substance-use. The researchers conducted semi-structured interviews with eight clinical psychologists who work with clients with substance-use issues. Key themes that emerged from these interviews include the importance of finding hope in the work and tending to core or underlying meanings to understand a client's substance use. Participants also identified the importance of tolerance and maintaining connection to clients. Psychologists also reported feeling fear over the responsibility they felt as a result of their work. Although similarly limited in terms of the generalizability of the results, this study highlights these substantive issues that may be helpful to consider when exploring psychologist's work with specific populations of clients.

Summary of Reviewed Research

In response to the increasing number of students with ASD on college campuses (White et al., 2011), a growing body of literature has emerged to help researchers better understand the experiences of these students and those who support them. Given the relatively recent emergence of this trend, most research to this date has been primarily exploratory in nature. That is, researchers sought to get a clearer sense of who these

students are and what, if anything, institutions of higher education are doing to help them be successful.

Several studies examined first-hand accounts of the college from students with ASD (Briel & Getzel, 2014; Cai & Richdale, 2015; Gelbar et al., 2015; Van Hees et al., 2014). Nearly all of these studies were qualitative in nature, with a few broader themes emerging across the studies combined. First, students with ASD reported receiving a number of academic supports, including testing accommodations, note taking assistance, and tutoring (Gelbar et al., 2014). Generally, students reported feeling as though their academic needs were being met (Cai & Richdale, 2015). In contrast, students with ASD reported high levels of depression, anxiety and loneliness, and reported receiving less psychosocial and emotional support on campus (Van Hees et al., 2014). Moreover, students with ASD described social challenges that made it difficult to find and keep internships and to participate in other career-related experiences (Briel & Getzel, 2014). As a result, students with ASD missed opportunities to gain job readiness skills that could help secure employment after graduation.

Another group of studies explored peer perceptions of students with ASD (Gardiner & Iarocci, 2014; Gillespie-Lynch et al., 2015; Nevill & White, 2011; Tipton & Blacher, 2014). While most students in the United States were generally knowledgeable about ASD, they held a number of misconceptions that could lead to more stigma and less acceptance of their peers with ASD (Gillespie-Lynch et al., 2015). Overall, both knowledge of ASD and acceptance of peers with ASD were greater when students had a personal connection to ASD through a family member or had friend with ASD (Gardiner

& Iarocci, 2014; Nevill & White, 2011; Tipton & Blacher, 2014). Participation in training was also found to have a positive effect by increasing knowledge and decreasing stigma (Gillespie-Lynch et al., 2015). Students who were more accepting were also found to be more likely to volunteer to be peer mentors (Gardiner & Iarocci, 2014).

A number of other studies examined factors critical to effectively supporting students with ASD in planning for and being successful in college. First, faculty members and disability services staff emphasized the importance of taking an individualized approach to determining supports and accommodations given the highly variable needs and abilities of students with ASD (Barnhill, 2014; Taylor, 2005). In addition, collaboration was seen to be highly beneficial, although many faculty and staff members acknowledged that this was an area that could be improved (Barnhill, 2014). Research also suggested that interventions, support and planning were more likely to be successful if the student with ASD was actively engaged in their design and implementation (Barnhill, 2014; X. Wei et al., 2016). Lastly, many institutions are not currently tracking outcomes for students with ASD, including those with programs specifically designed to serve this population (Barnhill, 2014).

Purpose of the Study

Current research has highlighted the prevalence of social and emotional challenges often faced by this population as they transition to college, such as social isolation, difficulty with changing routines and managing new schedules, problems with living independently away from home, and lack of external monitoring and guidance (Howlin, Goode, Hutton, & Rutter, 2004; Jobe & White, 2007), as well as the perceived

importance of psychosocial support in their college success. However, the literature reviewed here does not address the critical issue of college counseling center psychologists' training in, conceptualization of, and experience in working with college students with ASD. As previously stated, while some researchers have suggested that college counselors could play a critical role in supporting the social and emotional needs of students with ASD (Graetz & Spampinato, 2008; Pillay & Bhat, 2012), there is a lack of research examining how college counselors are supporting individuals with Autism Spectrum Disorder on their campuses. Thus, it is critical that counseling psychology researchers begin to address how college counseling center psychologists are supporting students with ASD. The present study used eight interview questions (Appendix A) to investigate five major research questions:

- 1) How do psychologists learn about ASD over the course of their education and professional training?
- 2) How do psychologists approach their work with college students with ASD?
- 3) What has been satisfying about working with college students with ASD?
- 4) What has been frustrating about working with college students with ASD?
- 5) How do psychologists get support and stay energized to work with college students with ASD?

These questions are important because they examine a variety of aspects of a participant's experience providing counseling services to students with ASD including preparation and training, the provision of therapy and the use of consultation and supervision. Moreover, these questions are connected to critical components within the

profession of counseling psychology: education, practice and ongoing training. By exploring these questions, it is hoped that recommendations for training and practice can be identified.

Conclusion to Chapter 2

In Chapter 2, the lack of extant literature related to the research topic from within counseling psychology was addressed. Then, relevant published studies in related fields such as education and disability studies related to the college experiences of individuals with ASD were summarized. Finally, the rationale for this current study based on prior literature was provided, and the research questions guiding this study were proffered. In Chapter 3, will address the method used in this research.

Chapter 3

Method

In Chapter 3, a brief overview of Interpretive Phenomenological Analysis (IPA; e.g., study of individuals perceptions of their experiences (Smith, 2015)) will be provided and the rationale for selecting this type of approach for the present study will be discussed. Then, specific procedures related to participant recruitment, research procedures and instrumentation will be addressed. Finally, the process utilized for data analysis including coding, organization into domains and themes and auditing will be described.

Research Design

This study utilized a qualitative research design to examine the experiences of psychologists, employed in university counseling centers, who counsel students with ASD. A qualitative approach is particularly appropriate in this instance given the lack of extant literature on this topic. Consequently, there is not an a priori theory or hypothesis to guide a more targeted examination. The goal was, instead, to attempt to achieve a deeper understanding of a small group of individuals' experiences.

In the present study, an IPA approach was selected. IPA was developed to provide a means of systematically investigating the ways in which individuals make sense of their experiences. As described by Smith, Eatough, Jarman, & Osborn (1999) and Smith (2015) the main aim of IPA is to gain insight into a participant's experience of the topic under investigation rather than providing an unbiased account of the object or the event

itself. Moreover, IPA lends itself well to research questions in which a participants' perceptions of a situation may be of particular interest (Smith, 2015). In this instance, the experiences and perspectives of the participants were of the greatest interest given the previously identified gaps between what the profession needs to know about providing counseling psychology services to college students with ASD, and what is currently known. This is because IPA is useful when a domain has generated very little empirical research study and has also received little theoretical attention.

IPA is also useful when the pool of participants is small, such as in this study, wherein there are fewer college counselors who provide services for students with ASD. One reason is because IPA lends itself well to small samples (6 is typically recommended, although 3 to 15 is acceptable), when sampling is purposive (i.e., selection based on selected criterion) and homogenous (i.e., selection of participants who are similar) (Reid, Flowers, & Larkin, 2005). IPA allows for multiple perspectives on a topic using flexible open-ended inquiry methods. Data collection is conducted via interview, diaries, or focus groups. The stance of the researcher is facilitative. Identification of rich themes that capture the complexities of *meaning making* is the aim of this method (Reid et al., 2005; Smith, 2007).

The analytical process using for the IPA design is often described as a *double hermeneutic* (Pietkiewicz & Smith, 2012). That is, participants, first, make meaning of their own world and then, second, the researcher attempts to decode or make sense of this initial meaning-making of the participant. From this perspective, the process can be characterized as both descriptive and interpretive (Pietkiewicz & Smith, 2012). A final

critical component of data analysis in IPA is that it is idiographic, meaning that each case is explored individually prior to forming general themes.

In this current study, semi-structured interviews were used to elicit psychologists' reflections on their experiences in training and in professional practice within university counseling centers. Interviews ranging from 30 to 45 minutes were conducted over the phone. A series of eight questions were posed to each of the participants with additional probes offered based on the responses provided. These interviews were then transcribed and analyzed to identify themes related to the experiences of psychologists in their work with college students with ASD. Inclusion criteria for the study were that participants: (1) held a doctoral degree in psychology and were licensed as a psychologist in the state in which they worked; (2) worked in a college counseling center at the time the research was conducted; and (3) had worked with three or more students with ASD over the course of their professional career.

Participants

Eight licensed psychologists whose primary employment was in a university or college counseling center were interviewed. Six identified their gender as female and two identified as male. With regard to ethnicity, one identified as African-American, one as Asian and six as Caucasian. All eight reported holding a Ph.D. in Counseling Psychology. In addition, all eight participants completed their pre-doctoral internship in a university counseling center. The number of years the participants worked in university or college counseling center ranged from 3-30 years (*mdn*=9). Six participants worked at large, public institutions and two participants worked at smaller, private colleges.

Procedure

Following receipt of approval from the University of Minnesota Institutional Review Board (IRB), an email invitation (Appendix A) was sent to a group of 20 clinical and counseling psychologists known by the primary researcher to work in a college or university counseling center. The initial email included details about the study as well as an invitation to forward the details of the study to colleagues who were known to have experience in providing therapy to college students with ASD. The initial recruitment strategy yielded two participants, so a follow-up email was sent to this initial group of prospective participants, as well as an additional group of participants, who were also psychologists, and who worked in local college counseling centers. This second invitation yielded four additional participants. A third recruitment email was sent to prospective participants who worked at other institutions that had not yet been tapped for participants for this current study. These institutions were identified through consultation with the primary researcher's professional colleagues. Two more participants were recruited using this method. All participants in this study were Ph.D.-level counseling psychologists who worked in a university or college counseling center, and who provided services to college students with ASD.

Once interested participants contacted the primary investigator, a phone interview was scheduled via e-mail and phone with the agreement that the interview would be audio recorded for future transcription. Participants were sent an information sheet (Appendix B) that included an overview of the study and information about informed consent. The primary researcher administered all interviews. At the start of each

interview, the primary researcher reviewed with participants the informed consent, and provided an opportunity for participants to ask any questions they had that were related to the study. Basic demographic information was also gathered. At the end of each interview, participants were thanked for their time and encouraged to follow-up with the investigator should any questions or concerns arise. There was no indication that this was the case for any of the interviewees.

Instrumentation – Development of the Semi-Structured Interview Protocol

A semi-structured interview protocol designed by the researcher and consisting of eight open-ended questions was developed based on the extant literature and the primary research questions (Appendix C). The interview protocol was by reviewed by a panel of three therapists who have experience working in a college counseling setting with students with ASD. It was also reviewed by the researcher's faculty advisors. Following review, minor revisions were made to the interview protocol.

Data Analysis

In order to conduct the data analysis, the audio files were transcribed by a professional transcriptionist. The Interpretive Phenomenological Analysis (IPA) was used to analyze the data. The research team consisted of the primary researcher and one doctoral student in counseling psychology with experience providing therapy to individuals with ASD in a university counseling center. Both members of this research team had experience with qualitative analysis, including coding of transcripts and auditing, prior to conducting this study, and analyzing the data. The primary researcher read each interview twice, the second time with the accompanying audio recording. The

interviews were then coded using a multi-step process as described by Pietkiewicz & Smith, (2012). During the first phase, the investigator made comments summarizing the participants' responses to questions as well notes aimed at capturing other key aspects of the participant's experience. During the second phase of analysis, these comments were distilled into emergent themes. These first two phases of analysis were completed for each of the interviews prior to further analysis. The second research team member then audited the analysis and provided feedback regarding additional emergent themes or modifications to those already identified. Finally, these emergent themes were clustered and organized into domains, which represented the broad categories addressed by all participants in their responses. These were, again, reviewed with the second research team member until agreement was reached. In total, six domains and 18 themes were identified as a result of the analysis.

Conclusion to Chapter 3

In Chapter 3, a description of Interpretive Phenomenological Analysis (IPA) as the method used to analyze the data generated in this research was provided. The participants and development of the semi-structured interview protocol were described. Finally, the reasons for selecting this analysis method were discussed and the means by which data was analyzed were described. In Chapter 4, a detailed overview of the results of the analysis will be provided.

Chapter 4

Results

Introduction

The domains and themes that emerged following analysis of the semi-structured interviews are presented in this chapter. In summary, six domains and 18 themes were derived. Domains comprised significant aspects of psychologist's experiences working with students with ASD within the college counseling setting: 1) experiences in training, 2) the context of college counseling, 3) approach to therapy, 4) rewards of work, 5) challenges of work, and 6) ways of getting support. The included themes represent the unique nuances of the individual experiences within these broader domains. As is suggested within an Interpretive Phenomenological framework, direct participant quotations will be presented as "raw data" as a means of retaining the voices of the participants (Pietkiewicz & Smith, 2012). Domains and Themes are summarized in Table 1 (p. 58).

Data is organized by domain, with each domain presented and described. Themes within these domains are presented with the most commonly occurring themes listed first. The convention that will be utilized to describe the frequency of themes is as follows: *all* ($n=8$), *most* ($n=7$), *many* ($n=5$ or $n=6$), and *half* ($n=4$). Participant quotations are utilized to capture the essence of the individual's experience in his or her own words as well as to elucidate the breadth of participant perspectives. Some of the quotations have been edited in small ways to increase the clarity of meaning.

Domain 1: Experiences in training

The first domain explores participants' exposure to ASD throughout the course of their training. Participants were asked to reflect upon their experiences of learning about ASD as well as their work with clients with ASD in the settings in which they completed their training (practicum, internship, post-doc, etc.). Prior to exploring their experiences, it was first important to understand participants' level of comfort and perceptions of their knowledge of ASD.

Theme 1.1: Lack of experience. Most participants reported feeling as though they had little to no experience working with individuals with ASD throughout the course of their training. One participant noted,

“I think my experiences in working with folks with Autism Spectrum Disorder is -- I don't know that I fully knew all about it prior – I feel like it's evolved over time. So I think I probably had worked with a few individuals without necessarily realizing it. And by that it would mean more the higher functioning end of things. They were subclinical or not diagnosed. But then, my first time really working with someone who did identify as on Autism spectrum was someone who had been diagnosed with Asperger's during my internship year.”

Another participant stated,

“And I remember early in the profession, I don't remember working with any folks on the spectrum really, it's possible that I didn't even work with anyone on the spectrum until I came to...[name of institution] which is about 18 years ago.”

Yet another reported,

“I went back to grad school, didn't really get any formal training in grad school on working with folks on the spectrum. Not through classes and not through my practicum experiences which were all in counseling centers. And then I showed up here and did my internship at...[name of institution] and then got a job here. I've been here ever since...and there's been nothing formal...”

And another noted,

“I have had some experience working with folks on the spectrum before and during my time at college counseling centers. However, it hasn’t been extensive.”

Theme 1.2: Lack of coursework. Many participants also reported that they had limited exposure to ASD through their coursework as graduate students. One participant stated,

“I would have to say that I did not really get any formal training or I don't think other than maybe just a really kind of cursory overview of autism spectrum disorders in a DSM class, I don't think I really learned that much in graduate school.”

Similarly, another reported,

“We didn’t even learn about it in my assessment course, not even in my courses when I was getting my PhD. So really not a lot of training. But, I don’t think that’s totally weird or uncommon. I think it’s unfortunately pretty common.”

Another participant noted,

“There’s definitely a limited amount of exposure in terms of course work. Of course it comes up in terms of diagnostic classes and assessment classes very minimally but I don’t think that I necessarily had a lot of course work just around the different complications that come up for the different experiences that could potentially be impacted by that disorder and how they treat and work with that.”

Theme 1.3: Importance of cultural and diversity coursework. Half of the participants identified their coursework in counseling across cultures and addressing issues of diversity as being helpful in their work with students with ASD. One participant stated,

“I think my training that had to do with culture that’s ongoing...the training in graduate school helps me...conceptualize culture very broadly and really be in tuned to the nuances of it. I think so often it gets cast with broad strokes where it’s just like, ‘Okay it’s about race’. Or it’s about ethnicity or something like that. And it just feels like it’s so much more than that and gets down to invisible disabilities as well as just identities.”

Domain 2: The Context of College Counseling

The second domain relates to the unique nature of the college counseling setting. Participants reflected upon both the benefits and challenges of working within a college or university counseling center. They identified key aspects of working within a broader campus system as well as how the context of a college or university might intersect with the issues addressed within therapy.

Theme 2.1: The importance of collaboration. All participants addressed the importance of collaborating with other offices and professionals on campus to meet the needs of students with ASD. One participant conveyed,

“The work that we do here at this particular counseling center is very much team based. We always invite students if they’re working with anyone else on campus to sign a release if they want that and to collaborate and we have times when we bring in, say someone, from disability services for a session, a joint session. We kind of look at the goals and what are the challenges that are getting in the way and what’s the plan moving forward so that we are all in the same page. So that’s one way in which we certainly work from the system’s perspective on campus...”

Another participant stated,

“But, yes. I mean we have a really wonderful accessibility resources office. I have to write a letter saying this person has symptoms that are consistent with ASD. And they get, they get the resources. It really just takes a letter and a diagnosis. So that’s been really, really nice. And I do that with, I mean, I do that, I try and do that really early on, so that they can get that stuff. Because you want them to have a successful college experience, obviously.”

A third participant asserted,

“One of the benefits of working in college counseling centers is we have a...[formal program for students with disabilities]. So, a student can register with...[the program], I would fill out the paperwork, send it over there, and because of the Americans with Disabilities Act of 1991, ...[the office] will advocate on behalf students that won’t show the diagnosis but they will come up with a reasonable list of academic accommodations, and they will advocate on the student’s behalf if these professors are unwilling to make those accommodations.

So, there's plenty of times where professors will say, well, you're not going to get special treatment just because you register with...[the program], and...[the office] will step in and say like, there's a legal mandate here that you have you to give this student his accommodations. And so, I'm finding it—that's one resource that I really try to maintain that relationship with. Students tend to find...[the program] to be helpful.”

Theme 2.2: Recognizing the social demands of college. Half of the participants acknowledged the social demands of a college or university setting and highlighted the ways in their clients with ASD have been particularly impacted as a result. One psychologist stated,

“When I think about what it takes for someone with autism to come in the door, I think about those specific challenges that they have being on a campus where there's so much in terms of developmentally what's happening, what's going on socially. I think it's a hard adjustment for anyone even where there aren't social skills challenges. So I think in those ways it just feels like I'm appreciative of the many layers of that.”

Another participant offered,

“I would say that other thing that's difficult about my work with ASD clients is yeah, the college setting, social life, is just so important. And the pain that some people are in is just visceral. The pain of deeply wanting more connection. And again, this is not all my ASD clients. But I've had a couple of folks recently in just deep pain over ‘I feel like I'm never going to have that connection...’”

Theme 2.3: Need for more services on campus. Half of the participants spoke about the need to have more on-campus services available to students with ASD. In particular, they discussed being able to offer groups for students with ASD. One stated,

“But, we've talked to the staff over a number of years about what kind of services we can provide that would be responsive to these individuals. We talked about having groups and things like that and we haven't been able to do that. But it's something that I think is interesting to think about and I wish that we had more services on campus. But I think in a time where college counselling centers all over the country are being swamped with increased demand and severity, all of that, it feels like this is a population that probably has some additional needs.”

Similarly, another participant shared,

“I would say there are some ideas that have not been fully realized at this point, and one of the things that we've talked about on this campus for some time is to try to put together a group for folks with ASD, and I'm thinking that that could be a really good opportunity not just for all the reasons that I just mentioned but also I think in some cases just for in vivo practice of the social skills and that sort of thing in a safe and supportive environment with people who would likely be able to understand on a really deep experiential level. And some of that has been just one of the biggest challenges on the campus of our size is just getting a critical mass for any type of group frankly getting that critical mass of enough students who are interested in and engaged and able to carve out the time. So it's been more a conceptual idea at this point than a reality but it's something that I still hope that we will may be able to get off the ground.”

In addressing the need for more opportunities for students to practice social skills, a third participant offered,

“I wish we had more environments where people could practice those skills and lower risks situations that they could gain more of those skills. So, I think that's the other hard part about the work is I feel like we're short on resources that'll be really helpful for people.”

Domain 3: Approach to therapy

The third domain incorporates the ways in which participants addressed their approach to working with students with ASD in individual therapy. All participants discussed the ways in which they had to adapt their approach to therapy to meet the needs of these clients. They also addressed the ways in which they conceptualize disability and how that enters into their therapeutic work.

Theme 3.1: Remain focused on client perspective. Most participants discussed the importance of maintaining an approach to their work that remained focused on the perspective of their client. For example, as one participant described,

“It’s really an exercise of trying to understand and have accurate empathy. That kind of thing. And putting yourself in the student’s shoes, but you know you can’t every fully be in their shoes. And...really trying to approach things, almost, I mean almost sort of human, client centered. Like, you really want to have that accurate empathy. And, understand, see them for who they are, really, in ways that other people don’t.”

Another way that participants described remaining focused on the client perspective in their work with students with ASD was to ensure that students take the lead in terms of defining ASD as a disability, rather than imposing this diagnostic label on them. For example, one participant conveyed,

“I think that in part it has to do with where a student is like whether they’re identifying that as a disability or not. I feel like I’m a little reluctant to jump in talking about Autism spectrum as a disability. I don’t know. I guess that part feels a little bit tricky to me because it certainly can be seen that way. But I also feel like it depends on how the student identifies. I feel like if the student is talking about it that way then that’s something I can join with them in. And if I do feel like there would be some benefit to getting it to having a formal diagnosis in terms of the student success of the university or overall wellbeing, I think that’s the time where I would talk about it. I don’t know. It’s not that I avoid the label. But I don’t feel that I lean into that label.”

Similarly, another participant stated,

“I think in terms of how students orient in terms of deciding whether a mental health condition is really a disability or not I really tend to defer to them. I have certainly worked with students who identify pretty strongly as having a psychiatric disability and were involved in organizations that kind of oriented that way... And then some students who thought of it more as sometimes not something that they would even want to put a diagnostic label on would see it maybe more in a developmental context or that sort of thing.”

Yet another participant shared,

“But what’s been, I think, really eye opening for me is in working with folks that have an identified disability, especially ones that might be invisible if you would to look at them, just if you met them in a casual setting, is to understand from them what it means to them.”

Theme 3.2: Conceptualize disability as an aspect of diversity. Many participants shared that an important aspect of their approach to working with students with ASD is a belief that disability is an aspect of diversity and of an individual's identity. One participant expressed,

“I consider it a part of diversity actually. So, I do and I work with clients around this. I try and talk to them about neurodiversity and you know, that there are challenges to having ASD, and also a lot of strengths. And a lot of things they, if they can see it, or if they can tap into those things, there's a lot of positive to having whatever disability they have including ASD.”

In a similar manner, another participant offered,

“But I also think that being influenced by ideas of intersecting identities and recognizing that within any given say type of disability that there's going to be a considerable amount of diversity and that a given disability is also going to interact with age and gender and social class and lots of other things that will influence how people experience.”

Another participant highlighted the identity development process that occurs for college students,

“When I think about their overall identity, it does feel really important, especially in college when people are – the identity development I think purveys the work that we do whether or not someone identifies as being on the spectrum or not. But I think disability in whatever forms, that is, that all is really relevant.”

Theme 3.3: Adapt approach to better suit client needs. Most participants also addressed the need to adapt their overall approach to therapy to better meet the needs of clients with ASD. A number of participants discussed shifting to a more directive and skills focused method of intervention. One participant stated,

“I'm talking more about teaching and psycho-education I do think that that's one of the things that has been part of how I kind of adapted my approach in terms of working with clients on the spectrum as I definitely do more of that.”

A second participant expressed,

“When working with folks on the autism spectrum I tend to be a little more pointed in my questions, a little bit more blunt. It’s been my experience with that when working with folks on the spectrum, they actually appreciate that. There’s no ambiguity in abstract language but rather just asking things in a very pointed and direct manner. Generally, they tend to tell that that’s just eases any anxiety with feeling like I have to interpret this. Being very literal sort of assuages some of the interpretation anxiety that comes with it.”

Another participant shared an example of how this recognition of the need for adaptation played out in therapy with a client with ASD,

“And I have to remind myself of things like “oh yeah, don’t use metaphor...I’ll give you the example. I was talking with...[the client] about something and I used the example of “You know, I wonder what do you think, if you were a fly in a wall, what would they have noticed? Or something like that. That “fly in the wall” metaphor. And his response was something like “Well, if there’s a fly in the wall, I’ll kill it, I’ll smash it and I just laughed and yeah, that’s right. Metaphor? Nope. Got to move away from that.”

Theme 3.4: Utilize a strengths based approach. Half of the participants addressed their tendency to emphasize a strengths-based approach in their counseling work with students with ASD. Several psychologists stressed the importance of assisting clients to recognize that living with ASD has both benefits and challenges, and utilizing therapy to assist clients in recognizing their strengths. One participant shared,

“I try and come from a strengths based approach and I work a lot with students around acceptance, and self-compassion and sort of reality like, this is you know, we can fight this reality but that’s not going to get us there, it’s just going to frustrate us. If we, the sooner we accept the reality and know how to work within our strengths and what within the cards that we were dealt, the better off we’ll be. So...very strengths based.”

Another participant echoed,

“but all limitations have their strengths and really helping people name and identify for themselves ‘what are my strengths,’ ‘what are my limitations,’ ‘what are the resources out there to help me move forward.’ ‘What are my life goals?’ So, I think it fits the themes of making sure there’s a strength-based piece.”

Domain 4: Rewards of work

The fourth domain examines aspects of working with students with ASD that participants found rewarding. They were asked to consider what they enjoyed most about their counseling experiences with students with ASD, and participants named a number of important factors. In particular, psychologists discussed being invigorated by the challenge of needing to learn new skills and by the opportunity to have some of their assumptions about individuals with ASD, and of those with disabilities in general, challenged. They also shared many experiences of being able to celebrate successes with their clients that resulted from work that occurred within individual therapy.

Theme 4.1: Appreciation of uniqueness. Half of the participants discussed finding joy in the unique perspectives and qualities that their clients with ASD possess. In particular, they shared about the passion and authenticity that observed in their clients as well as their client's unique perspectives on situations. One participant offered,

“I've become more appreciative of different ways of seeing the world and different ways of processing information and am maybe more compassionate toward the folks who struggle with the kind of sussing [sic] out what these rules and norms are. I feel like my ability to take a wider range of perspectives has been enhanced by working with some folks who just saw the world in really different ways.”

In a similar fashion, a second participant conveyed,

“I found some of them to be just absolutely brilliant in terms of the way that they think about things, it really feels different. It feels different than the way that most of the other students that are not on the spectrum when I talked with them, regardless of their presenting concern, when they come in, it does feel qualitatively different. Like sometimes the way that they phrase things, or the way that they go about problem solving, that problem solving approach feels really, really different and that's neat to me because it gives me access to a world or a window into a way of thinking that it does not come naturally to me, and that I'm not exposed to as often with folks that are not on the spectrum. So that to me

is usually, when I just listen and folks on the spectrum talk about how they experienced social relationships, how they experience it at work, how they experience it or what they want to do especially within romantic relationships, that to me is a just fascinating and really stimulating.”

Another participant talked more specifically about strong client interests,

“And with ASD of course, one of the really cool parts in that, for most folks is some strong passionate interest that is really motivating and kind of bringing them alive and have found that conversations can be really useful in session for connecting and helping me understand someone better. But also looking at how do they use that passion to build whether it’s a career future or to build connections interpersonally.”

Theme 4.2: Celebrating successes. Many participants discussed the rewards of being able to celebrate client successes as a result of therapy. In particular, they reported on clients’ development of skills and increased self-confidence. One participant shared,

“I love it when students who come in without much belief in themselves, which I think is a lot of students with ASD in college. Because a lot of them get here and are like holy smokes this is overwhelming, I’ve got to manage my own social life, manage my academic life, manage laundry, eating. I’ve got to manage something in a way that I’ve never done it before. There’s no way I can possibly do this. When they start to at least at first surprise themselves, and then slowly it becomes not surprising, but it becomes more of a solid belief in themselves. And a lot of that happens when they start to find their niche whether it’s socially, academically and occupationally.”

Similarly, another participant offered,

“I would say that one of the things that’s been really satisfying is that I feel like there have been some opportunities to celebrate small victories, and when I say small that’s sort of kind of a relative term. But I guess I would say that for some of these students who have dealt with a lot of social isolation, ostracism, and really I think sometimes very painful experiences not necessarily knowing always why things were happening but still very acutely feeling the effect, to see students have some successes even if they might have been relatively modest ones. I think sometimes create a bit of a social niche for themselves here. I feel like it’s been really rewarding to celebrate those accomplishments with students.”

Yet another participant echoed,

“I think we’re able to make some improvements for that person in terms of his adjustments in college and what’s appropriate within college classroom settings. And I don’t know that big things change but I think the small things changing add up to an overall sense of being okay with one’s self. So I think I was maybe able to have one small piece of what the larger journey was but being able to see that and recognize that.”

Theme 4.3: Appreciation of the challenge. Half of the participants also reported that it was rewarding to be challenged in new ways by their work with students with ASD. More specifically they addressed being challenged to learn new skills and to practice in a different way that they do with other clients. One participant shared,

“Well I think it’s definitely helped me keep it fresh. It’s easy when you’re overloaded to kind of have your go to mode that you use with clients. I talked earlier about how it’s an energetic shift for me. But that’s good too because that keeps me creative, it keeps me learning new methods, it keeps me on my toes a little bit. So, I think that’s part of that, I forgot the phrase for it but that continuous professional reflection and growth part. I definitely feel that with my ASD clients.”

A second participant stated,

“...it’s great and rewarding and that it challenges me to do things differently and not just think inside the box, so to speak, but to be able to challenge myself.”

A third participant shared that it was rewarding to have assumptions challenged,

“I think anytime you can have your assumptions brought to light, these things that happen without our awareness, and challenge is—anytime they can be brought to light and challenged, I think it’s really refreshing. That’s something that I really value.”

Domain 5: Challenges of work

The fifth domain encompasses the challenges participants identified in their work with students with ASD. Generally, they spoke to difficulties they encountered as a result

of some core features of ASD such as rigid thinking and persistent interpersonal struggles as well as challenges they experienced in needing to adapt and modify their approach to therapy.

Theme 5.1: Navigating components of ASD in therapy. Many participants shared that they struggled to navigate some of the deficits characteristic of ASD within the context of individual therapy. Several participants shared that some of their clients with ASD had rigid ways of thinking and understanding social situations. One participant offered,

“I’ve had a few students where there’s quite a bit of rigidity which is just part of the definition of it. But I think that that can manifest itself in a number of different ways interpersonally in how that feels. I had a student once, I was working on making a referral for him to more open-ended care and he was really not happy about the fact that he was getting a referral and he would have preferred to stay on campus. He took a piece of paper that I had given him with some names of folks on it and he wadded it up in a ball, threw it across the room.”

Another participant expressed similar difficulty,

“I certainly have worked with clients at times where I felt like there may be kind of lack of understanding of some of the social dynamics that were occurring led to them feeling frustrated, or feeling like other people should be changing their behavior rather than them. I think that there have been places where I have had to work with clients who were frustrated that they weren’t kind of getting the outcome that they were hoping for. I feel like that’s happened probably most with some of the young men on the spectrum that I’ve worked with who are trying to make their kind of initial forays into the realm of dating, and not necessarily kind of understanding some of the nuances of that.”

A third participant shared,

“I think also just the rigidity aspect of it. And so them tending to be set in one way and one of thinking and perseverating, that was one of the issues with the student I was talking about earlier, there was a religious component and a sexual orientation component that had become pretty rigid.”

In regard to different communication styles another participant noted,

“And just some kind of communication difficulties. You know, it takes more time to sort of learn what their language is, and how they talk about things and what they avoid.”

Theme 5.2: Need to scale goals appropriately. Half of the participants expressed feeling challenged by the need to reconsider goals and progress in their therapeutic work with students with ASD. One psychologist stated,

“But I will say you know, when I work with my experience with the couple of these clients, is really the rate of progress feels much slower than someone without one of these disorders. And so, I really have to sort of check myself because it’s not about my definition of progress. It’s their definition of progress. So, I can find a little bit occasionally, you know. I can be a little bit frustrated with that. Like, oh gosh, I really want them to be here, and they’re just not there. They’re back over here, but I have to just sort of be like, it’s okay. You know, sort of coaching myself through and having empathy for myself, but also them. You know, and their rate of recovery, and their rate of processing and improvement, and progress that kind of thing.”

Another participant stressed the need for patience,

“I think the first thing that I go back to is that part about patience that I mentioned earlier, when I get stuck in my own timeline and want to see change faster and I’m not slowing it down and not really being my best though both personally and professionally and meeting them where they’re at. Yeah, I would say that’s probably the most challenging thing. It mainly comes from my own sort of personal limitations or feelings if you will. Almost unconsciously forcing them into sort of a more neuro-typical timeline, and not just hanging in there with them and not realizing that trying to make a social connection is not the same thing for them as it is for me. It’s sure to encourage that, and not take into account that that could be one of the hardest things that they’ve ever done to this point in their life. It can be a challenge to keep myself attuned to that, and then as a result just be patient and kind and just be there with them while they sort out the best way to do that, and sort of wade through.”

In discussing a specific issue with a client, a third participant shared,

“It felt like when the severity of...[the behavioral issue] was beyond what I was able to deal with within the short-term model, I felt frustrated. Also for him, knowing that he needs something that I can’t give him right now as effectively as it would be with someone he trusts in a more ongoing relationship. Again, I don’t

know that that's totally unique, but I think some of the behavior that's one example. But I've had several situations like that over the years."

Theme 5.3: Difficulty of incorporating a different skill set. Half of the participants also talked about feeling challenged by the ways in which they need to adapt or modify their approach to therapy to meet the needs of their clients with ASD. Some discussed struggling to find balance between being empathetic and being direct. One participant claimed,

"So I think in that way I've just tried to navigate that as best I can within the context of the relationship trying to be as direct but also as kind as possible. I mean, I guess that's what I would try to say. That's not always easy. I feel like I tend to be an empathic person and warm and lean into the compassionate stuff. But I feel like doing more of the limit setting is something that I've obviously learned how to do and I think it's an important part of what we do. Again, I think I said this earlier, but it goes back to needing to challenge myself a little bit and to make sure that it's not just by providing empathy and compassion that can condone certain things. So I think just trying to be as direct and provide feedback as I can within the content of the caring relationship is what I try to do."

In addressing the need to modify one's approach to therapy, another participant offered,

"I have to be very active, very intentional, very... but it's high energy I think in terms of having to be playful about the session and really, so there's that piece. And then there's a piece of...we always try to, you try to shift to whatever the client needs and flexibility as a therapist is very important. And we all have our modalities that are our natural ease. And when it comes to, I don't know how familiar you are with the Myers-Briggs, but I am NF, I don't have one sensing or thinking point...So, for a woman who's incredibly intuitive to have to move to the sensing mode. It's got to be very intentional and I have to work very hard at it."

A third participant discussed feeling as though his "toolkit" was reduced,

"I think I tend to be the way that—I like language, and I like using metaphors and analogies, and I use storytelling to make a point, and sometimes it feels like my toolkit is whittled down a bit when I work with folks on the spectrum because I do a lot of accelerated, emotion focused, like psychodynamic therapy, and when I try to key in on affect, sometimes it's not as readily available, or language, using words to describe an abstract thing. It's difficult sometimes for folks on the

spectrum or for me to try to relay an idea and offer an interpretation. It doesn't come as easily and I find myself really having to adjust the way that I work."

Domain 6: Ways of finding support

The sixth domain covers the various ways in which psychologists identified finding support in their work with students with ASD. Participants identified a number of informal ways of accessing support through colleagues and others within the counseling center as well as resources within the broader community.

Theme 6.1: Use of consultation. Most participants identified their colleagues and supervisors as an important source of support. Several participants described the atmosphere within the counseling center as highly collaborative and supportive. One participant offered,

"Well, I have a really wonderful team here. We have a very strong team that's highly supportive of each other and very accepting of we're all eternally learning and processing and we all deeply care about our students, and are pretty creative here. So, I can always consult with one of my staff here."

Another shared a similar sentiment,

"So, I think that first off I think I work in a super supportive environment here at this counseling center. Even if folks don't necessarily understand ASD, they understand the tough work of college counseling center. I think it's easy to pop out the door and get support that feels good from my colleagues."

A third participant discussed finding support after shifting from a trainee to a licensed psychologist,

"I love talking to my colleagues. It's so interesting not being an intern or practicum student anymore because I realized that I'm—once you get licensed you're the end all be all, and so it can be a little bit scary, but I definitely consult with people...yeah, I think that probably the primary source of support and the primary place that I go to when I'm having frustrations is to other people and to my colleagues. They're the people who I know have been doing this a lot longer."

Theme 6.2: Utilizing resources within the broader community. Half of the

participants identified finding support through other offices and departments on campus as well as resources within the community. One participant described,

“Another thing that's helpful is I served on this committee that meets monthly during the school year called the...[name of committee]. That's got representatives obviously from the counseling center but also from the occupational therapy department, from housing, we have a separate case management department. We have a support and safety department we have conduct. Stakeholders all over campus that come together to talk about students that are on the autism spectrum and how best to support them. I'm kind of a fly on the wall mostly in that meeting because we're governed by HIPPA so I can't say much...Even just to sit there and see the commitment and hear the challenges that everybody else across campus faces, and trying to do their best to serve the students. It is extremely sort of validating and helpful. Also just to know that there is a lot of other good network of student affairs professionals about they're really trying to help, make sure these students are having success. So, that feels good, it feels very connecting and breaks down on any of those moments where I might feel isolated or helpless.”

In describing the need for collaboration another participant expressed,

“I think helping some of these students has made me more collaborative with colleagues in that sort of ‘it takes a village’ kind of mentality that I feel like whether with the director of our international student office or our dean of students office or disability resources. That there had been some individuals here who really relied upon a network of faculty and staff who are attuned to some of their challenges, who were willing to kind of do a little bit of extra coaching and encouragement. And so I've felt really honored to be part of a team that was able to kind of come together for the purpose of supporting particular students where we all I think felt a sense of accomplishment in their accomplishments...And so I think that in just that sense of being part of a collaborative team has been rewarding for me personally as a clinician. But also I think it's really helped the students feel they had people who are alike in their corner, and I think especially if they were running into difficulties...”

Another participant stressed the importance of accessing resources within the larger community,

“There's a host of clinicians in the community and one of the benefits of working in the...[area] here is that you could throw a stone in any direction and find a private practice psychologists office. And some of them specialize in working

with students on the spectrum. So, consulting with them as professionals or with a release of information like transitioning and helping a client move on. I learned a lot from the other professionals in the community.”

Table 1. Final domains and themes

<u>Domains</u>	<u>Themes</u>	<u>Number of Participants Endorsing Each Theme</u>
1. Experiences in Training	<i>1.1. Lack of experience</i>	7
	<i>1.2. Limited coursework</i>	6
	<i>1.3. Importance of cultural and diversity coursework</i>	4
2. The Context of College Counseling	<i>2.1. The Importance of collaboration</i>	8
	<i>2.2. Recognizing the social demands of college</i>	4
	<i>2.3. Need for more services on campus</i>	4
3. Approach to Therapy	<i>3.1. Remain client-centered</i>	7
	<i>3.2. Conceptualize disability as an aspect of diversity</i>	6
	<i>3.3. Adapt approach to better suit client needs</i>	7
	<i>3.4. Utilize a strengths based approach</i>	4

4. Rewards of Work	<i>4.1. Appreciation of uniqueness</i>	4
	<i>4.2. Celebrating successes</i>	6
	<i>4.3. Appreciation of the challenge</i>	4
5. Challenges of Work	<i>5.1. Navigating components of ASD in therapy</i>	6
	<i>5.2. Need to scale goals appropriately</i>	4
	<i>5.3. Difficulty of incorporating a different skill set</i>	4
6. Ways of Finding Support	<i>6.1. Use of consultation</i>	7
	<i>6.2. Utilizing resources within the broader community</i>	4

Note: Number of participants endorsing each theme: all (n=8), most (n=7), many (n=5 or n=6), and half (n=4).

Conclusion to Chapter 4

In this chapter, the domains and themes that emerged during the qualitative individual interviews with participants were identified. In total, 6 domains and 18 themes emerged representing the most salient factors in the experiences of psychologists working in university counseling centers who have counseled with students with Autism Spectrum Disorder. The domains and themes were summarized in Table 1 (p. 58). In the next chapter, conclusions, based upon the results of the present study, will be drawn, as well as placing these results within the extant literature base. In addition, the strengths and limitations of this study, implications for training and practice and directions for future research will be discussed.

Chapter 5

Discussion

This qualitative study utilized an Interpretive Phenomenological Analysis approach (Smith, 2015) to examine the experiences of psychologists in university counseling centers who provide psychological services to students with Autism Spectrum Disorder. Eight doctoral-level licensed psychologists participated in individual interviews that explored five main research questions: (1) How do psychologists learn about ASD over the course of their education and professional training? (2) How do psychologists approach their therapeutic work with students with ASD? (3) What has been satisfying about working with college students with ASD? (4) What has been frustrating about working with college students with ASD? and (5) How do psychologists get support and stay energized to work with college students with ASD?

In summary, data analysis revealed six domains and 18 themes that represent the most salient factors in the experiences of these psychologists in their college counseling work with students with ASD. Two additional techniques for interpreting qualitative data that goes beyond description, but does not exceed the meaning of small-sample qualitative data analysis, are to extend the analysis by raising questions, and to contextualize current findings by comparing those findings with extant literature (Wolcott, 1994). In this section, both methods will be used to interpret this current data. The questions being raised are: (1) What promotes better integration of disability into counseling psychology?; (2) How can opportunities be identified that would promote

students' with ASDs success in college?; (3) How can the profession of counseling psychology honor the joys and challenges of providing professional services to college students with ASD?; and, (4) How can supportive systems for practitioners be created? The current findings will be compared to the results of prior studies, even though the number of studies available in this research domain is very limited. Additionally, the study's strengths and limitations, implications for training and practice and research recommendations will be included in this chapter.

First, however, it is critical to acknowledge a basic yet incredibly important finding of the present study: some students with ASD are being seen by psychologists within university counseling centers. Furthermore, their ASD diagnosis affects the type and quality of the care they receive, as well as places additional demands for education, training, and ways to provide specialized counseling services on counseling psychology providers. There has been very little research that addresses how to provide counseling psychology services to college students with ASD, and thus the experiences of the participants in the present study provide limited but important data about the ways in which some individuals with ASD are choosing to seek out social and emotional support on college campuses. This finding reinforces the need to better understand the experiences of these psychologists. This is especially true as practitioners, faculty and academic administrators and student affairs staff seek to develop services to better address the needs of a growing number of students with ASD on college campuses. As one participant shared anecdotally,

“I think that this is probably happening in a lot of universities I suspect. But we...sort of see on the horizon, maybe it's not even on the horizon it's already

here. But the number of people that identify on the autism spectrum that are coming to college...is rising significantly. We have really good intentions but we don't have a lot of structured support in place.”

Analysis and Interpretation of the Qualitative Data: Extending the Analysis and Contextualizing Current Findings

What promotes better integration of disability into counseling psychology?

In the first domain, *Experiences in Training*, participants discussed their own experiences in training and education that informed their work with college students with ASD. Most participants reported a lack of direct training and many reported limited coursework in regard to ASD. As a result, they reported feeling ill-equipped to provide therapy to students with ASD. A small number of participants discussed continuing education in-service training through the university counseling centers where they worked, although these experiences were not typical. As one participant shared, “a lot of college counseling centers don’t have enough resources or enough education and training and we have to be generalists.”

With regard to coursework, many participants reported that they had little to no exposure to ASD in the courses they took as part of their graduate programs. At most, some discussed learning about ASD briefly as part of a psychopathology or assessment course, most typically during a short lecture. Half of the participants identified courses that they had taken in culture and diversity as being helpful to their current work with students with ASD as they tended to understand disability as an aspect of identity rather than utilizing a deficit-based model. Nonetheless, many participants described feeling

uncertain about their work with students with ASD because of their limited education and training.

Unfortunately, the lack of formal education and training related to ASD seems to be representative of a larger gap in training between that which is needed and that which is available related to developmental disabilities within psychology training programs. In a study of students in counseling and clinical psychology programs in Canada, Weiss, Lunskey, & Morin (2010) found that while a majority of students felt as though it was important to learn about developmental disabilities, few felt as though they had received adequate didactic and experiential opportunities. While those students in programs that focused on counseling with adults reported the least adequate training, those in programs that focused on counseling with children also reported a lack of formal opportunities. The authors also highlighted the fact that to date, little to no research had been done to examine the perceptions of students in programs in the United States. Consequently, it seems that many psychologists enter the workforce with almost no formal training on the provision of services to individuals with a range of developmental disabilities, including ASD. Although the results of the present study are not inferential, participants did report similar experiences in training. Namely, that they had minimal opportunities to learn about providing counseling to individuals with ASD as part of their training.

Aside from formal education and training related specifically to ASD and other developmental disabilities, participants in the present study highlighted their coursework in culture and diversity as being helpful in their work with students with ASD. In examining broader trends within the field, however, Pieterse, Evans, Risner-Butner,

Collins, & Mason (2008) found, in reviewing multicultural course syllabi from 54 APA and CACREP accredited counseling and counselor education programs, that only 12 course syllabi contained content related to disability and 4 contained content related to clinical psychiatric diagnosis. Even within courses focused on training counselors to work with facets of culture and diversity, disability and, more specifically, mental health conditions are not being universally addressed.

The lack of education and training related to ASD seems to parallel a lack of published research within counseling psychology addressing disabilities and, more specifically, ASD. In their review of content in five major journals in counseling psychology between 1990 and 2010, Foley-Nicpon & Lee (2012) found only 55 articles related to disability and, of those, only two related to ASD. Moreover, it should be noted that both of these articles related to providing counseling services to children with ASD and their families. Thus, despite general increases in research related to ASD (Dawson, 2013), similar increases within the counseling psychology literature do not seem evident at this time.

In considering ASD, and disability more broadly, as an aspect of identity through a cultural lens, a similar study examined multicultural content from the *Journal of Counseling Psychology* from 1955-2009 (Lee, Rosen, & Burns, 2013). This analysis yielded just 30 articles on disability compared to 227 related to race/ethnicity and 133 related to age. In looking more specifically at recent trends, only four articles relating to disability have been published in the *Journal of Counseling Psychology* since 1990. As this article highlights, it seems other aspects of diversity and multiculturalism may

receive far more attention and focus in counseling psychology research than do issues related to disability. Consequently, it seems that by increasing disability related coursework in counseling psychology programs, providing additional opportunities to trainees to provide therapy to individuals with disabilities and engaging in more disability focused research, counseling psychology can promote better integration of disability into the field.

How can opportunities be identified that would promote students' with ASDs success in college?

In the second domain, *The Context of College Counseling*, participants addressed the unique context of the college counseling center, compared to other settings where counseling is provided (e.g., primary care, independent practice, community mental health). They also discussed the related benefits and challenges as these impacted counseling college students with ASD given the integrated student services systems on many campuses as well as the highly social nature of residential college campuses. Most participants stressed the importance of working collaboratively with other departments and offices on campus, such as disability services, as many students receive academic accommodations in addition to counseling services. They also focused on their recognition of the social demands that college students experience, such as navigating interactions with roommates, classmates and professors, and the difficulties that trying to meet these demands caused students with ASD, such as misunderstandings and conflicts. Half of the participants expressed a desire to be able to provide more services to students

with ASD, such as social skills groups, to help students gain skills to better navigate these social situations and to receive support around the challenges they experienced.

In the third domain, *Approach to Therapy*, participants discussed the ways in which they approach their therapeutic work with students with ASD. Participants discussed striving to keep their work focused on the perspectives of the client, meaning that they followed a client's lead in terms of how ASD was addressed within the context of therapy. They also expressed their conceptualizations of ASD as an aspect of diversity. In other words, they recognize that disability can be understood from the perspective of variety and difference rather than as a deficit. Participants described the ways in which they have adapted their style of counseling to fit the needs of individuals with ASD better, such as using more concrete language and a more structured approach to therapy. Half of the participants expressed a preference for a strengths-based approach. For example, helping students to understand how to better understand and appreciate their strengths and identifying ways to utilize these strengths to support aspects of their functioning areas that may be more challenging.

As prior research has highlighted, many college students with ASD report feeling as though their academic needs are being met (Cai & Richdale, 2015), while at the same time experiencing difficulty successfully navigating aspects of on-campus social life such as interactions with roommates and professors (Gelbar et al., 2015). Moreover, many students with ASD report struggling with symptoms of depression and anxiety in addition to the loneliness they describe as a result of their social challenges (Van Hees et al., 2014). Thus, in many ways it seems the concerns students with ASD reported in other

research (Cai & Richdale, 2015; Gelbar et al., 2015; Van Hees et al., 2014) are reflected in the experiences of the psychologists interviewed in the present study.

Several of the key themes identified in the present study illuminate the ways in which college counseling psychologists are working to put supports in place to address the social and emotional needs of students with ASD. By understanding ASD as a facet of an individual's identity and utilizing a strengths based approach, psychologists seem to be drawing upon the inner resources of clients to resolve presenting issues. Moreover, by recognizing the social demands of the college setting and identifying the need for additional services, college counselors are seeking to better match the services they provide with the needs of students. Thus, the psychologists in this study identified both internal and external supports to help promote college success in their clients with ASD.

How can the profession of counseling psychology honor the joys and challenges of providing professional services to college students with ASD?

In the fourth domain, *Rewards of Work*, participants identified aspects of their work with students with ASD that have been rewarding. For example, many participants stressed an appreciation for the unique perspectives of these individuals, meaning that they approached situations with a different way of thinking and understanding. They also found the opportunity to celebrate successes, such as clients developing friendships. Participants also reported being energized by some of the challenges of working with this specialized population. For example, participants noted that they enjoyed the challenge of needing to learn about ASD and develop new and different skills to work with these students.

In the fifth domain, *Challenges of Work*, participants discussed aspects of their work that they found to be difficult. They reported struggling with clients' rigid patterns of thinking and difficulties understanding social rules and norms. They also addressed needing to redefine their definitions of success for some of their clients. Meaning that, especially within a small number of sessions, clients with longstanding social and behavioral differences may not make significant changes in response to individual therapy. Participants also noted that needing to change or modify their approach to therapy could be exhausting and frustrating at times. For example, they reported a need to use more concrete language or do more direct teaching of social skills with these clients.

Many of these themes echo other studies of therapists work with populations with special needs. For example, as Jones (2014) reported, therapists often have to modify or adapt their approaches to therapy when working with individuals with learning disabilities which can be complicated and time consuming. Moreover, many of the participants in Jones' study, also reported that they found their work difficult due to the slower rate of progress they perceived. Like many of the participants in the present study, however, those interviewed in Jones' (2014) study reported finding their work highly satisfying and meaningful given the positive changes they saw in clients through individual psychotherapy. Thus, by celebrating the unique gifts and perspectives that individuals with ASD bring into counseling, as well as recognizing the challenges that counselors encounter in providing therapy to individuals with ASD, counseling

psychology can honor the joys and challenges of providing professional services to college students with ASD.

How can supportive systems for practitioners be created?

In the sixth domain, *Ways of Finding Support*, participants shared how they found support in their work with students with ASD. Most participants stressed the importance of collaborating with colleagues as a means of finding encouragement. This included both formal support through staff meetings and consultation as well as informal support that they sought following difficult or challenging sessions. Half of the participants also discussed utilizing additional resources on campus, such as specific programs for students with ASD, as well as those within the larger community, such as trainings and referrals to outside providers, as providing needed support.

These means of accessing support identified in the present study support themes identified in previous, corollary studies. For example, Jones (2014) identified the importance of therapists use of consultation and supervision in serving clients with disabilities. In particular, she highlights the importance of consultation when working with complex clients. In addition, Barnhill (2014) highlighted the benefits of providing services to students with ASD that are well integrated and draw upon resources across departments and programs. Though not generalizable to other university counseling center psychologists, participants in the present study identified consultation and collaboration as important ways in which they access support to work with students with ASD in line with previous research within this domain. As a result, practitioners may wish to focus on their use of consultation and supervision as well as developing a

network of on- and off-campus connections to support them in their counseling work with students with ASD.

Strengths and Limitations

A strength of the present study is its use of qualitative methodology to gain insight into the experiences of psychologists who see students with autism spectrum disorder in college and university counseling centers. To date, no research has examined the role that college counseling psychologists play in supporting students with ASD and thus this study provides some important initial information in this domain. Moreover, as a qualitative inquiry, this study places an emphasis on gaining a more in depth understanding of the experiences of a small number of participants which may provide important insight to guide future research within this area.

A primary limitation of the present study is that given its qualitative design, results cannot be generalized to the population of interest. Additional quantitative research will be needed to determine how frequently the experiences identified by the participants in this study are found in the broader population of psychologists in university counseling centers. A second limitation is that the use of phone interviews may have prevented some participants from being more forthcoming in their interviews. For some individuals, talking over the phone can be perceived as a barrier to conversation and some participants may have shared more during in-person interviews. Moreover, the present study addressed limited aspects of the participants experiences providing counseling services to students with ASD. A longer interview protocol would have

allowed these psychologists to discuss other aspects of their experiences providing more data for analysis.

Practice and Training Recommendations

Based on the results of this study, several recommendations for training and practice are being offered. With regard to training, counseling psychology training programs should provide increased coursework and clinical experiences related to ASD. While participants reported learning about disabilities as a component of their training in cultural identity, few received training related to the provision of counseling services to individuals with ASD. Once in their roles in university counseling centers, participants reported receiving limited additional training either before or after licensure. Despite the lack of training, participants reported needing to adapt their approach to therapy to better suit the needs of clients with ASD. Brief, online trainings targeted at college counseling psychologists could be beneficial, as well as more traditional programs and classes.

Regarding practice, counseling center staff should have opportunities to engage in more outreach to individuals with ASD. All participants in the present study had worked with a small number of students with ASD. However, as prior research has highlighted, many students choose not to access services in counseling centers despite reporting a desire for more social and emotional support services (Gelbar et al., 2014). This additional targeted outreach, could encourage students to seek out services in counseling centers and help to provide clarification about the services that are available to increase usage.

The findings of present study were extended to draw connections to the related literature base outside of counseling psychology and to pose questions for counseling psychologists to consider looking ahead to the future. By continuing to address the following questions: (1) What promotes better integration of disability into counseling psychology?; (2) How can opportunities be identified that would promote students' with ASDs success in college?; (3) How can the profession of counseling psychology honor the joys and challenges of providing professional services to college students with ASD?; and, (4) How can supportive systems for practitioners be created?, counseling psychologists could identify additional means by which to better support college students with ASD and the practitioners providing these services.

Research Recommendations

Given the lack of extant literature regarding the role of college counseling psychologists in supporting students with ASD, further research is warranted. Researchers should continue to study counseling utilization among college students with ASD to better understand if and how these students are accessing individual counseling as well as other services that are available through university counseling centers. By examining usage data, center directors and university administrators could identify the need for more training and more targeted services to address the needs of students with ASD. It would also be helpful to directly survey students with ASD to find out about their experiences with the services they have accessed to better understand which services have been the most and least helpful to them and to garner data regarding additional services they find helpful.

In addition, the present study identified a number of potential areas of weakness in psychologist training related to ASD. Future research should examine if and how counseling psychology programs are providing trainees with didactic and practical training experiences to prepare them to work with individuals with ASD. Moreover, future investigation is warranted to study the ways in which ASD-specific information is incorporated into coursework, including both psychopathology/assessment courses and multicultural counseling courses.

Summary

This study made unique contributions to the counseling psychology literature, and moved the field of counseling psychology forward by qualitatively examining counseling psychologists' perspectives on treating college student clients with ASD. An Interpretive Phenomenological Analysis approach was used to gain insight into participants' experiences. No prior research had examined the role that college counseling psychologists play in supporting students with ASD and thus this study provides a foundation for future investigations into this important area of study.

By focusing on the experiences of psychologists who provide counseling services to college students with ASD, important information was gathered regarding aspects of counseling psychology training and practice within university counseling centers related to this population. This research illuminates a few areas, which may warrant additional focus in training such as ASD related course work and clinical experiences. Moreover, practitioners currently working in university counseling centers and providing counseling

services to students with ASD could gain helpful information to support the professional work in which they are engaged.

Given the increasing numbers of college students with ASD present on college campuses and the social and emotional challenges they often experience during college, it is critical to understand how to best meet the needs of these students. Moreover, given the integral role that counseling psychologists have traditionally played in providing much needed counseling services to college students, it is critical to understand how providers in university counseling centers are providing support to college students with ASD. Utilizing the information gathered as part of the present study, it is hoped that the field of counseling psychology can place a greater emphasis on meeting the mental health needs of college students with ASD.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
doi:<https://doi.org/10.1176/appi.books.9780890425596>
- Asperger, H. (1944). Die 'autistische psychopathen' im kindesalter. *Archiv Fur Psychiatrie Und Nervenkrankheiten*, *117*, 76–136.
doi:<https://doi.org/10.1007/BF01837709>
- Barnhill, G. P. (2014). Supporting students with Asperger Syndrome on college campuses: Current practices. *Focus on Autism and Other Developmental Disabilities*, *31*, 3–15. doi:<http://doi.org/10.1177/1088357614523121>
- Bishop, J. B. (1990). The university counseling center- An agenda for 1990s. *Journal of Counseling & Development*, *68*, 408–413. doi:<https://doi.org/10.1002/j.1556-6676.1990.tb02519.x>
- Blumberg, S. J., Bramlett, M. D., Kogan, M. D., Schieve, L. A., Jones, J. R., & Lu, M. C. (2013). Changes in prevalence of parent-reported autism spectrum disorder in school-aged U. S. children: 2007 to 2011 – 2012. *National Health Statistics Reports*, *65*, 1–11.
- Briel, L. W., & Getzel, E. E. (2014). In their own words: The career planning experiences of college students with ASD. *Journal of Vocational Rehabilitation*, *40*, 195–202.
doi:<http://doi.org/10.3233/JVR-140684>
- Cai, R. Y., & Richdale, A. L. (2015). Educational experiences and needs of higher education students with Autism Spectrum Disorder. *Journal of Autism and*

- Developmental Disorders*, 46, 31–41. doi:<http://doi.org/10.1007/s10803-015-2535-1>
- Cederlund, M., Hagberg, B., Billstedt, E., Gillberg, I.C. & Gillberg, C. (2008). Asperger Syndrome and Autism: A comparative longitudinal follow-up study more than 5 years after original diagnosis. *Journal of Autism and Developmental Disorders*, 38, 72–85. doi:<https://doi.org/10.1007/s10803-007-0364-6>
- Daniels, A. M., Rosenberg, R. E., Law, J. K., Lord, C., Kaufmann, W. E., & Law, P. A. (2011). Stability of initial autism spectrum disorder diagnoses in community settings. *Journal of Autism and Developmental Disorders*, 41, 110–121. doi:<http://doi.org/10.1007/s10803-010-1031-x>
- Dawson, G. (2013). Dramatic increase in autism prevalence parallels explosion of research into its biology and causes. *JAMA Psychiatry*, 70, 9–10. doi:<http://doi.org/10.1001/jamapsychiatry.2013.488>
- Dillon, M. R. (2007). Creating supports for college students with Asperger Syndrome through collaboration. *College Student Journal*, 41, 499-504.
- Farrell, E. F. (2004). Asperger's confounds colleges. *Chronicle of Higher Education*, 51, 1–5.
- First, J., Cheak-Zamora, N. C., & Teti, M. (2016). A qualitative study of stress and coping when transitioning to adulthood with autism spectrum disorder. *Journal of Family Social Work*, 19, 220–236. doi:<http://doi.org/10.1080/10522158.2016.1185074>
- Foley-Nicpon, M., & Lee, S. (2012). Disability research in counseling psychology journals: A 20-year content analysis. *Journal of Counseling Psychology*, 59, 392–

398. doi:<http://doi.org/10.1037/a0028743>

Folstein, S., & Rutter, M. (1977). Genetic influences and infantile autism. *Nature*, 265, 726–728. doi:<https://doi.org/10.1038/265726a0>

Frieden, T. R., Jaffe, H. W., Cono, J., Richards, C. L., & Iademarco, M. F. (2014).

Prevalence of autism spectrum disorder among children aged 8 years - autism and developmental disabilities monitoring network, 11 sites, United States, 2010.

Morbidity and Mortality Weekly Report: Surveillance Summaries, 63, 1–21.

Frith, U. (2004). Emanuel Miller lecture: Confusions and controversies about Asperger syndrome. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 45, 672–686. doi:<http://doi.org/10.1111/j.1469-7610.2004.00262.x>

Galligan, M. G., Feinstein, C., Sulkes, S. S., Bisagno, J. M., & Stein, M. T. (2013).

Asperger Syndrome and DSM-5. *Journal of Developmental & Behavioral Pediatrics*, 34, 529–532. doi:<http://doi.org/10.1097/DBP.0b013e3182a399a6>

Gardiner, E., & Iarocci, G. (2014). Students with Autism Spectrum Disorder in the university context: Peer acceptance predicts intention to volunteer. *Journal of Autism and Developmental Disorders*, 44, 1008–1017.

doi:<http://doi.org/10.1007/s10803-013-1950-4>

Gelbar, N. W., Shefycyk, A., & Reichow, B. (2015). A comprehensive survey of current and former college students with autism spectrum disorders. *Yale Journal of Biology and Medicine*, 88, 45–68. Retrieved from

<http://www.ncbi.nlm.nih.gov/pubmed/25745374>

Gelbar, N. W., Smith, I., & Reichow, B. (2014). Systematic review of articles Describing

- experience and supports of individuals with Autism enrolled in college and university programs. *Journal of Autism and Developmental Disorders*, 44, 2593–2601. doi:<http://doi.org/10.1007/s10803-014-2135-5>
- Gerhardt, P. F., & Lainer, I. (2011). Addressing the needs of adolescents and adults with Autism: A crisis on the horizon. *Journal of Contemporary Psychotherapy*, 41, 37–45. doi:<http://doi.org/10.1007/s10879-010-9160-2>
- Gernsbacher, M. A., Dawson, M., & Goldsmith, H. H. (2005). Three reasons not to believe in an autism epidemic. *Current Directions in Psychological Science*, 14, 55–58. doi:<http://doi.org/10.1111/j.0963-7214.2005.00334.x>
- Gillespie-Lynch, K., Brooks, P. J., Someki, F., Obeid, R., Shane-Simpson, C., Kapp, S. K., ... & Smith, D. S. (2015). Changing college students' conceptions of Autism: An online training to increase knowledge and decrease stigma. *Journal of Autism and Developmental Disorders*, 45, 2553–2566. doi:<http://doi.org/10.1007/s10803-015-2422-9>
- Gobbo, K., & Shmulsky, S. (2014). Faculty experience with college students with Autism Spectrum disorders: A qualitative study of challenges and solutions. *Focus on Autism and Other Developmental Disabilities*, 29, 13–22. doi:<http://doi.org/10.1177/1088357613504989>
- Graetz, J. E., & Spampinato, K. (2008). Asperger's syndrome and the voyage through high school: Not the final frontier. *Journal of College Admission*, 198, 19-24.
- Jobe, L. E., & Williams White, S. (2007). Loneliness, social relationships, and a broader autism phenotype in college students. *Personality and Individual Differences*, 42,

1479–1489. doi:<https://doi.org/10.1016/j.paid.2006.10.021>

- Jones, R. A. (2014). Therapeutic relationships with individuals with learning disabilities: A qualitative study of the counselling psychologists' experience. *British Journal of Learning Disabilities, 42*, 193–203. doi:<http://doi.org/10.1111/bld.12028>
- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child, 2*, 217–250. doi:<http://doi.org/10.1105/tpc.11.5.949>
- Kitzrow, M. a. (2003). The mental health needs of today's college students: Challenges and recommendations. *NASPA Journal, 41*, 167–181. doi:<http://doi.org/10.2202/1949-6605.5037>
- Kolvin I. (1972). Infantile Autism or Infantile Psychoses. *British Medical Journal, 3*, 753–55. doi:<https://doi.org/10.1136/bmj.3.5829.753>
- Kothari, G., Hardy, G., & Rowse, G. (2010). The therapeutic relationship between therapists and substance-using clients: A qualitative exploration. *Journal of Substance Use, 15*, 257–271. doi:<http://doi.org/10.3109/14659890903040060>
- Lee, D. L., Rosen, A. D., & Burns, V. (2013). Over a half-century encapsulated: a multicultural content analysis of the Journal of Counseling Psychology, 1954-2009. *Journal of Counseling Psychology, 60*, 154–61. doi:<http://doi.org/10.1037/a0031002>
- Lee, D., Olson, E. a., Locke, B., Michelson, S. T., & Odes, E. (2009). The effects of college counseling services on academic performance and retention. *Journal of College Student Development, 50*, 305–319. doi:<http://doi.org/10.1353/csd.0.0071>
- Leppel, K. (2001). The impact of major on college persistence among freshmen. *Higher Education, 41*, 327–342. doi:<http://doi.org/10.1007/s11162-009-9127-x>

- Liu, K., & Bearman, P. S. (2015). Focal points, endogenous processes, and exogenous shocks in the Autism epidemic. *Sociological Methods & Research, 44*, 272–305.
doi:<http://doi.org/10.1177/0049124112460369>
- Lord, C., & Bishop, S. L. (2015). Recent advances in Autism research as reflected in DSM-5 criteria for Autism Spectrum Disorder. *Annual Review of Clinical Psychology, 11*, 53–70. doi:<http://doi.org/10.1146/annurev-clinpsy-032814-112745>
- Mason, R. A., Rispoli, M., Ganz, J. B., Boles, M. B., & Orr, K. (2012). Effects of video modeling on communicative social skills of college students with Asperger syndrome. *Developmental Neurorehabilitation, 15*, 425–34.
doi:<http://doi.org/10.3109/17518423.2012.704530>
- Mazefsky, C. A., McPartland, J. C., Gastgeb, H. Z., & Minshew, N. J. (2013). Brief report: Comparability of DSM-IV and DSM-5 ASD research samples. *Journal of Autism and Developmental Disorders, 43*, 1236–1242.
doi:<http://doi.org/10.1007/s10803-012-1665-y>
- McKeon, B., Alpern, C. S., & Zager, D. (2013). Promoting academic engagement for college students with Autism Spectrum Disorder. *Journal of Postsecondary Education & Disability, 26*, 353–366. Retrieved from
http://ahead.org/publications/jped/vol_26
- McPartland, J. C., Reichow, B., & Volkmar, F. R. (2012). Sensitivity and specificity of Proposed DSM-5 diagnostic criteria for Autism Spectrum Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 51*, 368–383.
doi:<http://doi.org/10.1016/j.jaac.2012.01.007>

- Muller, E., Schuler, A., & Yates, G. B. (2008). Social challenges and supports from the perspective of individuals with Asperger syndrome and other autism spectrum disabilities. *Autism, 12*, 173–190. doi:<https://doi.org/10.1177/1362361307086664>:
- Nevill, R. E., & White, S. W. (2011). College students' openness toward Autism Spectrum Disorders: Improving peer acceptance. *Journal of Autism and Developmental Disorders, 41*, 1619–1628. doi:<http://doi.org/10.1007/s10803-011-1189-x>
- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2) (NCSE 2011-3005)*. Washington, DC: U.S. Department of Education: Institute for Education Sciences: National Center for Special Education Research. Retrieved from <https://ies.ed.gov/ncser/pubs/20113005/pdf/20113005.pdf>.
- Obeid, R., Daou, N., & Denigris, D. (2015). A cross-cultural comparison of knowledge and stigma associated with Autism Spectrum Disorder among college students in Lebanon and the United States. *Journal of Autism & Developmental Disorders, 45*, 3520–3536, doi:<http://doi.org/10.1007/s10803-015-2499-1>
- Philip, R. C., Dauvermann, M. R., Whalley, H. C., Baynham, K., Lawrie, S. M., & Stanfield, A. C. (2012). A systematic review and meta-analysis of the fMRI investigation of autism spectrum disorders. *Neuroscience & Biobehavioral Reviews, 36*, 901-942. doi:<https://doi.org/10.1016/j.neubiorev.2011.10.008>
- Pieterse, A. L., Evans, S. A., Risner-Butner, A., Collins, N. M., & Mason, L. B. (2008).

Multicultural competence and social justice training in counseling psychology and counselor education: A review and analysis of a sample of multicultural course syllabi. *Counseling Psychologist*, 37, 93–115.

doi:<http://doi.org/10.1177/0011000008319986>

Pietkiewicz, I., & Smith, J. A. (2012). A practical guide to using Interpretative Phenomenological Analysis in qualitative research psychology 1. *Czasopismo Psychologiczne*, 18, 361–369. doi:<http://doi.org/10.14691/CPJ.20.1.7>

Pillay, Y., & Bhat, C. S. (2012). Facilitating support for students with Asperger's Syndrome. *Journal of College Student Psychotherapy*, 26, 140–154.

Pinder-Amaker, S. (2014). Identifying the unmet needs of college students on the autism spectrum. *Harvard Review of Psychiatry*, 22, 125–37.

doi:<http://doi.org/10.1097/HRP.0000000000000032>

Pugliese, C. E., & White, S. W. (2014). Brief report: Problem solving therapy in college students with Autism Spectrum Disorders: Feasibility and preliminary efficacy. *Journal of Autism and Developmental Disorders*, 44, 719–729.

doi:<http://doi.org/10.1007/s10803-013-1914-8>

Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived experience: An introduction to interpretative phenomenological analysis. *The Psychologist*, 18, 20-23.

Rice, C. E., Rosanoff, M., Dawson, G., Durkin, M. S., Croen, L. A., Singer, A., & Yeargin-Allsopp, M. (2013). Evaluating changes in the prevalence of the Autism Spectrum Disorders (ASDs). *Public Health Reviews*, 34, 1–22.

doi:<http://doi.org/10.1002/jcp.24872>.The

- Rimland B. 1964. *Infantile Autism: The syndrome and its implications for a neural theory of behavior*. New York: Appleton-Century-Crofts.
- Russell, G. (2012). The rise and rise of the Autism Diagnosis. *Autism: Open Access*, 2, 7890. doi:<http://doi.org/10.4172/2165-7890.1000e104>
- Russell, G., Golding, J., Norwich, B., Emond, A., Ford, T., & Steer, C. (2012). Social and behavioural outcomes in children diagnosed with Autism Spectrum Disorders: A longitudinal cohort study. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 53, 735–744. doi:<http://doi.org/10.1111/j.1469-7610.2011.02490.x>
- Rutter, M. (1972). Childhood schizophrenia reconsidered. *Journal of Autism and Developmental Disorders*, 2, 315-337. doi:<https://doi.org/10.1007/BF01537622>
- Scahill L., Turin E., Evans A. (2014). The history of Autism: From pillar to post. In: Davis III T., White S., Ollendick T. (Eds.) *Handbook of Autism and Anxiety* (Autism and Child Psychopathology Series) (pp. 3–13). New York, NY: Springer, Cham . doi:http://doi.org/10.1007/978-3-319-06796-4_1
- Shapiro, D., Dundar, A., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2015, November). *Completing college: A national view of student attainment rates – Fall 2009 Cohort* (Signature Report No. 10). Herndon, VA: National Student Clearinghouse Research Center.
- Shattuck, P. T., Steinberg, J., Yu, J., Wei, X., Cooper, B. P., Newman, L., & Roux, A. M. (2014). Disability identification and self-efficacy among college students on the Autism Spectrum. *Autism Research and Treatment*, 2014. Retrieved from <https://www.hindawi.com/journals/aurt/2014/924182/>.

doi:<http://doi.org/10.1155/2014/924182>

Smith, J. A. (2007). Hermeneutics, human sciences and health: Linking theory and practice. International support services for students with Asperger's syndrome in higher education. *College Student Journal of Qualitative Studies on health and Well-being*, 2, 3-11, 41, 515.

Smith, J. A. (2015). Interpretative phenomenological analysis. *Qualitative Psychology: A Practical Guide to Research Methods*. Thousand Oaks, CA: Sage Publications.

Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&auth_type=crawler&jrnl=17525616&AN=53920709&h=R7OnANKucW65EOVyhhF1Zav4N0um3RkCeqOfCl6%2FUF633ChHXk5H4gOQ7FqCI9eSfrputN2DJE4I6llZksL7Rg%3D%3D&crl=c

Smith, J., Eatough, V., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. In M. Murray & K. [Chamberlain](#) (Eds.). *Qualitative health psychology: Theories and methods* (pp. 35–51). Thousand Oaks, CA: Sage Publications. doi:<http://doi.org/10.1002/9780470776278.ch10>

Taylor, M. J. (2005). Teaching students with autistic spectrum disorders in HE. *Education & Training*, 47, 484–495.

doi:<http://doi.org/10.1108/00400910510626330>

Tipton, L. A., & Blacher, J. (2014). Brief report: Autism awareness: Views from a

campus community. *Journal of Autism and Developmental Disorders*, 44, 477–483.

doi:<http://doi.org/10.1007/s10803-013-1893-9>

Van Hees, V., Moyson, T., & Roeyers, H. (2014). Higher education experiences of students with Autism Spectrum Disorder: Challenges, benefits and support needs.

Journal of Autism and Developmental Disorders, 45, 1673–1688.

doi:<http://doi.org/10.1007/s10803-014-2324-2>

VanBergeijk, E., Klin, A., & Volkmar, F. (2008). Supporting more able students on the Autism Spectrum: College and beyond. *Journal of Autism and Developmental Disorders*, 38, 1359–1370.

Disorders, 38, 1359–1370.

Volkmar, F. R., & McPartland, J. C. (2014). From Kanner to DSM-5: autism as an evolving diagnostic concept. *Annual Review of Clinical Psychology*, 10, 193–212.

doi:<http://doi.org/10.1146/annurev-clinpsy-032813-153710>

Wei, X., Christiano, E. R. A., Yu, J. W., Blackorby, J., Shattuck, P., & Newman, L. A. (2014). Postsecondary pathways and persistence for STEM versus non-STEM

majors: Among college students with an Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 44, 1159–1167.

doi:<http://doi.org/10.1007/s10803-013-1978-5>

Wei, X., Wagner, M., Hudson, L., Yu, J. W., & Javitz, H. (2016). The effect of transition planning participation and goal-setting on college enrollment among youth with

Autism Spectrum Disorders. *Remedial and Special Education*, 37, 3–14.

doi:<http://doi.org/10.1177/0741932515581495>

- Weiss, J. A., Lunskey, Y., & Morin, D. (2010). Psychology graduate student training in developmental disability: A Canadian survey. *Canadian Psychology/Psychologie Canadienne, 51*, 177–184. doi:<http://doi.org/10.1037/a0019733>
- White, S. W., Ollendick, T. H., & Bray, B. C. (2011). College students on the autism spectrum: Prevalence and associated problems. *Autism, 15*, 683–701. doi:<http://doi.org/10.1177/1362361310393363>
- Whitehouse, A. J. O., Durkin, K., Jaquet, E., & Ziatas, K. (2009). Friendship, loneliness and depression in adolescents with Asperger's Syndrome. *Journal of Adolescence, 32*, 309–322. doi:<http://doi.org/10.1016/j.adolescence.2008.03.004>
- Wilson, S. B., Mason, T. W., & Ewing, M. J. . (1997). Evaluating the impact of receiving university-based counseling services on student retention. *Journal of Counseling Psychology, 44*, 316–320. doi:<https://doi.org/10.1037/0022-0167.44.3.316>
- Wing, L. (1981). Asperger's syndrome: a clinical account. *Psychological Medicine, 11*, 115–129. doi:<http://doi.org/10.1017/S0033291700053332>
- Wing, L., & Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children: epidemiology and classification. *Journal of Autism and Developmental Disorders, 9*, 11–29. doi:<http://doi.org/10.1007/BF01531288>
- Wolcott, H. F. (1994). Transforming qualitative data: Description, analysis, and interpretation. Thousand Oaks, CA: Sage.

Appendix A: Recruitment E-mail to Prospective Participants

My name is Drew Benson, and I am a 5th year doctoral student in the Counseling and Student Personnel Psychology Program at the University of Minnesota. I'm conducting my dissertation research on the experiences of psychologists in college counseling centers who have worked with students with Autism Spectrum Disorder (ASD). This is not a study of experts, but rather, of the experiences of practitioners who have encountered students with ASD (either diagnosed or suspected) as part of their work in the college counseling setting.

I'm conducting phone interviews and they have typically taken 30-45 minutes. If you are willing and able to participate, let me know and I can provide further details.

Thank you in advance for your consideration!

Warm regards,

Drew Benson, MA
PhD Candidate
Counseling and Student Personnel Psychology
University of Minnesota - Twin Cities
bens0379@umn.edu

Appendix B: Information Sheet for Participants

INFORMED CONSENT FOR RESEARCH

Supporting Students with Autism Spectrum Disorder in College: Perspectives of College Counseling Professionals

You are invited to be in a research study of your experiences working with students with Autism Spectrum Disorder (ASD) as a college counseling professional. You were selected as a possible participant because you are the director or a counseling center staff member. I ask that you read this page carefully and ask any questions you may have before agreeing to be in the study.

This study is being conducted by: Drew Benson, MA, Department of Educational Psychology, University of Minnesota, Twin Cities

Procedures:

If you agree to be in this study, we would ask you to do the following things:

Complete a brief (60 minute) interview that will ask your perceptions of providing counseling services to students with Autism Spectrum Disorder.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is: Drew Benson. If you have questions about this study **you are encouraged** to contact him at: 250 Education Sciences, 56 East River Road, Minneapolis, MN 55455, (612) 624-6827, bens0379@umn.edu. The researcher's advisor is: Sherri Turner, PhD. She may be contacted at: (612) 624-1381, turne047@umn.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; (612) 625-1650.

You are encouraged to print a copy of this information to keep for your records.

Semi-structured Interview Protocol – Drew Benson 1/23/17

1. Over the course of your training, what has been your experience with individuals with Autism Spectrum Disorder?
2. How do you conceptualize disability as part of an individual's identity?
3. How does your conceptualization of disability affect your practice?
4. How has your training in disability translated into your work with students with ASD?
5. What's satisfying about working with students with ASD?
6. What's been frustrating about working with students with ASD?
7. How has your work with students with ASD affected you as a practitioner?
8. How do you find support to stay energized to work with students with ASD?