

PRACTICE BRIEF

Interdisciplinary Support Services for Students with Autism Spectrum Disorders

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Abstract

This Practice Brief describes a grant-funded pilot program at an urban four-year public college, developed to address the needs of students with Autism Spectrum Disorders (ASD). This Interdisciplinary Collaborative Support Services program provided (1) more clinical assistance for students with ASD to promote their academic and social success; (2) education, training, and supervision for graduate student mentors; (3) in-service training for faculty, staff, students, and administrators; and (4) a resource library related to the target population. This article describes the work among the different program partners to offer interdisciplinary, collaborative services for the students who elected to participate in the initiative and reports both the positive outcomes and challenges of the program. This article concludes with suggestions for expansion of the practice and research opportunities on the efficacy of the model.

Keywords: Autism Spectrum Disorder, college students, interdisciplinary supports

An increasing number of individuals with high functioning autism (HFA) and Asperger syndrome (AS) currently attend college (Graetz & Spampinato, 2008; Smith, 2007; Taylor, 2005). Although the exact numbers are not known, more students with HFA/AS are likely to enroll in institutions of higher education (IHE) in the coming years. Anecdotal reports among those working in college settings further support this increase. Despite the lack of formal data regarding the number of postsecondary students with HFA/AS, colleges should prepare to serve this growing population (Davis, 2012). The success of these students could be enhanced by the degree to which they can be supported by their IHE (Welkowitz & Baker, 2005). Educational experiences for students with disabilities involve collaborations among families, educators, and therapists through the high school years. However, college students with disabilities are essentially responsible for their own needs (Longtin, 2014). By law, such otherwise qualified students cannot access the reasonable accommodations mandated by the Section 504C/ADA unless they self-disclose their disability to a designated entity, usually the disabilities services office at their college, and then self-advocate for those accommodations.

The need for college programs specifically designed for students with HFA/AS is critical but, the number of such university-sponsored programs is relatively small (Smith, 2007). Several of these programs, some in their pilot stages, have been described in the emerging literature. A compilation of some of these programs can be found on the website of the Higher Education and Autism Spectrum Disorders, Inc. (2012). These programs can be costly and pose an economic hardship to families already burdened by rising tuition costs. For example, a program that costs \$5,000 at a college that charges \$25,000 in tuition adds 20% to the annual costs. Moreover, programs would be prohibitive to students from lower income levels, who are more likely to attend a public IHE where tuition costs are relatively lower than in private schools. Using, adapting, and expanding postsecondary supports that are already in place can minimize the cost of supporting students with HFA/AS. Longtin (2014) describes how the contributions of such resources (such as disabilities services, a health clinic, personal counseling, and a speech-language-hearing center) can support students on the spectrum.

Depiction of the Problem

This Practice Brief describes a grant-funded pilot program conducted in an IHE that was developed to (1) support college students with ASD; (2) provide education and practical experience to graduate students in clinical fields who served as mentors; 3) provide in-service training to faculty, staff, students, and administrators; and 4) provide resources related to the target population. While otherwise qualified students with HFA/AS who self-disclose their disability have access to reasonable accommodations established by law, these students often have unique needs that, typically, are not fully addressed through traditional accommodations. For example, the areas of developing social skills and managing executive functions often continue to challenge these students at the college level. Without the interdisciplinary supports that this project provided, participating students may not have had a positive educational experience.

Participant Demographics and Institutional Partners/Resources

The Interdisciplinary Collaborative Support Services program for students with Autism Spectrum Disorders was conducted at a four-year public IHE located in a large metropolitan area. This IHE is part of the largest urban university system in the United States consisting of 24 institutions including eleven senior colleges, seven community colleges, an honors college, and a doctoral-granting university center. The pilot project was funded at \$18,968 through the central Office of the University Dean for Health and Human Services. The director of the college health clinic and a full-time member of the faculty in the speech-language pathology program responded to a request for proposals that could enhance clinical competencies of students in health professions programs or provide educational resources for students. Recipients received funding for the project one month after the semester had already begun with the constraint that the funds be utilized by the end of the fiscal year, which occurred one month after the end of the semester.

The IHE is situated in one of the most dynamic and diverse communities in the country. The college is committed to student success and the historic mission of providing an affordable, high-quality education to students of all backgrounds. Over 16,000 students (approximately 80% undergraduate students and 20% graduate students) enrolled at the college at the start of the program.

The six college offices that collaborated on this project were disability services, the health clinic, personal counseling, the speech-language-hearing

center, career counseling, and the learning center. In addition, several clinically-oriented academic departments, Mental Health Counseling, School Counseling, and Speech-Language Pathology, participated. Approximately ten students on the autism spectrum had disclosed to disability services prior to the grant period. Of these, five students, four males and one female, participated in the program. These students ranged in age from 21-27 years. Two students self-identified as Black, two as White, and one as Hispanic.

Description of Practice

A flyer that listed the name, campus address, website, and phone number of each of the six offices partnering for the initiative was created to publicize the program. Posters announcing the initiative were placed in strategic locations around campus. An article posted on the college website further increased project visibility. In addition, the program partners led a round table discussion at an annual end-of-year faculty conference at the college.

An Internal Release of Information form was developed to allow members of the interdisciplinary team to communicate with each other regarding the participating students. The form authorized the release of information between disabilities services and the other five aforementioned offices. The participating students were each assigned to a graduate student mentor who met individually with his/her mentee on a weekly basis to provide guidance on college life, social pragmatics, executive function, study habits, relationship building, job search, and self-advocacy. As needed, the mentors directed their mentees to the appropriate on campus services.

The mentor program provided training and weekly supervision for graduate students enrolled in three of the college's clinically oriented programs: Mental Health Counseling, School Counseling, and Speech-Language Pathology. A clinical psychologist, employed full-time at the college, served as mentor supervisor. The mentors were recruited initially through email, requesting that practicum and clinical professors announce an opportunity for graduate students to gain experience as mentors in the grant-funded pilot. Interested students emailed the mentor supervisor, who ultimately selected the mentors based on interview, availability and recommendation. Five first-year, full-time graduate students from the above-mentioned programs served as mentors, one to each of the five participating students. The graduate student mentors, who received stipends for their service, were trained through participation in (1) a webinar that focused on mentoring relationships, (2) ten weekly one-hour group supervisory sessions, (3)

at least one day of an on campus in-service workshop (discussed below), and (4) a conference on “Issues in Independent Living for Adolescents and Adults on the Autism Spectrum” sponsored by a local HFA/AS advocacy organization.

The grant funded two half-day in-service workshops on “Helping College Students on the Autism Spectrum” that were led by a psychologist with expertise in HFA/AS who had previously developed training courses in coaching and supporting these students. The first workshop, “An Introduction to Asperger Syndrome and High Functioning Autism,” examined the (1) social, emotional, cognitive, and executive function features that impact academic achievement and (2) issues of time management, sensory overload, and self-regulation. The second workshop, “How to Support College Students on the Autism Spectrum,” addressed (1) methods for supporting friendships other social relationships, and faculty/staff interactions; (2) recognizing problems that need referral; (3) collaborating on campus to coordinate and enhance resources; and (4) strategies for use in the college classroom.

Finally, members of the interdisciplinary team selected print resources that would benefit the students with HFA/AS and other members of the college community. In addition to books, the team selected two rating scales to assess executive functions that could be used in the campus clinical facilities (i.e., Gioia, Isquith, Guy, & Kenworthy, 2000; Guy, Isquith, & Gioia, 2004). The program partners decided that most of the other resources should be located in the disability services office. Appendix B lists the resources that were purchased through the grant.

Evaluation of Observed Outcomes

Evaluation forms consisting of five-point Likert scales and additional questions were developed to assess the outcomes for the in-service and mentor program from the perspective of the mentors and the mentees. In addition, the mentor supervisor provided written evaluative feedback about her experiences in that role.

Four of five students with HFA/AS reported that they would choose to continue their participation if the project were extended through the next academic year. The other student was “neutral” in responding to most of the items on the evaluation form. All attended at least one additional clinical or academic service during the program. In terms of the support services used during the grant period, three attended disabilities services, three career counseling, and five personal counseling. One student attended the speech-language-hearing center prior to the grant period but

was no longer actively involved with those services. The participants acknowledged that the collaborative support services promoted their academic and social success, allowing them more fully to engage in the college experience. Table 1 lists the students’ comments in response to the evaluation form question, “What contributed to making the term an academically successful semester?” Finally, two incoming freshman on the spectrum planned to enroll at the college for the following academic year because of their awareness of this program.

Using another five-point Likert scale to evaluate the mentor program, the five mentors rated their overall experience in the program, the supervisory meetings, and the supervisor’s effectiveness as “very beneficial.” Four of the students rated their interactions with their mentee as “very beneficial” and one as “fairly beneficial.” The five mentors “strongly agreed” that the program provided useful information and enhanced their clinical training. Three “strongly agreed” and two “agreed” that the program seemed to help their mentee. The mentors unanimously agreed that the weekly group clinical supervision they received was an asset of the program. Other noted strengths included the opportunity to meet individually with their mentee and to connect with other support services at the college. The mentors unanimously agreed that the program could have been improved had it started at the beginning of the semester, which was not possible because of the funding constraints. Table 2 lists the responses to three questions on the mentor evaluation form regarding the knowledge, skills, and strategies they gained as graduate student clinicians.

The mentor supervisor’s evaluative comments noted that the mentors’ “enthusiasm” and “dedication” to the project contributed to its success. She reported that the mentors collaborated with and provided useful feedback to each other. She also noted that the mentors effectively directed their mentees to the appropriate campus resources such as career counseling or the health clinic.

In terms of the in-service workshops, more than 25 members of the college community, including graduate students, faculty, administrators, and clinical support staff, were trained to help college students with HFA/AS. Faculty and clinical support staff across a variety of disciplines expressed appreciation for the greater opportunity to collaborate. Feedback on the in-service evaluation form was overwhelmingly positive. Participants noted that the presenter was “exceptionally knowledgeable,” “comprehensive,” and provided “numerous practical examples” to assist them in their work. All attendees rated the workshop content, or-

Table 1

HFA/AS Students' Responses to the Question "What Contributed to Making This an Academically Successful Semester?" on the Mentee Evaluation Form

I prioritize what to do each day.

I have more confidence in college.

My mentor was very helpful in directing me to institutions that will help me with my schoolwork as well as institutions that will help me financially.

My class note takers sometimes contributed to my academic success.

I spoke with counselors rather than give in to impulsive reactions when things were not going well.

Table 2

Sample Graduate Students' Responses to Three Questions on the Mentor Evaluation Form

What skills have you acquired from participating in this mentor program for college students on the autism spectrum?

Patience

Effective interaction skills

How to provide advice

How to plan for individual meetings

How to develop realistic goals

How to assist with executive functions such as time management and organization

How to assist with self-advocacy such as accessing services at the college

Did you learn any strategies to support the student(s)?

Segmenting tasks into smaller units

Providing facilitative cues

Using schedules for time management

Using a timer to limit excessive focus on a single topic of conversation

Providing effective feedback to the mentee

What specific knowledge or skill(s) did you acquire that is applicable to your future work as a clinician?

Increased knowledge about high functioning autism and Asperger Syndrome

Greater awareness about the everyday challenges of these individuals

The difficulty in trying to gauge my mentee's feelings

The importance in establishing a trusting relationship

ganization, presentation, and handouts as either “very beneficial” or “fairly beneficial.” All participants “agreed” or “strongly agreed” that the in-service was useful and would influence their professional growth. All but two “agreed” or “strongly agreed” that the workshop would influence them professionally. For each day of the in-service, the participants were requested to provide examples of how they would apply specific information gleaned from the workshop to their work. Sample attendee responses to this question are listed in Table 3.

Implications and Portability

We learned that the infrastructure of the four-year public IHE has adequate resources to provide collaborative clinical services to students with HFA/AS, but that the future of such a program would require further financial commitment from the college administration to cover fees for general program participation or fees for specific services. Other outside funding could supply additional resources. A program such as the one described here would likely cost administrations (or other funding agencies) between \$15,000 and \$20,000. Table 4 lists a breakdown of selected start-up and maintenance costs for this project.

During the brief grant period, disabilities services and the clinical staff from the different divisions and academic departments established common ground in the provision of services to students on the spectrum. While these services would likely continue and be more collaborative than prior to the project, ongoing formal coordination and the continuation of the mentoring program would require resources for a program coordinator, mentor supervisor, and the graduate student mentors.

Major challenges of the program were the lack of planning time and the short-term nature of the funding. This required that the pilot be initiated immediately and concluded within a four-month period. As such, the co-applicants and other program partners did not have the benefit of a planning period. This precluded significant outreach and the development of more detailed outcomes assessment. The pilot was essentially “up and running” one week after the co-applicants received notification that their proposal was funded, which was already one month after the start of the semester. In fact, the students with HFA/AS expressed concern about having sufficient time to work with their mentors, given the short-term, one semester limit of the funding. Challenges the mentor supervisor reported were the “unknown expectations” of her role and insufficient “support staff” to “meet the needs of the mentees and mentors.” All of the program partners accepted the added responsibilities of the initiative while being fully

engaged in their regular full-time commitments at the college. Despite the short planning time, the project was deemed successful by multiple sources. Based on what we learned, disabilities service providers in the future could try to identify additional students with HFA/AS who are not known to their office. This could be done through freshman seminars, student services orientations, and by providing a link to an online self-assessment tool, *The Autism Spectrum Quotient* (ac.server8.org), which might result in self-referrals for further evaluation and services.

The program could be enhanced if the various program partners offered additional services geared toward the target population, which could help increase graduation and retention rates. For example, career counseling could provide students with HFA/AS with individualized advisement and guidance through regularly scheduled appointments, which would also benefit relationship building for these students. This expanded role for career counseling would be important given that students with HFA/AS, including those with college degrees, are often unemployed or underemployed (Hurlbutt & Chalmers, 2004). Further, program partners could regularly schedule individual and group social skills training sessions that could address social communication needs for college and career. Speech-language-hearing, personal counseling and career counseling could collaborate in this area. The resource library could also be expanded to include several first person narratives written by individuals with HFA/AS that address their college experiences and career paths. The strength-based perspective of many of these autobiographies, most published within the past decade, could benefit the students on the spectrum, the program partners, and the graduate student mentors. Discussion of these narratives in an informal campus “book club” venue, led individually or collaboratively by the program partners, could serve as the basis for practicing social interactions among the students with HFA/AS (and education for the mentors, faculty, and clinical staff) while they learn about the lives of others from this target population. Appendix C lists suggested titles.

Future research needs to address the efficacy of the programs by including pre-assessment baseline data, as well as post-assessment outcome data, better to evaluate the in-service and mentor components of the program. For example, the assessments for the in-service could measure the attendees’ specific knowledge about HFA/AS both before and after the workshops. The assessments for the mentees could be expanded to include quality of life measures and the acquisition of specific knowledge and skills that made a difference in their

Table 3

Sample Attendees' Responses to the Question, "What Specific Information Did You Acquire That is Applicable to Your Work" on the In-Service Evaluation Form

- The Behavior Rating Inventory for Executive Functions (BRIEF).
- I can use this information when counseling my future clients and in mentoring settings.
- As a career academic counselor for students with disabilities, it is useful to learn about the importance of executive functions and how they affect students. I can utilize this knowledge to plan for academic success by developing appropriate career goals.
- Coaching strategies; difficulties that the AS population faces.
- I may incorporate a reflection process at the end of each session.
- How to set up coaching activities and strategies.
- I learned more than just the diagnostic criteria of AS in the DSM but other underlying important issues as well as how to implement the interventions. This will be very helpful to me in the mental health field.
- The information on executive functions was very useful; I have more of an understanding that people with AS may not be lazy and noncompliant; they may have difficulty planning and organizing.
- How to provide referral to disabilities services.
- Consider individual needs of students.
- It will help me in training my staff to better meet the needs of our students.
- Working better with these students and ones that may need additional support or referrals.
- Many of my students struggle with management. I will try to utilize the strategies from this workshop to assist students such as creating as a visual master plan/calendar.
- A thorough understanding of AS which helps with differential diagnosis.
- I really appreciated the discussion regarding interpretation of "classroom rules."
- Pragmatic suggestions that would apply to any student with executive function issues (including those with attention deficit disorders and learning disabilities).

Table 4

Selected Start-up and Maintenance Costs for the Project

Item	Cost (US\$)
Start-up	
Project Coordinator	3,900
Consultant/In-service Workshops	3,000
Resource books and tests	1,000
Printing of flyers and posters	100
Subtotal Startup	
Maintenance	
Mentor Supervisor	3,500
Mentor Stipends (5 x \$800)	4,000
Subtotal Maintenance	7,500
Total	15,500

Note. Personnel costs such as the project supervisor, consultant, and mentor supervisor would likely vary with experience, faculty rank, institutional practices, and geographic location.

college experience. The students with HFA/AS could also be followed over time to evaluate their retention, graduation, and eventual career paths. Assessments for the mentors could include specific clinical knowledge and skills gleaned from their experiences.

Finally, because the number of participants in this pilot was small, identifying other colleges with similar infrastructures where the model could be implemented would provide a larger participant base for broader support for the interdisciplinary model. By employing a comparison control group of students with HFA/AS with similar demographic characteristics who elect not to participate in such support programs, research could begin to explore questions related to the efficacy of these support programs across different campuses.

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About the Author

Susan Longtin received her B.A. and M.A. degrees in speech-language pathology and audiology from Hunter College and Ph.D. from the Graduate School of the City University of New York. She is a state licensed, nationally certified speech-language pathologist with experience working in school settings and supervising graduate student clinicians in university clinics. She is currently assistant professor in the Department of Speech Communication Arts and Sciences at Brooklyn College of the City University of New York and co-director of the Advanced Certificate Program in Autism Spectrum Disorders at the college. Her research interests include parent-professional partnerships, mindfulness-based interventions, and the first person narratives of adults with autism spectrum disorders. She can be reached by email at: slongtin@brooklyn.cuny.edu

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Appendix A

Resources Purchased Through the Grant Funding

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Appendix B

Selected First Person Narratives Published by Individuals with HFA/AS Relevant to College and Career

- Carley, M. J. (2008). *Asperger's from the inside out: A supportive and practical guide for anyone with Asperger's syndrome*. New York, NY: Penguin Group.
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