



THIS FALL, UNCG RESEARCHERS BEGIN WORK ON A \$3.2 MILLION GRANT TO STUDY ADHD treatment programs for college students. It will be the first large, randomized, controlled treatment outcome study of college students with ADHD that doesn't involve medication.

The college outlook for most students with Attention Deficit Hyperactivity Disorder (ADHD) is dim. According to research by ADHD scholar Dr. Russell Barkley, only 20 of every 100 clinically diagnosed children with ADHD will get into a four-year college. Only five of those 20 will finish college. And the five who do make it through will often have lower grade point averages, change majors and universities more frequently, and take longer to graduate.

What's behind these numbers? Why do college students with ADHD perform so poorly? Until recently, well-researched answers to these questions were few and far between. But UNCG Professor of Human Development and Family Studies Arthur D. Anastopoulos is changing that. He is one of the first researchers to systematically study ADHD in college students and has been the recipient of several major grants to further this work.

And his efforts are paying off — in the form of new knowledge, effective interventions, and changing lives.

UNCG AND ADHD

Dr. Anastopoulos has dedicated his career to uncovering the mysteries of ADHD. His interest in the field began in 1972, while he volunteered with a local mental health clinic. His assignment was a hyperactive 7-year-old boy who put him through the wringer during their two-hour meetings. Although exhausting, three years of demanding sessions with his young charge inspired Anastopoulos' curiosity about hyperactivity, impulsiveness, and short attention spans.

Anastopoulos went on to study child development at Tufts University, earned his master's in psychology at Wake Forest University, and completed his doctorate in the field of clinical psychology at Purdue. He came to UNCG in 1995 after working at the University of Iowa and the University of Massachusetts Medical School.

For the past 20 years, Anastopoulos has made great strides to put UNCG at the forefront of ADHD research and treatment. In 1996, he established UNCG's ADHD Clinic, which provides state-of-the-art mental health care services and education to the university community, the Triad region, and the state. It has increased understanding of ADHD through clinical research and provided clinical practice training to numerous graduate students and other health care professionals. Through the years the clinic has provided services to thousands of community residents and students.

"Years ago we began doing ADHD evaluations of college students, and I became intrigued," says Anastopoulos. "Most clinically referred kids with ADHD do not enroll initially in four-year colleges."

"We looked to the literature and there wasn't much there for college kids with ADHD. And what was available wasn't high quality or trustworthy. There seemed to be an opening in the college student arena to conduct better research."

THE TRAC STUDY

That gap in the literature and his previous work in the field led Anastopoulos, along with collaborators Dr. George DuPaul at Lehigh University and Dr. Lisa Weyandt at the University of Rhode Island, to

the TRAC (Trajectories Related to ADHD in College) project, now in its fourth year. TRAC is funded by the National Institutes of Health, and follows students with and without ADHD from their freshman year onward to determine how the disorder impacts educational, cognitive, psychological, social, and vocational functioning through the college years.

The five-year, \$3 million, multi-site longitudinal study recruited 456 college freshman across the three campuses (UNCG, Lehigh University and University of Rhode Island), with participants with ADHD carefully evaluated to make sure they met rigorous criteria for the diagnosis. Every year, the students receive a comprehensive evaluation, which looks at ADHD symptoms, executive, emotional, vocational and social functioning, and use of treatment services.

The findings of the TRAC study shed light on the difficulty students with ADHD experience when transitioning from high school to college. For those with ADHD, it's a perfect storm, says Anastopoulos. They leave the shelter of high school where many things are managed for them — school work, meals, laundry, money management, appointments — and enter a world they have to manage on their own. In clinical terms, it's called self-regulation, the ability to manage one's behavior across different settings in the service of reaching personal goals.

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The transition from high school to college can be overwhelming even for students without ADHD, much less those that have a deficit in self-regulation, as is often the case in ADHD. "Their gap between demands and capacity for self-regulation is much greater for them than it is for others who do not have ADHD," Anastopoulos says. "There is a substantial mismatch."

In high school, a student with ADHD might have an Individualized Education Plan. Mom and dad might have been monitoring their behavior and activity. Perhaps they were even receiving counseling and taking medicine. But that often stops at college.

Students don't want to be different than their peer group, so they might stop taking the medication. "And the last thing they want to do is go to a disability service office, publicly acknowledge they have a problem and ask for help," says Anastopoulos. Complicating the college situation is the fact that even if students fully accept their diagnosis and seek assistance, most campus resources are inadequate to address all their needs.

And then there is the complicating factor of co-morbidity. The TRAC project has shown that 55 percent of college students with rigorously defined ADHD have a second or third diagnosis, relative to 11 percent of college students without ADHD. The other diagnoses are mainly major depressive disorders or anxiety disorders that will likely become worse during college. "Quite commonly, people get stuck on just having ADHD and are not aware of the increased risk for depression and anxiety, which can make success in college even more difficult to attain," says



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Anastopoulos.

To manage these situations best, Anastopoulos and his colleagues recommend that co-morbid conditions need to be managed before a student reaches a college campus.

What that means is that parents and teachers of high school students need to become more aware of these additional problems while the student is still in high school. They need to get on top of these problems with treatment — not just treatment for ADHD — while in high school and then during the transition into college for continuity of care.

Parents should also initiate a gradual process of having their son or daughter assume increased responsibility for managing themselves in preparation for the increased demands for self-regulation that come with college.

ACCESS

For Anastopoulos and his colleagues, the findings of the TRAC study confirmed that colleges need more treatment services for students with ADHD. And that's where the ACCESS (Accessing Campus Connections and Empowering Student Success) program was born.

Anastopoulos, his colleague Dr. Kristen King, and some former graduate students initially designed the ACCESS program in 2011 thanks to a \$3 million grant received by UNCG and two other North Carolina universities to aid college students with learning style differences. The funding came from Oak Foundation and GlaxoSmithKline along with \$500,000 in matching support from local Triad foundations.

The grant charged each university with creating programming for college students with learning challenges. UNCG focused on ADHD, but right off the bat, they hit a snag.

"The challenge was, there were no well-done studies of treating college students with ADHD for us to review," says Anastopoulos. "So we turned to the adult ADHD literature. We borrowed from adult cognitive behavioral treatment programs and tailored it to college students."

For participants like UNCG senior Meredith Anderson (name changed), who joined the ACCESS program in the fall of 2012, the program has improved her skills and her comfort level.

"I knew many of the things we talked about skill-wise, but the program gave me a place to implement them in my life in new ways as an independent person while providing wonderful support and accountability," says Meredith. "My awareness was heightened as I understood for the first time some things I did and ways I felt socially that are related to ADHD."

The ACCESS program begins with an eight-week active treatment program in the first semester, where students participate in eight 90-minute group therapy sessions. They learn about ADHD knowledge, behavioral strategies and cognitive therapy techniques. Staff from different support services on campus come in to educate the students. "The point is to demystify the campus services so students are more comfortable with them," says Anastopoulos.

"The most comforting and empowering moment sometimes in a small group was the moment someone said, 'You do that?! Me too!'," says Meredith. "It crushed the lies that we are alone in our struggles or that no one understands. It reminded me I'm doing better than I sometimes may think I am."

At the same time they have an individual mentor, whose job is to reinforce what's learned in the group. The mentor evaluates them and helps facilitate their entry into campus support services, and they provide personal coaching.

INITIAL RESULTS FROM THE ACCESS PROGRAM PRESENTED AT THE 2014 AMERICAN PSYCHOLOGICAL ASSOCIATION MEETING

Significant increase in:

- ADHD awareness
- Self-reported organizational behaviors and adaptive thinking
- Use of support services

Psychotherapy use increased from 18 to 30 percent

Pharmacotherapy use increased from 55 to 80 percent

Disability services registration increased from 38 to 70 percent

Disability services usage increased remarkably from 15 to 63 percent



ALL ACCESS Human Development and Family Studies graduate student Kaicee Beal mentors participants in the program.

ACCESS is composed of three main parts: knowledge of ADHD, behavioral strategies, and cognitive therapy techniques.

The first part of the program is the knowledge element. Most students come to college with poor knowledge of their own disability. "On our ADHD awareness test, those with ADHD average about 25 out of 50 correct. The comparison group, those without ADHD, score 23 out of 50 correct. If you understand your disability, you accept and manage it better. We thought we had to increase their knowledge of ADHD."

The second part is a behavioral piece, looking at skills like time management, planning, organization, scheduling, and tracking. "Students with ADHD need to have these skills or they are in big trouble," says Anastopoulos. "We teach skills that help them not only in the educational domain but also the social and emotional aspects of college life."

The third part of the ACCESS program is cognitive therapy. The way people think affects the way they behave and feel. Many college kids with ADHD have maladaptive beliefs, like "I do better at the last minute" or "I can never do well in school." The program teaches them to be aware of these thinking errors that can lead to depression and anxiety. Cognitive therapy strategies help participants deal with existing anxiety and depression and head off anxiety and depression that can present itself.



EVIDENCE-BASED Dr. Kristin A. King, ACCESS Project Coordinator, demonstrates how to lead a cognitive behavioral therapy group.

"The mentoring was the most crucial part of my experience, and the aspect of the program I have used the most," says Meredith. "Having someone I could share places I was struggling with, and who knew the science of what I was dealing with, and had the skills to help me by helping me figure out how to do it myself was such a good experience for me.

"She was also so faithful to point out when I was doing really well at handling a situation or when I had improved in an area," says Meredith. "Communicating that meant so much because she saw my struggles deeper than I let others see them and still saw wonderful things in me. It made me a lot more confident in who I am and that my life is not defined by my illness."

The second semester of the ACCESS program is the maintenance phase. Group therapy sessions are reduced to one and mentoring is reduced to five or six sessions. "We don't want to create young adults that are dependent on us," says Anastopoulos. "We more provide oversight to make sure they have the skills before we let them go.

"The thinking is that if we see improvement/change in these behaviors and knowledge, we'll see improved school, social, and emotional functioning."

But the study has its limitations. There was no comparison group and only a limited period to gather data. "We don't know how these numbers go over time," says Anastopoulos.

So Dr. Anastopoulos worked in concert with Dr. Joshua Langberg at Virginia Commonwealth University, or VCU, to apply for a grant from the U.S. Department of Education, Institute of Education Sciences, to continue the ACCESS program. In March 2015, they were awarded \$3.2 million for a program that began this fall. It will be the first large, randomized, controlled study of college students with ADHD that doesn't involve medication.

THE NEW STUDY

The study is a two-site project jointly undertaken by UNCG and VCU, with UNCG as the lead institution and Anastopoulos as the lead principal investigator.

Over the course of five consecutive semesters, 240 students will be enrolled, 120 of those at UNCG. Of these 120, half will immediately begin the ACCESS program, and half will be delayed by two semesters in order to create a control group.

Everyone in the program receives a thorough evaluation of ADHD and comorbid conditions free of charge. And each student receives \$70 for taking the evaluation and a written summary that they can take to treatment services — even those in the delayed treatment control group.

While waiting for treatment, students can still seek other treatment on their own before starting ACCESS. "Their actions will be seen as treatment as usual and compared with active participants," says Anastopoulos.

To determine whether ACCESS treatment works, researchers will collect information at the beginning of the semester, at end of the semester of active treatment, and at the end of maintenance phase. Then, a fourth evaluation is conducted six months after treatment has ended.

"We aren't saying ACCESS is the be all and end all of ADHD treatment. We're saying to effectively treat ADHD in college students, you need multiple treatments in combination," says Anastopoulos. "ACCESS adds another layer to the treatment landscape. It encourages students to get the other assistance they need."

For students like Meredith, it's had a big impact. "I still have all the materials from the sessions and I feel so much more confident to deal with my ADHD now than in the past." 🗣️

By Mary Leigh Howell • Photography by Mike Dickens & Martin Kane •
For reasons of confidentiality, no research participants were photographed.
Learn more at <http://adhd.uncg.edu>