

# Examining the Mental Health of College Autistic Students

## Leadership Presentation by Cassidy Edmondson

With support from Dr. Brian Freedman and Dr. Jessica Monahan, University of Delaware; Dr. Luke Kalb and Vini Singh, Kennedy Krieger Institute

### Background

More autistic young adults are attending colleges and universities than ever before (Wei et al., 2013). Regarding this increasing population, it is important to acknowledge that students with autism experience greater mental health challenges than their neurotypical peers, which can make college life even more difficult (van Steensel et al., 2011). For example, one study demonstrated that autistic students had more worries than neurotypical peers related to transitioning to university, which highlights the fact that this population may be more vulnerable to the stressors of college life (Lei, 2020).

However, autistic college students have also identified mental health resources as especially lacking in higher education. Similarly, mental health providers report less comfort in treating autistic individuals, emphasizing the need for a better understanding of mental health needs and services for young autistic adults, particularly college students (Maddox et al., 2019). Research is emerging in this field, but there has yet to be a study that compares the mental health needs of autistic college students to peers without autism using a nationally representative sample (Jackson et al., 2018).

For college counseling centers and other practitioners to properly support autistic college students, there needs to be a better understanding of the types of mental health challenges within this population as compared to those of the neurotypical college students utilizing the same services. This study aims to understand the experiences of autistic college students who have sought mental health services from their college counseling centers by analyzing data from the Center for Collegiate Mental Health.

We do so through an examination of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62), an intake measure frequently used to self-report student mental health. The CCAPS-62 measures a student's well-being across the domains of depression, generalized anxiety, social anxiety, academic distress, eating concerns, family distress, hostility, and substance use. This measure has strong validity and reliability for the general population of students it is used for, but there are not currently any studies examining the validity of the CCAPS-62 for autistic individuals, despite the fact it is already in use for measuring this population's mental health needs.

#### Research Aims

**Aim 1.** Examine the internal construct validity and reliability of the CCAPS-62 for autistic college students to see if the instrument holds as a valid measure for this population.

*Hypothesis: The CCAPS-62 will show internal validity.*

**Aim 2.** Understand the specific mental health needs of autistic college students when compared to college students with other disabilities and without disabilities.

*Hypothesis: Students with autism will exhibit more mental health challenges than other student groups in some areas, like anxiety, but not in others, like substance abuse.*

**Aim 3.** Explore predictors of the mental health needs of autistic college students. This will be informed by an autistic student advisory board.

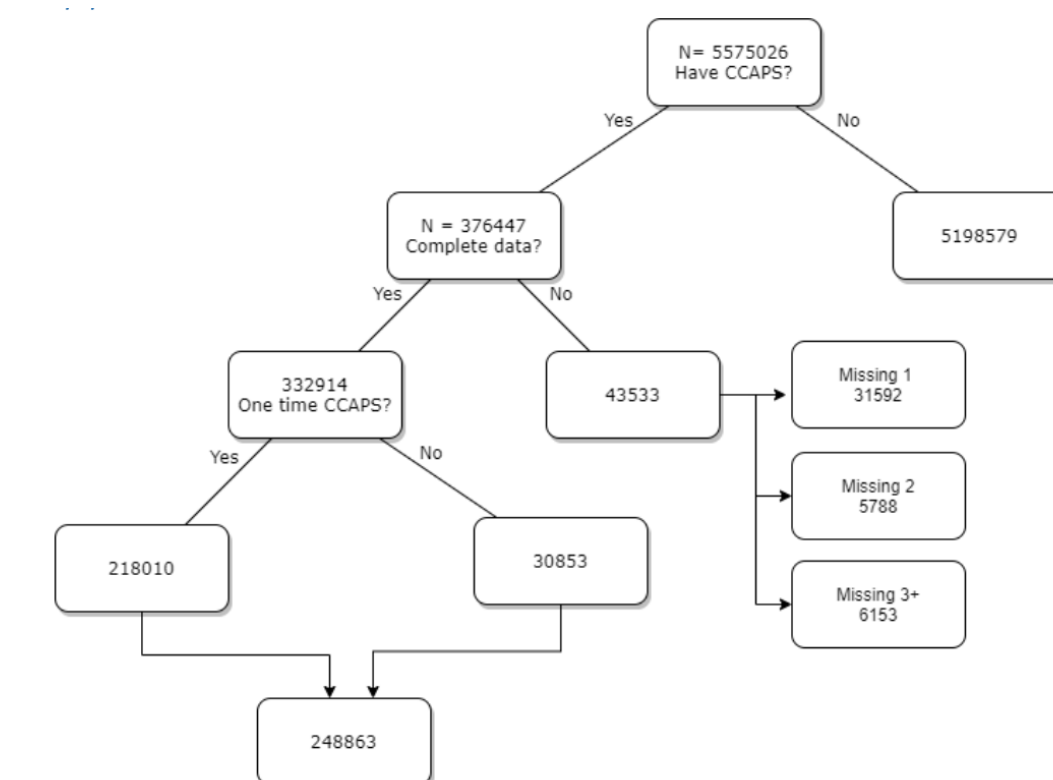
*Hypothesis: Some variables, like race or first-generation status, will significantly predict mental health challenges.*

### Methods & Findings

**Aim 1.** Is the CCAPS-62 valid for autistic college students?

A confirmatory factor analysis (CFA) is a test of whether measures of a construct are consistent with the nature of that construct. This CFA examined the differences in the CCAPS-62 between autistic students and non-autistic students.

Figure 1. Narrowing down to the total pool of students we will use.



Figures 2 and 3. The matching process: In our sample, we controlled for variables that would lead to participants answering questions differently for reasons other than disability status. Our sample is representative of the overall data.

	(ALL) N=5044	No ASD N=3776	ASD N=1268	N
What is your gender identity?				4223
- Men	2553 (61.4%)	1885 (50.8%)	708 (56.0%)	
- Women	1172 (27.8%)	884 (28.1%)	288 (26.8%)	
- Other	292 (6.7%)	226 (7.2%)	66 (5.2%)	
- Transgender	178 (4.2%)	155 (4.9%)	23 (2.0%)	
What is your race/ethnicity?				4774
- White	3432 (71.9%)	2563 (70.8%)	849 (76.2%)	
- Black	117 (2.5%)	73 (1.9%)	47 (4.2%)	
- Asian	435 (9.1%)	386 (10.2%)	49 (4.4%)	
- Hispanic/Latino	348 (7.3%)	283 (7.7%)	65 (5.8%)	
- Multiracial	322 (6.7%)	254 (6.9%)	68 (6.1%)	
- Other	130 (2.8%)	84 (2.3%)	46 (4.1%)	
Are you an international student?				4036
- No	3831 (94.8%)	2787 (95.4%)	1034 (98.8%)	
- Yes	205 (5.1%)	152 (4.6%)	53 (5.2%)	
Year of Completion				5044
- 2015	2192 (43.3%)	1857 (49.2%)	338 (26.4%)	
- 2016	1438 (28.5%)	1055 (27.9%)	381 (29.9%)	
- 2017	1416 (28.1%)	864 (22.8%)	552 (43.3%)	
Age	25.2 (6.0)	26.3 (6.1)	22.0 (4.7)	5044

Figure 4. After a few trials and tribulations along the way, the analysis is in, and it is exactly as expected.

Model	RMSEA	CFI	TLI	SRMR
Second Order	0.056 (0.056-0.055)	0.963	0.951	0.077
Eight Factor	0.059 (0.059-0.058)	0.957	0.954	0.074

	Academic	Depress	Soc	Family	GAD	Health	Soc-Anx	Substance
08	0.463	10	0.678	06	0.811	01	0.870	04
18	0.637	11	0.686	16	0.828	09	0.702	05
07	0.867	13	0.785	23	0.860	14	0.799	17
19	0.854	15	0.677	26	0.755	25	0.770	21
06	0.707	24	0.837	29	0.882	43	0.657	22
27	0.809	35	0.825	47	0.687	31	0.802	64
32	0.629	38	0.813			34	0.753	68
41	0.654	53	0.873			37	0.814	
45	0.631	69	0.727			44	0.543	
51	0.661							
61	0.741							
65	0.510							
70	0.674							

Figure 5. The autistic sample and the non-autistic sample answer the CCAPS-62 in an extremely similar way, so it can be said that this measure is valid for autistic college students to continue using when seeking mental health services.

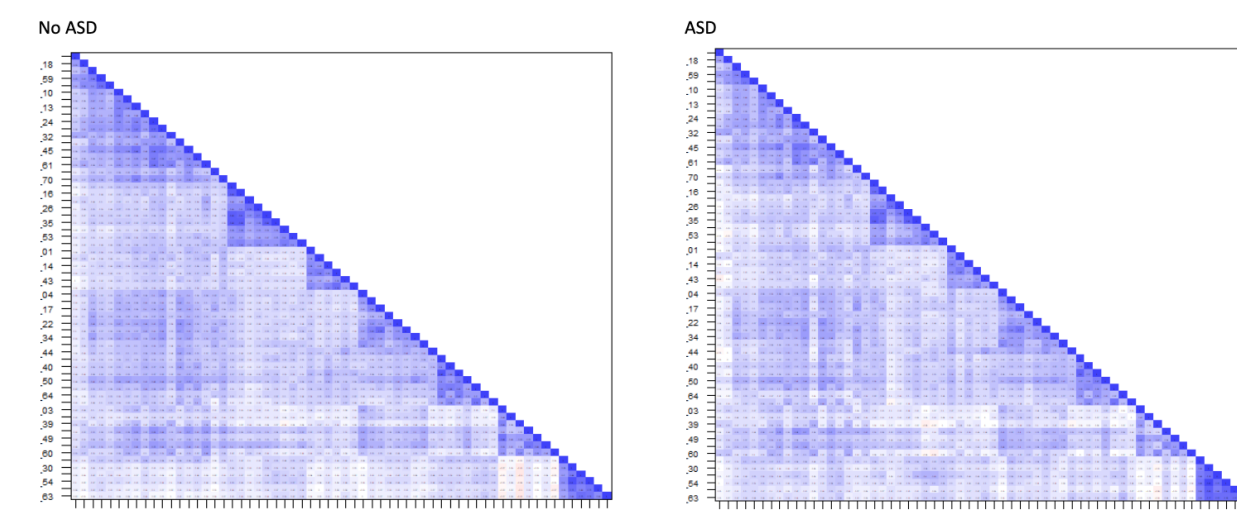
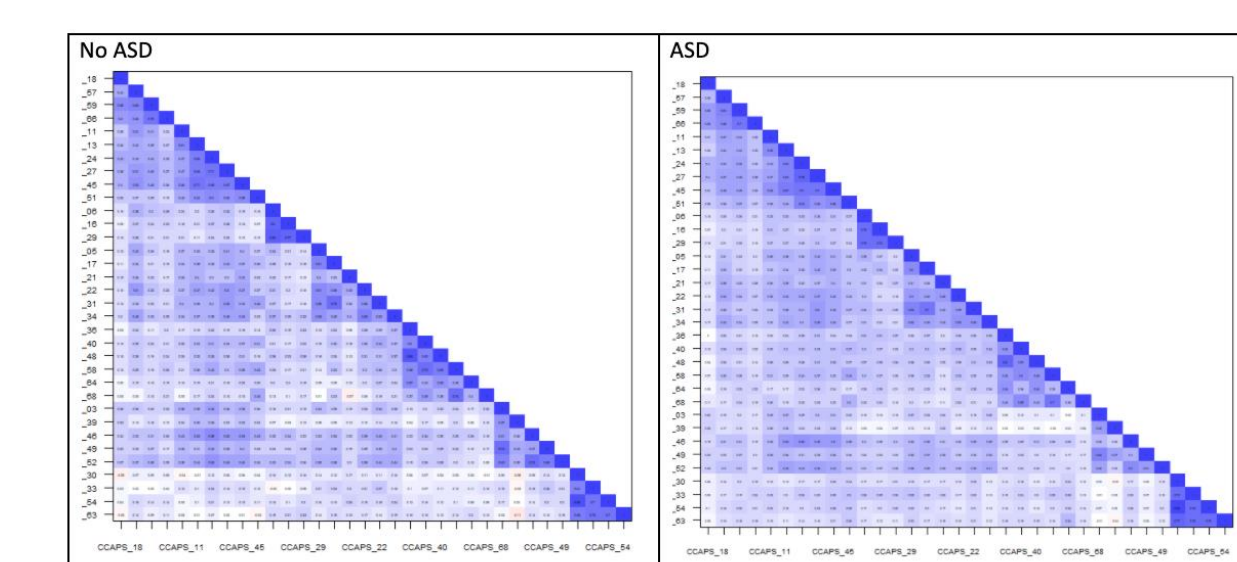


Figure 6. Bonus—the CCAPS-34, the shortened version of the measure, is valid for autistic college students, too.



### Next Steps

**Aim 2.** Are the mental health needs of autistic college students different than peers with other disabilities or without disabilities?

A multivariate analysis of variance (MANOVA) is a technique that determines the effects of independent variables on multiple dependent variables. In this study, a MANOVA will determine what differences, if any, exist between the CCAPS-62 subscales among students with autism, students with other disabilities, and students without disabilities. If there are, a direction dependence analysis will be conducted in order to better understand the relationship between those scores.

Figure 7. Based on the disabilities listed in the SDS dataset, these will be the different disability groups for the analysis.

Proposed group	SDS dataset disabilities included in group
Physical	<ul style="list-style-type: none"> <li>Difficulty hearing</li> <li>Difficulty seeing</li> <li>Difficulty speaking/language impairment</li> <li>Mobility limitation/orthopedic impairment</li> <li>Health impairment/condition, including chronic conditions</li> </ul>
Cognitive	<ul style="list-style-type: none"> <li>Traumatic Brain Injury</li> <li>Specific Learning Disability</li> <li>ADD or ADHD</li> <li>Cognitive difficulties or intellectual disabilities</li> </ul>
Psychological/Psychiatric	<ul style="list-style-type: none"> <li>Psychological or psychiatric impairments</li> </ul>
Autism	<ul style="list-style-type: none"> <li>Autism Spectrum Disorders <b>only</b></li> </ul>
Autism & co-occurring disability	<ul style="list-style-type: none"> <li>Autism Spectrum Disorders <b>AND</b> any other disability category or categories</li> </ul>
2+ Disability	<ul style="list-style-type: none"> <li>More than one disability category <b>BUT no</b> inclusion of Autism Spectrum Disorders</li> </ul>

**Aim 3.** What predicts the mental health needs of autistic college students?

A regression analysis will examine potential predictors of mental health challenges, such as gender identity, sexual orientation, race, first-generation status, prior mental health treatment.

Figure 8. We will identify predictor variables, ones that may cause a significant decrease or improvement in mental health on their own and would therefore complicate the relationship between disability status and mental health.

Predictor Variables
Trauma and/or abuse
Family support
Social network support
Sexual orientation
Residential status
Transfer student status
Extracurricular activities
First-generation college student status
Financial situation

*Note:* Much of the autistic community has expressed that most research does not reflect their priorities and therefore desire greater involvement in the research process (Gowen, 2019). We will consult twice with an advisory board of autistic college students to seek input and feedback. In the first meeting, we will discuss the findings of the study and responses to the results. In the second meeting, we will seek the advisory board's recommendations for practitioners and future research.

### Reflection

My work on this leadership project is directly related to my discipline as a future school psychologist and all the tenets of LEND that I have come to value this year. In my practice as a school psychologist someday, I will be working with autistic students at many ages. Seeing as mental health is a passion of mine, I want to prioritize awareness and support for the mental health challenges that students with disabilities face. Having a better understanding of how students may express these difficulties across disabilities will allow me to more efficiently detect students who may be in need. It is always important to remember in my future work, however, that families may be able to share a different perspective on a student's mental health state that should be considered, since parents are often a child's strongest advocate. It is also necessary to keep in mind that a student's cultural context is crucial for understanding their circumstances, because the intersections of disability and minority statuses are often essential to a student's identity. As for interdisciplinary practice, I have learned through this project the importance of collaboration with professionals in the field who can share unique skills and perspectives in order to provide the best services to students.

This study will ultimately lead to a better understanding overall of the mental health challenges experienced by autistic college students. By validating a commonly-used measure at college counseling centers for students with autism, this study will lead to improved detection of mental health challenges in autistic college students. Therefore, the field can create more targeted interventions for the specific needs of the population and reduce the disparities frequently reported by autistic college students at college counseling centers. Playing a role in that, no matter how small, makes me feel confident in my abilities as a future leader in the field. Being involved with a project that combines my two strongest passions (raising awareness for mental health and advocating for children with disabilities) has affirmed that I am entering the right career. I am looking forward to working on the rest of this study and seeing all the positive implications it will have for autistic college students in the future.

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