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The Need to Revisit Legal Education in an Era of Increased Diagnoses of Attention-Deficit/Hyperactivity and Autism Spectrum Disorders

Heidi E. Ramos-Zimmerman*

ABSTRACT

The ever-fluctuating rhetoric from experts, in the field of neurodevelopmental disorders, has led to outdated notions and perplexity surrounding attention deficit/hyperactivity disorder (ADHD) and autism spectrum disorders (ASD). This Article tries to clarify some of the confusion. Better understanding of these disorders is imperative for today’s law professor, since law schools are likely admitting more students diagnosed with ADHD and ASD. This Article discusses the need for change in legal instruction and explores the link between the two disorders. An examination of recent history illuminates some of the commonly held misunderstandings and highlights the disparity in the diagnoses of ADHD and ASD among women and people of color. In addition, the Article delves into what an instructor can expect when he or she has a student with these disorders in the classroom. An illustration helps practically convey how these students may differ from their neurotypical classmates. Finally, the Article discusses what measures a law professor can adopt to assist students with ADHD and ASD in facing their many challenges. There are examples of teaching measures that assist struggling students with their organization, set shifting, focus and social skills. Thus, this Article aids today’s law professors by increasing their understanding of ADHD and ASD and the issues facing these differently gifted students and provides some recommendations for supporting their educational efforts.

* Assistant Clinical Professor, Southern Illinois University School of Law. I thank Professor Andrew Pardieck, Jon Gobert, and the staff of the Dickinson Law Review for their many helpful comments and suggestions. I am also grateful for the support of my family and my husband, Joel Zimmerman.
INTRODUCTION

Before the moderate increase of law school applications in 2018,1 many concerned scholars wrote regarding the tempestuous climate surrounding legal education. Not surprisingly, there fails to be any uniformity in their proposed solutions. Some authorities argue for changing the traditional model of legal education,2 while others support making law school more affordable.3 Still, others encourage changing the structure of experiential legal education by outsourcing the same to private businesses.4 In fact, if there is a rallying cry for the majority of these advocates, it is CHANGE!

The recent sizable decline in law school applications led to this flurry of self-examination. In 2010, 87,900 persons applied to American Bar Association-approved law schools. In 2016, that number dropped to 42,800—a 36 percent drop in applicants in six years. Now compare the number of applicants to the number of admissions. In 2010, the number of applicants admitted to law school was 52,488. In 2016, law schools admitted 37,107 applicants. Thus, in 2010, law schools admitted approximately 60 percent of applicants, while in 2016, they admitted 65 percent of applicants from a sizably smaller pool. Simply put, the pool of applicants has shrunk substantially, while the same number of law schools—or more—bid for applicant matriculation. It’s no wonder everyone is scrabbling for a solution.

Amidst this turmoil, law schools are struggling to maintain respectable enrollment numbers. As a result, some law schools are admitting applicants that they would have declined just ten years earlier. Many schools today are even courting applicants with lower LSAT scores and GPAs with the promise of scholarships. Unfortunately, lower LSAT scores and GPAs can be harbingers of increased failure either in law school or on the bar exam. The inference is that law schools are admitting “at risk” students just to keep enrollment numbers up and the doors open. Because no one wants to see law school or bar failure rates increase, there have been a number of articles written about changing legal education. This Article is no exception; it suggests that legal educators look beyond lower LSAT scores and GPAs.

Of equal or greater concern is the potential increases in students with attention-deficit/hyperactive disorder (ADHD) and autism spectrum disorder (ASD) admitted to law school. The basis for this theory involves a number of interconnected factors. There is a growing number of people diagnosed with the two disorders.14 And at the same time, there has been an increase in medical care and parental support for ADHD15 and ASD.16 Additional medical treatment and support for these neurological disorders has increased the likelihood of scholastic success for students with these disorders.17 It then follows that the increased scholastic success of people with ADHD and ASD has led to an upsurge in the number of law students diagnosed with these conditions. So while law school applications are down, the number of people diagnosed with ADHD and ASD is up. The juncture at which these intersecting trends meet may be perilous.

The rising number of students admitted to law school with ADHD and ASD makes understanding these disorders essential for today’s law professor; but at the same time, using the term “disorder” may be a disservice to those individuals. The term “disorder” is associated with malady or disturbance.18 People with ADHD or ASD have a neurological disorder because their brains do not process information the same way as the brains of neurotypical individuals. Their conditions are neither good nor bad—they are just different. This Article will continue to refer to ADHD and ASD.
ASD as disorders to parallel the language used by the medical community but urges the reader to refrain from associating negative connotations with the term. After all, the goal of this Article is to help clarify some of the confusion and concerns surrounding ADHD and ASD.

That law students with ADHD and ASD might struggle more than their neurotypical classmates is a reasonable concern. Although they can have higher IQs, students with ADHD typically have lower GPAs than their peers. Adults with ADHD also tend to have higher rates of academic failure and lower incomes. Specific learning disabilities likely affect 30 to 50 percent of students with ADHD. Additionally, the majority of young adults with ADHD have restricted social participation, such as needing more time to complete high school and poor attendance and graduation rates from college. The same symptoms that make school difficult for students with ADHD can impact students with ASD. However, ASD is a spectrum disorder with an array of manifestations.

One obstacle to understanding the difficulties facing students with ADHD is the shroud of secrecy that surrounds the disorder. Both the Americans with Disabilities Act (ADA) and the Federal

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Mean To Be Neurotypical?, VERYWELLHEALTH (June 22, 2018), http://bit.ly/2QzqisA.
22. Dusan Kolar et al., Treatment of Adults with Attention-Deficit/Hyperactivity Disorder, 4 NEUROPSYCHIATRY DISEASE & TREATMENT 389, 389–90 (2008).
Educational Rights and Privacy Act\textsuperscript{28} rightfully protect the privacy of disabled students, which means an instructor may never know that a student with a neurological disorder sits in his or her classroom. Given the confidential nature of neurodevelopmental disorders, wouldn’t adjustments to every class, rather than proceeding as if all of the students are neurotypical, be the best practice? This Article explores several slight alterations that a law professor can make to their classes to benefit law students with ADHD.

This Article also strives to help the law professor identify students with ASD. Without studying ASD, the average legal educator may view a student with ASD as socially awkward or shy. With insight into ASD, the professor will be better able to act as an instructor and supervisor to students with this neurological disorder. Additionally, the professor will be able to recognize the challenges facing typical students with ASD and to deliberatively structure each class to avoid exacerbating his or her students’ circumstances. Finally, the dedicated experiential instructor should be motivated to go beyond teaching the practice of law to personally assist the student with ASD by addressing the social aspects of practice.

Researching the literature and documented studies of adults with ADHD and ASD has been paramount to this Article. While most of the information comes from medical or psychological journals, this Article attempts to describe the science behind the disorders in non-scientific terms. In other words, this Article attempts to demystify some of the scientific principles behind ADHD and ASD and to answer some of the questions a law professor might have regarding the same. Due to the limited literature on this issue, some synthesis was necessary to specifically address the legal instruction of people with these neurological disorders. Additionally, a certain amount of first-hand and practical experience was involved in creating teaching solutions.

The purpose of this Article is to answer the legal instructor’s questions regarding ADHD and ASD. Part I of this Article underscores the importance of studying both neurological disorders and, in so doing, answers the question of why a law professor should be familiar with ADHD and ASD. The diagnoses of both ADHD and ASD have shaky foundations. Part II examines the historical contexts of ADHD and ASD, including the traditional biases faced by some populations in receiving—or not receiving—diagnoses or treatments for their disorders. When looking at the symptomatology of these disorders, it is helpful for an instructor to know which

groups traditionally lacked the medical and educational advantages available to their classmates. Part III begins by illustrating how some types of assignments can exacerbate the struggles that people with ADHD and ASD face. Part III then describes what ADHD and ASD look like both in and outside the classroom. After touching on the positive aspects of having students with ADHD and ASD in the classroom, this Article discusses these students’ challenging emblematic traits. Part IV introduces instructional adjustments that the law professor can make to benefit students with ADHD and ASD.

I. WHY DOES A LAW PROFESSOR NEED TO KNOW ABOUT THESE NEUROLOGICAL DISORDERS?

A. Change Is Here

Assisting students with their organization and focus would benefit everyone, not just those with neurological disorders. Unfortunately, many legal instructors feel it is not part of their job descriptions. After all, won’t these students soon occupy a profession where people’s lives may well be in their hands? Shouldn’t they be able to organize their studies and lives on their own? Yes and no. Students’ lawyering skills or legal profession classes may discuss the necessity of carrying a calendar and noting new assignment deadlines, but doctrinal and clinical professors can do more to help. Won’t assisting future generations of lawyers with their organizational skills benefit clients and students alike?

Legal education is “remarkably resistant to change.”29 Theories abound regarding the validity of this proposition. One justification for staying the course may be the tough love espoused by some legal instructors, especially in this era of fewer applications.30 Others see the resistance to change as defensive posturing by legal faculty entrenched in maintaining the status quo.31 While this Article does not speak to institutional barriers, one possible reason many law professors have not modified their instruction to aid students with ADHD or ASD might be a lack of information. Few


30. See Rick Bales, Glocking Bunnies, L. DEANS ON LEGAL EDUC. BLOG (Feb. 5, 2016), http://bit.ly/2Ne9VU1 (explaining that a law school dean’s comment about glocking bunnies was meant to encourage struggling law students to drop out before they fail out and negatively impact the school’s retention numbers).

31. Mangan, supra note 29 (“Curricular changes have to be approved by faculty members, most of whom graduated from the same elite law schools, have comfortable jobs, and have little reason to want change, several deans said.”).
law professors realize how many adults have these neurological disorders and what little effort it takes to adapt their teaching to facilitate these students.32

Nevertheless, the American Bar Association (ABA) has made it difficult for faculty to continue standing idly by while students flounder. The ABA responded to the changing nature of legal education by mandating accountability. Standard 501 of the ABA Standard and Rules Procedure for Approval of Law Schools speaks to law schools only admitting students with the propensity to graduate.33 Specifically, Standard 501(b) provides: “A law school shall not admit an applicant who does not appear capable of satisfactorily completing its program of legal education and being admitted to the bar.”34 With no clear guidelines, interpretation of this standard proved to be very subjective.35 Out of concern for some schools’ liberal interpretation of Standard 50136—specifically the caliber of students admitted—the ABA passed Interpretation 501-3 in 2017 to serve as a guideline for applying the rule.37 ABA Interpretation 501-3 sets forth a presumption of violation of Standard 501 if a school experiences 20 percent or more attrition.38 In other words, if 20 percent or more of admitted students flunk out, the school presumably violated the rule. A violation of the ABA’s guidelines can jeopardize a law school’s accreditation.39 Thus, if law schools continue admitting students with lower LSAT scores and GPAs, additional measures should be put in place to assure student success.

32. Although not focusing specifically on legal instructors, a master’s research project at the College of Education at Ohio University found “the areas of prevalence and treatment as areas where teachers have the least knowledge.” Jodi Danielle Funk, Assessing Ohio’s Teacher Knowledge of Attention Deficit Hyperactivity Disorder (ADHD): Are Current Teachers Adequately Prepared to Meet the Needs of Students with ADHD? 43 (Oct. 15, 2011) (unpublished Master’s thesis, Ohio University), http://bit.ly/2xdJTGy.


34. Id.


38. Id.

Even before the adoption of ABA Interpretation 501-3, scholars called for law professors to change their approaches to teaching. This Article echoes that cry but emphasizes the need to take students with ADHD and ASD into consideration when formulating new pedagogies. One reason for focusing on those neurological disorders is the meteoric rise in the diagnoses of ADHD and ASD.

B. The Tide Is High

Why should people with ADHD and ASD be of more concern now than in the past? Simply put, doctors are diagnosing more people with these disorders, which likely results in law schools admitting more students diagnosed with ADHD and ASD. That is not to say that former law students did not have ADHD or ASD; the diagnoses are simply more prevalent among today’s law students. If the make-up of the law school classroom has changed, shouldn’t legal education change accordingly?

The doubtful reader may demand proof of change. Substantiation begins with the number of people diagnosed with ADHD. In the United States, the number of people diagnosed with ADHD increased 42 percent from 2003 to 2011. This trend appears to be spreading worldwide. The increase in ADHD diagnoses is due in part to the burgeoning knowledge of the disorder. Although the American Psychiatric Association (APA) first recognized ADHD as a mental disorder in the late 1960s, scientists began researching ADHD only 20 years ago. This onslaught of recent research

43. Devon Frye & Janice Rodden, Explaining the Global Rise in ADHD Diagnoses, ADDITUDE, http://bit.ly/2MzCTbV (last visited Aug. 18, 2017). Other reasons for the global rise in ADHD diagnoses include: marketing, the influence of the United States, the Internet, and patient advocacy groups.
46. For a timeline of ADHD diagnostic criteria, prevalence, and treatment, see id.
has made clear that ADHD is often comorbid with a number of disorders.

Comorbidity is a term used when a person has two or more diseases at the same time, and it is very common in people with ADHD. For example, up to 50 percent of adults with ADHD have substance abuse problems, 30 to 50 percent have one or more episodes of depression, and 40 to 60 percent have dealt with anxiety disorder.47 Historically, comorbidity often led to the misdiagnosis of ADHD. With today’s research, the medical community knows that the most common manifestation of ADHD is comorbid with another disorder.48 In fact, 60 to 100 percent of patients with ADHD also have one or more comorbid conditions.49 The medical community’s recognition of ADHD’s comorbidity with other disorders has triggered a broader range of diagnoses.

In light of the increased diagnosis of ADHD, some argue that the medical community is overdiagnosing the disorder.50 There are also allegations that the overdiagnosis of ADHD has led to the abuse of ADHD medication on college campuses.51 Studies have found that white, male, fraternal members with lower GPAs at competitive northeastern colleges are most likely to abuse ADHD stimulant medication.52 Yet most law school faculty lack the background necessary to determine whether a medical professional has erroneously diagnosed a student with ADHD. Thus, the presumption should go to the student admitting to struggle with ADHD. Let the medical professionals argue over whether they are overdiagnosing ADHD. In the following section, this Article explains how particular populations remain underdiagnosed for ADHD.

The diagnoses of autism and ASD have also been on the rise. In 2000, the Center for Disease Control and Prevention (CDC) esti-

47. Kolar et al., supra note 22, at 391.
48. Nanda N. J. Rommelse et al., Comorbid Problems in ADHD: Degree of Association, Shared Endophenotypes, and Formation of Distinct Subtypes, 37 J. ABNORMAL C HILD P SYCHOL. 793, 793 (2009) (“It is estimated that around 60-100% of patients with ADHD also exhibit one or more comorbid disorders.”).
49. Id.
51. See Andrea Green & David Rabiner, What Do We Really Know About ADHD in College Students?, 9 NEUROTHERAPEUTICS 559, 564 (2012) (“The prevalence of stimulant medication diversion by students with ADHD was found to be 26% in the previous 6 months, 35% in the previous 12 months, and 62% during their lifetime.”).
52. Shaheen Lakhan & Annette Kirchgessner, Prescription Stimulants in Individuals with and Without Attention Deficit Hyperactivity Disorder: Misuse, Cognitive Impact, and Adverse Effects, 2 BRAIN & BEHAVIOR 661, 664 (2012).
mated that one in 150 children had ASD.\textsuperscript{53} By 2014, the prevalence rate of ASD rose to one in every 68 children—an increase of approximately 150 percent since 2000\textsuperscript{54}—making autism one of the fastest growing developmental disabilities.\textsuperscript{55} One reason for the increase in ASD is the expansion of what ASD looks like.\textsuperscript{56} “For example, about 80\% of patients diagnosed with Autism in the 1970s and 1980s were also intellectually disabled.”\textsuperscript{57} Nowadays, the overwhelming majority of those diagnosed have milder forms of ASD,\textsuperscript{58} and 44 percent of children diagnosed with ASD have average or above-average IQs.\textsuperscript{59}

Aside from the escalation of ADHD and ASD diagnoses, another indicator of the increase in law students with these neurological disorders is the increase in students seeking accommodations during their undergraduate careers. Accommodations include anything from a quiet room or additional time for taking tests to allowing or providing a notetaker in every class. In 2010, the University of North Carolina at Chapel Hill reported that the number of learning disabled (LD) and “ADD” students seeking eligibility for accommodations had doubled since 2002, with no sign of that rate slowing down.\textsuperscript{60} The increase in accommodation requests is not limited to the United States. Canada, Australia, and the United Kingdom have also seen rises in requests for accommodations.\textsuperscript{61}

\begin{footnotesize}
\textsuperscript{53} CDC-ASD, supra note 14.
\textsuperscript{54} Susan Scutti, Autism Prevalence Increases: 1 in 59 U.S. Children, CNN (Apr. 26, 2018), https://cnn.it/2p7UNJA.
\textsuperscript{56} Sam Sholtiz, Increasing Prevalence of Autism Is Due, in Part, To Changing Diagnoses, PENN STATE (July 21, 2015) (noting the increase of individuals classified with autism may be a result of reclassification of other intellectual disability disorders).
\textsuperscript{58} Ernest Van Bergeijk et al., Supporting More Able Students on the Autism Spectrum: College and Beyond, 38 J. AUTISM & DEV. DISORDERS 1359, 1359 (2008).
\textsuperscript{59} See Karen Kaplan, Here’s Why the Apparent Increase in Autism Spectrum Disorders May Be Good for U.S. Children, L.A. TIMES (Apr. 26, 2018), https://lat.ms/2Ox3GqU.
\textsuperscript{60} Melana Zyla Vickers, Accommodating College Students with Learning Disabilities: ADD, ADHD and Dyslexia, POPE CTR. SERIES ON HIGHER EDUC. (John William Pope Ctr., Raleigh, NC) Mar. 2010, at 3, 3, http://bit.ly/2xffTdw (“[T]he number of LD and ADD students seeking eligibility for accommodations has almost doubled since 2002 and has grown eight fold since the 1980s.”).
\textsuperscript{61} Mike Condra et al., Academic Accommodations for Postsecondary Students with Mental Health Disabilities in Ontario, Canada: A Review of the Litera-
Such statistics support the proposition that the number of students seeking accommodations is rising even more rapidly than the rise of people diagnosed with ADHD.\textsuperscript{62} Some colleges even report that students are seeking accommodations for “psychological conditions like depression and bipolar disorder.”\textsuperscript{63} The more students with neurological disorders seek accommodations, the more likely those students will attain higher undergraduate grade-point averages (UGPAs).\textsuperscript{64}

Of course experts have alternative theories for the rise in students seeking accommodations. Some assert that the rise in accommodations requests is due in part to the advancement in medication.\textsuperscript{65} Others argue that the increase in the United States is due to the 2001 passage of the No Child Left Behind Act and the 2008 ADA Amendments Act (ADAAA).\textsuperscript{66} There is even concern that students are faking ADHD symptoms to gain an academic advantage.\textsuperscript{67} Students with higher UGPAs have a better chance of admission to postgraduate school. Thus, when students achieve higher UGPAs after receiving accommodations, they in turn have a better chance of admission to postgraduate school. Whether the increase in accommodations requests is need-based is outside the scope of this Article. What is important is the racial skew found in the distribution of college accommodations.

Limited finances may be a cause of some of the disparity in the distribution of accommodations. Colleges are permitted to ask a disabled student to provide expensive diagnostic test results to support his or her request for accommodations.\textsuperscript{68} Furthermore, the federal government does not mandate that colleges pay for per-
sonal aids or service accommodations,\textsuperscript{69} such as attendants to assist with dressing or bathing. The ADAAA only mandates that post-secondary schools provide auxiliary aids that make their programs and activities accessible to disabled students.\textsuperscript{70} Unfortunately, low-income students may be unable to pay for a required medical assessment to obtain accommodations, let alone pay for the additional services necessary to put them on the same academic field as their peers.\textsuperscript{71} Students with fewer financial resources are more likely to be African-American or Hispanic, rather than white or Asian.\textsuperscript{72} Perhaps unsurprisingly, colleges that traditionally attract affluent students are seeing a rise in reported neurological disorders than colleges traditionally attended by students with lesser means.\textsuperscript{73} Most of the reporting of these disorders comes from white males or their parents.\textsuperscript{74}

Unlike elementary and secondary school, the burden is on the college student needing accommodations to proactively request the auxiliary aids.\textsuperscript{75} Unfortunately, African-American students are less likely to self-report a learning disability in higher education and thus less likely to receive academic accommodations for the same.\textsuperscript{76} Fear of being labeled is one reason some populations do not report their learning disabilities.\textsuperscript{77} Another hindrance is lack of knowledge regarding the possibility of such assistance.\textsuperscript{78}

\begin{thebibliography}{99}
\bibitem{69} Id.
\bibitem{72} Tiffany Hsu, \textit{Minority Families Struggle to Break Out of Poverty, Study Finds}, L.A. \textit{Times}, Mar. 17, 2015, https://lat.ms/2QzkS0C (“In 2013, the median net worth of white households was 3 times higher than that of black families . . . . The disparity for minorities is so large not because ‘of a lack of work effort, but because they are more likely to be working in low-paying jobs’ . . . .”).
\bibitem{73} Vickers, \textit{supra} note 60.
\bibitem{74} Pellegrino et al., \textit{supra} note 71.
\bibitem{75} U.S. Dep’t Educ., \textit{supra} note 68.
\bibitem{77} Id.; see also Adrienne Green, \textit{The Cost of Balancing Academia and Racism}, \textit{Atlantic} (Jan. 21, 2016), http://bit.ly/2xlf422 (“But research has shown that the higher-education experience often requires that black students employ more grit than their white peers if they want to achieve both in the classroom and outside of it, where they have to overcome stereotype threat and straight-up racism.”).
\bibitem{78} See Laura Marshak et al., \textit{Exploring Barriers to College Student Use of Disability Services and Accommodations}, 22 \textit{J. Postsecondary Educ. & Disability} 151, 156 (2010).
\end{thebibliography}
C. It Takes Two

Why does this Article examine two different neurological/neurodevelopmental disorders together? In addition to ADHD and ASD both having similar rises in their diagnoses, both conditions impact the executive function of the brain.79 Perhaps the more accurate description would be that persons with ADHD and ASD have executive dysfunction.80 Studies have found that ADHD and ASD are not the result of executive dysfunction, but rather that executive dysfunction is a symptom of both disorders.81 But while both ADHD and ASD affect the executive function of the brain, the severity of the symptomology varies as widely as people do.

Another reason for combining ADHD and ASD in this Article is that scientists have found extensive comorbidity between the disorders.82 Ironically, while the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) prohibited the diagnosis of ADHD for those persons diagnosed with ASD and vice versa,83 the fifth edition (DSM-V) allows for dual diagnosis. Presently, it is estimated that anywhere from 30 to 50 percent of persons with ASD manifest symptoms of ADHD and that nearly two-thirds of persons with ADHD also show symptomology for ASD.84 Given the relatively new allowance for dual diagnosis, the exact reason for the comorbidity is uncertain. But studies have shown that there is a moderate degree of overlap in the genetic influences of the two neurological disorders.85 For now, and for the purpose of this Article, it should suffice to understand that oftentimes a person with one of these disorders also has traits associated with the other.

82. Rommelse et al., supra note 48 (finding a 69 percent correlation between ADHD and autistic traits).
84. Id.
Finally, some of the same tools used in class design can benefit students with either disorder. Few law professors hold degrees in education. They never studied theories on teaching students, let alone adjusted their teaching to account for people with diverse learning styles. As a result, the principal design for legal instruction is cognitive uniformity. That is to say that most law professors design their courses assuming that everyone learns in the same manner. Yes, they may study the different learning styles of Baby Boomers,\textsuperscript{86} Gen Xers,\textsuperscript{87} and Millennials;\textsuperscript{88} but law professors rarely adjust their instruction techniques in contemplation of the individual differences within generations.

II. PUTTING THESE NEUROLOGICAL DISORDERS IN HISTORICAL CONTEXT

A. The Epic Story of ADHD and ASD

Why does an instructor need to be familiar with the history of ADHD and ASD? One reason is that many of the commonly held beliefs concerning ADHD no longer apply. Thus, the average law professor may harbor some misconceptions about the disorder. The public knows even less about ASD. Absent having a family member with ASD, most people do not know a great deal about the neurodevelopmental disorder. Both disorders are fraught with misconceptions. Furthermore, the studies of ADHD and ASD seem to be fluid disciplines with constant and perplexing changes. Understanding the basis for this confusion is the first step toward comprehending the disorders.

Most law professors think they understand ADHD well. After all, most instructors grew up hearing about the disorder. While ADHD stands for attention-deficit/hyperactivity disorder, those that lived through the 1980s knew the disorder as attention deficit disorder (ADD), either with or without hyperactivity.\textsuperscript{89} Consequently, the medical community diagnosed people either with

\begin{itemize}
\item \textsuperscript{87} Generation X includes persons born between 1965 and 1980. \textit{Id.}
\item \textsuperscript{89} See \textit{AM. PSYCHIATRIC ASS’N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS} 43–44 (3d ed. 1980) [hereinafter DSM-III].
\end{itemize}
ADD or ADHD. By the time the APA published the DSM-IV in 2000, it had switched the label to ADHD. Back then, experts categorized ADHD as a disruptive behavior disorder, similar to oppositional defiant disorder and conduct disorder. Including ADHD in this category did nothing to help dispel the negative connotations associated with ADHD. The DSM-IV included the following ADHD subtype designations: combined type, predominately inattentive type, and predominately hyperactive-impulsive type.

The DSM-V removed ADHD from the realm of disruptive disorders and correctly placed it within neurodevelopmental disorders domain. Shifting the paradigm of ADHD to a neurodevelopmental disorder removed the focus from any negative behavioral inferences and placed it on the workings of the brain. The DSM-V also replaced the idea of “types” of ADHD with “presentations” of ADHD. Those presentations include: combined, predominately inattentive, or predominately hyperactive/impulsive.

If the constant evolution of ADHD wasn’t confusing on its own, ADHD was historically associated with hyperactive children. In the past, even experts thought those hyperactive children

92. DSM-III, supra note 89, at 85, 884.
93. Oppositional defiant and conduct disorders are two similar conditions involving repeated incidents of acting out often with angry and malicious behavior. Disruptive Behavior Disorders, CHADD: NAT’L RESOURCE CTR. ADHD, http://bit.ly/2xc8pIg (last visited Aug. 18, 2018). “It is felt that the difference between oppositional defiant disorder and conduct disorder is in the severity of symptoms and that they may lie on a continuum often with a developmental progression from ODD to CD with increasing age.” Id.
95. AM. PSYCHIATRIC ASS’N, DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 461 (5th ed. 2013) [hereinafter DSM-V]. The DSM-V describes disruptive disorders as “unique in that these problems are manifested in behaviors that violate the rights of others.” Id.; see also Amanda Morin, The Difference Between Disruptive Behavior Disorders and ADHD, UNDERSTOOD, https://u.org/2Ord5R8 (last visited Aug. 18, 2018) (“Not all kids who have ADHD have a disruptive behavior disorder.”). It is important to move ADHD out of disruptive behavior disorders to avoid wrongfully stereotyping every person with ADHD as a possible threat to the person and property of others.
96. DSM-V, supra note 95, at 60–61; see also ADHD Timeline, supra note 45.
97. Kolar et al., supra note 22, at 389 (“ADHD was considered for many years to be a disorder limited to childhood due to diminishing externalizing behaviors.”).
would outgrow their disorders upon reaching majority. Now more people know that adults can also have ADHD. Perhaps less well-known, approximately one-half to two-thirds of children with ADHD have symptoms that persist into adulthood. In fact, the most recent statistics indicate that somewhere between 4.4 and 5 percent of adults have ADHD.

ADHD’s association with children arose from the narrow constraints of the *Diagnostic and Statistical Manual of Mental Disorders*. Historically, doctors could only diagnose patients with ADHD if the person in question manifested symptoms of the disorder in childhood. The DSM-V requires outward manifestations of ADHD to be observable by age 12, but previous editions required symptoms of ADHD to be present by age seven. If the patient was any older, they would need to provide independent documentation showing they experienced the difficulties associated with the disorder before those pivotal years of age. This onset requirement has often been a difficult obstacle for adults with ADHD seeking accommodations for the bar exam. Remarkably, recent studies of the progression of ADHD in children have led research-
ers to a number of surprising cases of adults with ADHD that did not appear to have the disorder in childhood.\textsuperscript{107}

Another problem arising from the traditional association of ADHD with youth was the widely held belief that ADHD would always look the same irrespective of age.\textsuperscript{108} While experts previously—and erroneously—believed that the disorder dissipated by adulthood, they now know that most adults with ADHD have subtler symptomology than children.\textsuperscript{109} Although the symptoms may lower in intensity later in life, ADHD still impacts the adult individual’s sense of self-control and self-efficacy and often leads to problems in school, work, and relationships.\textsuperscript{110}

Today, ADHD is the diagnosis given to adults with symptoms of hyperactivity or impulsiveness. Everyone has met a person believed to be hyperactive and has had a class interrupted by a student struggling with impulsivity. These outward manifestations of their disorder make the atypical workings of their executive function self-evident. But more often, adults with ADHD present inattentive.\textsuperscript{111} As logic would dictate, people “presenting” with inattentive ADHD may appear as if their minds are elsewhere.\textsuperscript{112} They may also make careless mistakes and forget daily activities.\textsuperscript{113} Unfortunately, the person presenting with inattentive ADHD can struggle as much scholastically as a classmate presenting with hyperactive-impulsive ADHD but without the telltale symptomology.\textsuperscript{114} Due to the fewer outward signs of inattentive ADHD, more people with these presentations go undiagnosed by their doctors and unrecognized by their instructors.

The majority of adults struggling with ADHD have symptoms of both presentations or a combination subtype.\textsuperscript{115} Research indicates that 62 percent of diagnosed adults have a combination sub-

\begin{itemize}
\item \textsuperscript{107} Sumathi Reddy, \textit{Can Adults Get a Different Kind of ADHD?}, \textit{Wall St. J.} (May 23, 2016), https://on.wsj.com/2pb2rD5 (citing a United Kingdom study where 166 adults who were undiagnosed as children were found to have ADHD at age 18).
\item \textsuperscript{108} See generally Sandra JJ Kooij et al., \textit{European Consensus Statement on Diagnosis and Treatment of Adult ADHD: The European Network Adult ADHD}, 10 \textit{BMC Psychiatry} 67 (2010).
\item \textsuperscript{109} Id. at 68.
\item \textsuperscript{111} Id.
\item \textsuperscript{112} Id.
\item \textsuperscript{114} Id.
\item \textsuperscript{115} Id.
\end{itemize}
type. While 31 percent of adults have only the inattentive type of ADHD, approximately 93 percent of diagnosed adults have inattentive symptomology. That leaves only seven percent of adults diagnosed with ADHD presenting with only hyperactive/impulsive symptomology. Thus, the notion of a “typical” person with ADHD is not typical at all.

Equally confusing is the history of ASD. Until the release of the DSM-V in 2013, autistic disorder, Asperger’s disorder, and pervasive developmental disorder not otherwise specified (PDD-NOS) were considered separate—albeit similar—neurological disorders. Scientists believed that all three disorders compromised social communication skills but that children with autism also had a delay in the development of spoken language not found in children with Asperger’s. Doctors reserved the PDD-NOS diagnosis for people with “severe and pervasive impairment in the development of reciprocal social interaction or verbal and nonverbal communication skills, or when stereotyped behavior, interests, and activities are present, but the criteria are not met for a specific pervasive developmental disorder, schizophrenia, schizotypal personality disorder, or avoidant personality disorder.” In other words, PDD-NOS was the diagnosis given to patients that appeared to be on the autism spectrum but didn’t have the defining characteristics that led to a diagnosis of autism or Asperger’s.

For years, scholars quarreled over whether these were really three different disorders or varying shades of one. Experts now group these three conditions together under ASD. Rather than label a person with mild or severe ASD, a physician should set out the manner in which the ASD presents itself.

Unlike with ADHD, experts never believed that people could outgrow autism. ASD was considered a life-long disorder. A recent study, however, found some exceptional cases where people,
often with the help of therapy, overcame symptoms of ASD. In addition, now that Asperger’s and PDD-NOS fall under the ASD diagnosis, individuals diagnosed with ASD may have higher-than-average IQs. In fact, 44 percent of children diagnosed with ASD have average or above-average IQs. Doctors often diagnosis these individuals with high-functioning ASD, or “HFA.”

Given the requirements for admission to law school, a law professor is more likely to have a student with HFA—as opposed to the other end of the autism spectrum—in his or her class.

B. Some People Are More Equal than Others

Studying the history of ADHD and ASD can help the reader place the disorders in their proper contexts; understanding the systemic gender and racial biases in diagnosing the disorders can aid the benevolent instructor in identifying the source of a student’s learning or social deficits. Historically, doctors were more likely to diagnosis boys with ADHD than girls at a 1:3 to 1:16 ratio. Some experts speculate that this disparity reflects not the presence of ADHD but rather a clinical referral bias. After all, doctors can only diagnosis children brought to their offices. Others argue that the skewed ratio confirms the theory that girls have different symptomology than boys, especially when it comes to presenting with hyperactive-impulsive ADHD. For example, teachers and parents may recognize the boy constantly running around as having ADHD, but not the girl who incessantly talks to her friends. Additionally, girls are more likely to have the more difficult-to-diagnosis ADHD that presents itself as inattentive. A 2014 study supports

126. Id.
129. An obvious parody of George Orwell’s famous quote from Animal Farm. See George Orwell, Animal Farm 133 (Signet Classic 1996) (1946) (“There was nothing there now except a single Commandment. It ran: ‘ALL ANIMALS ARE EQUAL BUT SOME ANIMALS ARE MORE EQUAL THAN OTHERS.’”).
131. Young et al., supra note 21, at 6.
132. Ginsberg et al., supra note 101.
135. Young et al., supra note 21, at 6 (“Compared with boys, girls are more frequently present with inattentive symptoms, rather than disruptive behaviours
the theory that girls are underdiagnosed with ADHD. In that study, doctors found an equal distribution of ADHD between boys and girls. Doctors have also found the disorder equally distributed between adult men and women. It is thus apparent that parents and teachers often miss the signs of ADHD in girls or have a bias toward recognizing the symptoms more often in boys.

Racial partiality in diagnosing white children with ADHD is also apparent. One study showed that doctors are 69 percent less likely to diagnose African-American children with ADHD. This diagnosis disparity exists despite African-American youth presenting with more ADHD symptoms. Some reasons for the disparity include the cultural beliefs or biases held by parents and the failure of the medical community to understand those cultural concerns. This trend seems to continue into college, where rates of self-reporting of ADHD are lower at historically black colleges and universities.

Unfortunately, still more factors likely to decrease the chances of obtaining an ADHD diagnosis and treatment for the same exist, including non-English-speaking households and lack of access to healthcare. Furthermore, Hispanic children with ADHD are less likely to be treated with stimulant medication. In other words, Hispanic people have historically been underdiagnosed and undermedicated for ADHD.

[sic] or problems in school. It has been suggested that this presentation may be more difficult to identify and could lead to a gender-based referral bias.”


137. Id. at 4.


139. See Paul L. Morgan et al., Racial and Ethnic Disparities in ADHD Diagnosis from Kindergarten to Eighth Grade, 132 PEDIATRICS 85, 89 (2013).

140. Torri W. Miller et al., Attention-Deficit Hyperactivity Disorder in African American Children: What Can Be Concluded from the Past Ten Years?, 29 CLINICAL PSYCHOL. REV. 77, 84 (2009).


142. Pellegrino et al., supra note 71.


144. Id. at 175 (“[A] study of children in public schools reported that Hispanic students received methylphenidate at approximately one-third the rate of white students.”).

145. Morgan et al., supra note 139, at 85–93.
optimistically—that ADHD is just not as prevalent in the Hispanic population. 

Aside from the specific populations of children set out above, there is also speculation that adults with ADHD are underdiagnosed. Studies show that “fewer than 20% of adults with ADHD are currently diagnosed” with the disorder. Thus, if a law professor has a student with ADHD in his or her class, that student is unlikely to be receiving treatment for his or her disorder. Presumably, the complexity of the comorbid conditions set out above is partially at fault for the underdiagnosis of ADHD in adults. Doctors are more likely to treat an adult patient for the comorbid condition rather than the ADHD. So even if doctors overdiagnose ADHD in white households with health insurance coverage, the disorder is still underdiagnosed in households without insurance, African-American and Hispanic households, and young girls and adults that have inattentive ADHD.

As with ADHD, there appears to be a gender bias associated with ASD. Historically, doctors were four times more likely to diagnosis a boy with ASD than a girl. Thus, scientists traditionally conducted ASD research on boys. Not surprisingly, experts initially thought ASD in females would look just as it did in males—presenting with deficits in social communication. Recent research shows that girls with ASD often struggle with depression, anxiety, and eating disorders in attempts to keep up socially with their neurotypical peers. Because of the gender-biased research, doctors typically diagnose girls with mild symptoms of ASD two years later than their male counterparts. Additionally, studies have found that girls with ASD are more similar to neurotypical boys than to boys with ASD or neurotypical girls.

146. An analysis of parent-reported data from the National Health Interview Survey found that 6.3 percent of children in Hispanic populations were diagnosed with ADHD compared to 11.5 percent of white children who were diagnosed with ADHD. General Prevalence, CHADD: NAT’L RESOURCE CTR. ADHD, http://bit.ly/2NOkxZg (last visited Aug. 18, 2018).
147. Ginsberg et al., supra note 101.
148. Id.
150. See DSM-V, supra note 95, at 30.
152. Id.
153. Id.
Racial inequity is also prevalent in the diagnosis of children with ASD. African-American and Hispanic children are less likely to have an ASD diagnosis in their medical records.\textsuperscript{154} Other studies show that doctors are likely to diagnose an African-American child with ASD at an older age than a white child and less likely to diagnose a Hispanic child with ASD at all.\textsuperscript{155} Unfortunately, doctors are more likely to misdiagnose African-American children with conduct disorder or ADHD before they correctly diagnose them with ASD.\textsuperscript{156} In addition, children with “more severe impairment associated with behavioral characteristics of autism” that are raised in poverty are less likely to be diagnosed with a “psychiatric diagnosis.”\textsuperscript{157} Obviously, a late diagnosis of ASD leads to later therapy, if any at all. A late diagnosis also makes it more difficult to document the history of the disorder to obtain accommodations.\textsuperscript{158}

Experts have put forth a number of theories regarding the delay in ASD diagnoses, many of which mirror the diagnosis delay rationales for ADHD. For example, two possible reasons are professional bias and parental ignorance regarding the disorder.\textsuperscript{159} Financial resources may also be a cause of later ASD diagnoses in African-American and Hispanic children. Some researchers offer a unique theory that children of color may often have a communication delay that is subtler than that of white children.\textsuperscript{160} While having a less-severe communication delay is certainly a positive attribute, it could ultimately lead to the negative outcome of receiving a later ASD diagnosis.

The historical racial bias in diagnosing ADHD and ASD may have a real bearing on law students. In 1987, there were 13,250 “minorities” enrolled in law school.\textsuperscript{161} Since 1987, a steady increase in minority enrollment has raised that number to 35,914 in 2013.\textsuperscript{162} Not surprisingly, with the decrease in law school applicants and the


\textsuperscript{155} Id.


\textsuperscript{158} See id. at 356 (discussing a case example of the late diagnosis of an African-American male).

\textsuperscript{159} See Mandell et al., supra note 154, at 496–97.

\textsuperscript{160} Turner, supra note 156.


\textsuperscript{162} Id.
rise of minority law students, there are fewer non-minority law students. Professor Aaron Taylor speculates that in 2015 there were 9,000 fewer white law students and 1,300 fewer Asian law students than in 2010. While the ABA does not track the attrition rate of non-minority students per se, it monitors the enrollment of minorities in each class. A consistent drop in the number of minorities still enrolled in law school by their second year occurs each year. For example, while 12,446 minorities were enrolled as first-year law students in 2013, only 10,947 minorities were enrolled as second-years in 2014. Diversity is an ideal goal, unless it means more people are flunking out of law school or failing the bar exam. Although there is no singular solution to this issue, it is important to reiterate that African-American and Hispanic students are less likely to have received the correct diagnosis or accommodations for ADHD and ASD before coming to law school. Although no law professor should assume that any population has these neurological disorders, he or she might consider the benefits of designing future classes to support the students that do.

III. The Two Neurological Disorders in the Law Classroom

As set out above, both ADHD and ASD are neurodevelopmental disorders. The prefix neuro- indicates that such disorders are associated with the brain or nervous system. Attaching the word developmental distinguishes these disorders from those associated with brain injuries or progressive/degenerative disorders. In essence, both ADHD and ASD are disorders involving the brain and nervous systems with a typical onset during the brain’s developmental stage. Most specialists today believe there is more than one cause of ADHD or ASD and that both disorders impact brain function, albeit in different ways. They also use diverse terminology to describe the mechanics of the disorders. For the sake of clarity, this Article will refer to the executive function of the brain as

163. As Law School Applicant Pool Shrinks, Student Bodies Diversify, NAT’L PUB. RADIO (Apr. 26, 2016), https://n.pr/2paxw9H.
164. AM. BAR ASS’N, supra note 161.
165. Id.
166. Id.
168. See DSM-V, supra note 95, at 31.
the area affected by the two neurological disorders—or succinctly, executive dysfunction.

The basic definition of executive function is “a broad umbrella term associated with higher-order cognitive functioning and goal-directed behavior.” Although the definition may make the task sound modest, it requires the precise synchronization of various mental tasks. A neurotypical executive function is constantly evaluating and reevaluating one’s actions or inactions based on updated information. The executive dysfunction found in students with ADHD interferes with this evaluation process. Dr. Thomas Brown likens the executive function of the brain to a conductor of an orchestra. A sounder comparison might be a traffic officer in the middle of a busy city street intersection. Everyone has seen the videos of skillful police officers that dance while directing traffic. The officers always appear calm, even with cars and pedestrians approaching from all sides. Our skillful officer can take in the constantly changing variables and alter his finger gestures accordingly. The brain of someone with executive dysfunction functions more like a crossing guard. Crossing guards help students traverse a school intersection but might have more difficulty performing when confronted with additional noise or distractions. The result: information may be scrambled or lost, depending on other concurrent stimuli. The “faulty” executive function process makes it difficult to stay on task or remember information.

Experts divide the specific operations of the brain’s executive function into different categories, although the name and number of those groupings differ among them. Planning, flexibility, and inhibition make up one division. Other experts divide the operations into shifting, updating, and inhibition. Dr. Thomas E. Brown identifies six areas of executive function that are impaired in individuals with ADHD: activation, focus, effort, emotion, memory, and action. Regardless of the nomenclature, the executive

170. Christopher R. Brydges et al., Executive Functioning (Fully) and Processing Speed (Mostly) Mediate Intelligence Deficits in Children Born Very Preterm, 68 INTELLIGENCE 101, 101 (2018).
173. Hill, supra note 171, at 192, 197, 203.
function is clearly responsible for many important aspects of day-to-day life. Imagine the additional strain on these operations that occurs when a person with ADHD adds law school to the list of daily obligations. It is no wonder the executive dysfunction muddles information through the process.

Before discussing the complications of ADHD or ASD, it is incumbent to mention the advantages of having students with these disorders in your classroom. Diversity of any kind benefits the classroom. Individuals with different upbringings, backgrounds, skin tones, and learning styles bring unique insights to the learning process. Supporting these differences, and encouraging students to do so as well, is an important aspect of modern-day teaching. Additionally, the symptomology expressed by persons with ADHD and ASD vary vastly. No one should presume inabilities based solely on a student’s diagnosis. In some instances, the IQ of a person with ADHD or ASD counterbalances some of the executive dysfunction.

A. ADHD

Law professors should consider themselves lucky to have students with ADHD in their classrooms. The typical person with ADHD brings a number of positive qualities to the classroom. Of course the positive traits, just like the more challenging ones, differ from person to person. People with ADHD commonly possess the following traits.

One positive trait frequently found in people with ADHD is the ability to tender original ideas or, in unoriginal terminology, to “think outside the box.” An open-minded working group can benefit from the input of a student with ADHD. Unfortunately, not all groups support the student with ADHD’s well-intended ideas. And these days, one can encounter ridicule both face-to-face
or via social media. For the struggling student, scorn can exacerbate lack of self-esteem.\textsuperscript{179}

Another positive trait shared by many people with ADHD is creativity.\textsuperscript{180} Neuroscience research has found a link between ADHD and creativity.\textsuperscript{181} Some of the creative traits often found in people with ADHD include greater levels of spontaneous thinking, daydreaming, energy, mind-wandering, and impulsivity.\textsuperscript{182} Unfortunately, these same traits can also make embracing traditional education difficult.

Students with ADHD often have winning personalities. Unlike people with ASD, students with ADHD tend to have a good sense of humor.\textsuperscript{183} They are often compassionate and strive to be fair.\textsuperscript{184} Although most people with ADHD possess these characteristics naturally, others may adopt or feign such traits to mask insecurities about their disorder.\textsuperscript{185}

While it may seem counterintuitive, students with ADHD often have the ability to hyperfocus on matters of personal interest.\textsuperscript{186} This hardly seems possible given the stereotypical characteristics of people with ADHD, but the ability to focus can arise when the student likes the topic of conversation or study. This ability does not demonstrate a lack of effort at other times; rather it pertains only to material that the person with ADHD finds interesting. Related to the ability to hyperfocus, a person with ADHD may also work tirelessly on a project that he or she finds interesting.\textsuperscript{187}

A person with ADHD is also prone to take more risks than his or her neurotypical counterpart.\textsuperscript{188} The ability to act in the face of

\textsuperscript{179} Van Pelt, \textit{supra} note 110, at 14.

\textsuperscript{180} Stephanie A. Sarkis, \textit{Is the ADHD Brain More Creative?}, PSYCHOL. TODAY (June 13, 2011), http://bit.ly/2p9UAFF (“A later study . . . found that people with ADHD scored higher in original creativity and creative achievement than those without ADHD.”).


\textsuperscript{182} \textit{Id.}


\textsuperscript{188} \textit{Id.}
uncertainty is considered a positive trait in many fields,\textsuperscript{189} and it may well serve the student with ADHD in the context of group work. On the other hand, the willingness to take risks is likely the flip side of that student’s struggle with impulsivity.\textsuperscript{190}

Finally, people with ADHD tend to be generous.\textsuperscript{191} Through their desire to make others happy, people with ADHD are often generous with their time and resources. A similar description of people with ADHD is “big-hearted.”\textsuperscript{192} A generous, big-hearted person is a positive asset to any class and to the field of law; however, he or she might also be susceptible to exploitation by other group members or classmates.

The person with the above traits may still struggle in law school. Imagine a world in which lengthy instructions are lost and the thought of reading countless pages of dense material and answering hundreds of questions is a mountain too steep to climb. A certain degree of angst plagues most law students,\textsuperscript{193} but imagine approaching assignments with the additional burden of ADHD. The neurological disorder causes an impairment that can manifest in many ways.

The student with ADHD will likely have difficulty starting a task and organizing and prioritizing multiple projects, which results in procrastinating assignments until the last minute.\textsuperscript{194} The law professor may grow frustrated by the student’s procrastination, but the student with ADHD is rarely lazy or irresponsible. Instead, the student is lost and overwhelmed.

The commonly held belief that people with ADHD have difficulty focusing\textsuperscript{195} is not entirely accurate. Students with ADHD may have difficulty focusing on a class lecture but remain focused

\textsuperscript{189}. For example, the ability to act in the face of uncertainty is desirable for entrepreneurs. See id.

\textsuperscript{190}. Erica Patino, Why Teens with ADHD May Take More Risks, UNDERSTOOD, https://u.org/2p84Xd7 (last visited Aug. 18, 2018).


\textsuperscript{193}. Mary Dunnewold, Handling Law School Stress Well, A.B.A.: BEFORE THE BAR (Dec. 1, 2011), http://bit.ly/2MuWzsB (“In fact, over the past several decades, empirical studies have confirmed that law students are among the most stressed of all graduate students.”).

\textsuperscript{194}. Joseph R. Ferrari & Sarah E. Sanders, Procrastination Rates Among Adults with and Without AD/HD, 3 COUNSELING & CLINICAL PSYCHOL. J. 2, 7 (2006).

on something else.\textsuperscript{196} Distraction can come from outside the classroom, the laptop in front of them, or their own whirling thoughts. The end result is the student, through no fault of his or her own, may not be able to completely follow the lesson as taught in the typical lengthy lecture format.\textsuperscript{197}

The difficulty that students with ADHD have with hearing exacerbates this condition. While approximately seven percent of all children have auditory processing disorder (APD), experts speculate that 50 percent of children with ADHD also have APD.\textsuperscript{198} Studies show that children with hearing loss are more likely to have behavioral problems.\textsuperscript{199} Unfortunately, experts often diagnose young people with ADHD because of their behavioral problems\textsuperscript{200} without screening for APD. Adults with ADHD often struggle with the same problem.\textsuperscript{201} If a typical student with ADHD has trouble focusing, that student will have even greater difficulty if he or she also has APD. The typical symptomology of the student with ADHD and APD is a problem with short-term memory and difficulty distinguishing speech with other noise.\textsuperscript{202} Unfortunately, some individuals diagnosed with ADHD may truly have hearing loss instead.

Besides inability to focus on the spoken word, people with ADHD frequently have difficulty reading. Generally, the problem is not with the student’s vocabulary but rather with processing speed and working memory.\textsuperscript{203} To engage their focus, students with ADHD must often re-read the same passages repeatedly to under-

\begin{thebibliography}{99}
\bibitem{197} Leah Levy, 5 Creative Ways to Help Students with ADHD Thrive in the Classroom, EDEUDMIC (Nov. 10, 2014), http://bit.ly/2xcQt0a.
\bibitem{199} Jim Stevenson et al., The Relationship Between Language Development and Behaviour Problems in Children with Hearing Loss, 51 J. CHILD PSYCHOL. & PSYCHIATRY 77, 81 (2010).
\bibitem{202} These symptoms together are sometimes referred to as “tolerance-fading memory.” See Benjamin J. Lovett, Auditory Processing Disorder: School Psychologists Beware?, 48 PSYCHOL. SCHS. 855, 860 (2011) (describing tolerance-fading memory as a deficiency in short term memory and hearing while background noise is present).
\bibitem{203} See Brown et al., supra note 64, at 83–86 (hypothesizing that students with ADHD have difficulty with reading comprehension due to impairments in working memory and processing speed).
\end{thebibliography}
stand the substance of the material. Deficits in the working memory account for these reading difficulties, although the problem can also be an undiagnosed learning disorder. Few people know that “up to 50 percent of adults with ADHD also have a learning disability.”  

Reading for school requires more than just memorizing material. A student must also interpret the material and decide what to do with the informational input. Given the vast amount of reading required for law school, this sorting process must take place every day. For the neurotypical person, these functions happen automatically and simultaneously while reading. For a student with ADHD, this type of mental multitasking may be too much to handle all at once.

For students with ADHD, reading problems arise as problems with the executive function of the brain; those problems seem to be “situationally specific.” Thus, the student with ADHD may have little difficulty reading if allowed to choose the material. The paradoxical nature of this impairment can vex the law professor who feels slighted when a perplexed student questions the material covered in class but can recite baseball statistics for the entire National League. As confusing as it might sound, the student with ADHD who has difficulty concentrating might also hyperfocus on materials they find interesting.

Yet another hurdle for the student with ADHD is staying alert in class. Although a student with ADHD might experience difficulty focusing and maintaining extended concentration, lack of alertness is generally a problem related to sleep. Recent studies have found a strong link between ADHD and sleep disorders. Historically, experts faulted the stimulant-based medication that doctors prescribe to people with ADHD. Scientists now recognize that some people who were originally diagnosed with ADHD actually struggled with sleep disorders. Lack of sound nighttime sleep may have led these misdiagnosed individuals to act out during

205. Brown et al., supra note 64, at 79.
207. Ariana Eunjung Cha, Could Some ADHD Be a Type of Sleep Disorder? That Would Fundamentally Change How We Treat It, WASH. POST (Sept. 20, 2017), https://wapo.st/2z6WEX0.
208. See, e.g., Amy Norton, ADHD Medications Linked to Sleep Problems in Kids, WEBMD (Nov. 23, 2015), https://wb.md/2KI9AgS (discussing a study which found children who took ADHD medication had more sleep problems).
209. Cha, supra note 207.
the day, and those daytime behavioral problems often mimicked ADHD. Still more research into the association between ADHD and sleep disorders must be conducted.

Although not common, adults with ADHD can have the same hyperactivity and impulsivity seen in children with ADHD. In the law school classroom, hyperactivity may come in the form of fidgeting or constantly tapping a foot or pencil. The student acts as if a motor constantly runs inside them. The same ADHD presentation may result in impatient and restless behavior, such as talking over classmates or having difficulty waiting to speak. At its extreme, hyperactive and impulsive presentations can result in in-class outbursts. Besides impacting students’ studies, these temperament issues sometimes threaten students’ work, finances, and relationships.

Overall, adults with ADHD ostensibly have higher rates of alcohol and marijuana abuse than neurotypical adults. Experts disagree as to the causal relationship between ADHD and substance abuse. Some hypothesize that substance abuse is a comorbid conduct disorder, while other experts blame the susceptibility of some students with ADHD to give in to the pressure of their “deviant peers.” Still other researchers assert the possibility that substance abuse depends on the symptomology of the person with ADHD. For many people with ADHD, substance abuse serves as a means of self-medicating or addressing racing thoughts. Picture a roulette wheel going around and round in your head; drugs and alcohol are the simplest means for making the wheel stop, if just for a short while. It is easy to understand the proclivity toward substance abuse under those circumstances.

Combine students with ADHD and law school and you are likely to see some serious substance abuse problems. Regrettably, attorneys often struggle with addictive behavior. A study con-

210. Id.; see also Susan S.F. Gau et al., Association Between Sleep Problems and Symptoms of Attention-Deficit/Hyperactivity Disorder in Young Adults, 30 SLEEP 195, 200 (2007).
211. Cha, supra note 207.
216. Id. at 455–56.
ducted by the Hazelden Betty Ford Foundation and the American Bar Association Commission on Lawyer Assistance Programs found that 36 percent of practicing attorneys reported drug or alcohol use consistent with abuse or dependence. In fact, lawyers are twice as likely to have substance abuse problems compared to the general population. Studies show that some of that abuse starts in law school. The stress and intense competition associated with law school can lead to this abuse. Given the propensity of adults with ADHD toward substance abuse, the introduction of traditional legal education likely increases those odds.

For the average instructor, some of the traits that students with ADHD possess may not be observable. Two such examples include making “poor life choices” and getting into automobile accidents. People with ADHD struggle with those issues because of their proclivity toward taking risks. Dr. Richard A. Friedman explains that this trait correlates to the dopamine reward pathway of the person with ADHD. The release of dopamine motivates everyone to act or seek out rewards. Dr. Nora D. Volkow found that people with ADHD have fewer dopamine receptors than those without ADHD. A student with ADHD may therefore need to work harder to obtain the same thrill that a neurotypical person experiences. Risk-taking behavior releases dopamine in people with ADHD who find everyday experiences boring or dull.

The above symptomology sketches a broad overview of the person with ADHD. But in practical terms, how can the average law professor recognize when a student has ADHD? Without the student expressly telling the instructor, there is no certain way to...
ascertain whether ADHD is at issue. The following signs should certainly give the curious professor pause to consider whether ADHD is at play: a student is constantly late to class and in submitting assignments; asks for reexplanations of instructions; often has excuses for failing to comply with the terms of the class; seems to have a lot of life drama; constantly interrupts others; has difficulty sitting still in class; poor penmanship;\textsuperscript{226} and is likely sitting alone in class. These traits and more may concern the legal instructor, but it is often after reading the student’s work\textsuperscript{227} that a professor is able to confirm that something else is at issue.

Students with ADHD generally have difficulty formulating logical structure in their work. Upon reading their answers, a professor may truly wonder whether the student was answering the correct problem or understood the question. It truly is a case where one and one do not equal two. Law school assignments don’t come naturally to the student. And students with ADHD are likely to submit shorter pieces of work.\textsuperscript{228} If a student hasn’t asked for accommodations—either because they do not know or want to admit they have ADHD—brevity is logical.

Of course, some students with ADHD do not appear to struggle with the above. Some are on medication, and some have adopted strategies over the years to compensate for or mask their disorder. That does not mean that reading or writing comes as naturally to them as it does to students without ADHD. But maybe with time, and without even knowing it, they have erected coping mechanisms that kick in when necessary.

\section*{B. ASD}

ASD is a spectrum disorder; thus, the range of symptoms differs from student to student. Before discussing the obstacles facing students with ASD, there are a number of positive qualities worth mentioning. One affirmative trait common among people with ASD is that they are typically good workers. In fact, there is currently a push to hire employees with ASD.\textsuperscript{229} “Autistic employees

\textsuperscript{226} Keath Low, \textit{Writing Problems Common for Students with ADHD}, \textsc{Verywellmind} (last updated June 14, 2018), http://bit.ly/2D2wJIf (discussing the different writing challenges that students with ADHD experience).

\textsuperscript{227} See \textit{id.} (describing the type of work product produced by a student with ADHD).

\textsuperscript{228} \textit{Id.}

\textsuperscript{229} Ronald Alsop, \textit{Are Autistic Individuals the Best Workers Around?}, \textsc{BBC: Capital} (Jan. 7, 2016), https://bbc.in/2pbyhzC.
are known for their loyalty and diligence and low turnover rates."\textsuperscript{230} These characteristics are desirable in a law student.

In addition to being good workers, people with ASD can have superior rates of task completion and job knowledge.\textsuperscript{231} These traits make for an efficient, conscientious individual. They also enable the person with ASD to concentrate on a matter for a long time, even when the task is monotonous.\textsuperscript{232} Thus, people with ASD may appreciate jobs often shunned by neurotypical persons\textsuperscript{233} or people with ADHD,\textsuperscript{234} such as those involving a repetitive task or social isolation.\textsuperscript{235}

Finally, people with ASD may have special abilities in math, music, and computer knowledge.\textsuperscript{236} Technology companies such as Microsoft, Bodafone, SAP, and Hewlett-Packard value these skills.\textsuperscript{237} If a law professor is aware of these skills, he or she may want to steer a student with these gifts towards fields where the student’s expertise will stand out.\textsuperscript{238} However, despite these potential gifts, people with ASD face much greater unemployment rates than people without ASD.\textsuperscript{239} People with ASD probably have difficulty securing employment because of their executive dysfunction.

Executive dysfunction in adults with ASD can also lead to more taxing traits. A student with ASD can struggle with the same issues that plague a student with ADHD. In fact, approximately 30 to 80 percent of children with ASD also match the criteria for

\textsuperscript{230}. Id.
\textsuperscript{231}. Van Pelt, \textit{supra} note 110.
\textsuperscript{232}. Yuki Noguchi, \textit{Autism Can Be an Asset in the Workplace, Employers and Workers Find}, NAT’L PUB. RADIO (May 18, 2016), https://n.pr/2paz57z.
\textsuperscript{234}. See generally Wiklund et al., \textit{supra} note 187 (discussing how some ADHD symptoms, such as impatience, boredom, and novelty seeking behavior, may impact job performance).
\textsuperscript{235}. Hendricks, \textit{supra} note 233, at 126.
\textsuperscript{236}. See generally Van Pelt, \textit{supra} note 110 (discussing how society is failing to utilize the “special abilities” of people with ASD).
\textsuperscript{237}. See Alsop, \textit{supra} note 229 (highlighting how technology companies are seeking to make use of the “incredible strengths” of people with ASD).
\textsuperscript{238}. For example, a professor might steer an ASD student with extensive scientific or computer knowledge to intellectual property or patent law. See, e.g., Maryclaire Dale, \textit{Have a Science Degree? Become a Patent Lawyer}, N.Y. TIMES (May 21, 2007), https://nyti.ms/2kV1Tk0 (discussing the advantages that lawyers with scientific or technical undergraduate degrees have when practicing patent law).
ADHD. Experts look for problems with social engagement, communication skills, and repetitive or ritualistic behaviors to distinguish patients with ASD from patients with ADHD. Thus, where ADHD impacts the executive function’s control over planning and memory, ASD often impacts the executive function’s regulation of shifting and flexibility.

Additionally, people with ASD may struggle with two other neurological dysfunctions. People with ASD often have cognitive impairments in their theory of mind or “Theory of Mind Deficit” (ToM) and “Weak Central Cohesion” (WCC). ToM is a diminished ability to see things from another person’s viewpoint. Another term for this condition is “mindblindness.” A number of the idiosyncrasies that make a person with ASD appear socially awkward are linked with ToM. Some examples of these idiosyncrasies include difficulties with understanding one’s own emotions and the emotions of others, inferring the intentions of others, and appreciating how behavior can influence others’ opinions.

WCC is more difficult to explain. Experts often characterize WCC as an inability “to see the forest through the trees.” This deficit arises because people with ASD often struggle to “integrate diverse information from a variety of sources.” Although WCC might sound like a negative characteristic, it can produce the positive effect of enabling people with ASD to excel in monotonous or repetitive jobs.

As mentioned above, ASD is regularly associated with the appearance of social awkwardness. People with ASD often appear to feel ill at ease in the company of others, when just the opposite is true. They may just have a different type of social style that is unfamiliar to the neurotypical student. Ironically, people unac-
quainted with ASD might feel uncomfortable around classmates or students with ASD. This mutual uneasiness, or appearance of such, may harken back to a number of possible factors. Although the list of possible examples is extensive, some of the main categories and causes follow.

A student with ASD may have limited experience in social settings. An ASD student may have a history of social isolation due to home or online schooling.250 Young people with ASD are often pupils of non-traditional schooling, which makes adjusting to a public school difficult. That students with ASD often undergo non-traditional schooling should not be surprising. It is not because the parents are trying to isolate their child. Frustrated parents often find schools nonresponsive or unsupportive of their child’s needs.251

Additionally, public schools can also be overstimulating for the child with ASD.252

Another issue that often leads to social problems is poor hygiene.253 Sensory perception issues and executive function difficulties can impair the person with ASD’s grooming routine.254 Specifically, people with ASD can have problems with touch, taste, smell, and hearing.255 In other words, grooming can be a very uncomfortable, if not unpleasant, obligation for students with ASD. If a student moves away from home to attend law school, the student can leave behind the parental check on his or her hygiene. Unknowing classmates will often ostracize the student with ASD because of his or her hygiene routine.

Related to social awkwardness, people with ASD also struggle with mental health issues. Compared to neurotypical law students, students with ASD will likely be “higher in [n]euroticism, and lower in [e]xtraversion, [a]greeableness, [c]onscientiousness, and

250. See generally Marriage et al., supra note 57, at 326 (discussing the protectiveness of families with children with ASD).
252. See John McClaughlin, Why Model Autism Programs Are Rare in Public Schools, Spectrum (July 11, 2017), http://bit.ly/2xcG9F4 (describing how children with ASD work better in calm atmospheres than in chaotic ones, such as public schools).
Simply put, classmates may deem a student with ASD somewhat stubborn or offensive. Despite conjecture otherwise, people with ASD are generally aware that they have these behavioral traits. In fact, people with HFA tend to deal with greater depression than the average person because they know that their behavior does not conform to the social norm. Possibly related to depression, people with ASD may also grapple with low self-esteem, despite a seemingly tough demeanor.

School can also be more difficult for students with ASD because they may have restricted or repetitive behaviors (RRBs). RRBs can cover a wide swath of behaviors. Some examples of RRBs include repetitive manipulation, object attachments, self-injurious behavior, routines, and rituals. Injury can result from some of these behaviors. Most experts divide RRBs into two categories: lower order behaviors and higher order behaviors. But other experts suggest dividing RRBs into “Repetitive Sensory Motor” and “Insistence on Sameness” behaviors. While the latter categorization is more descriptive, scientists use the former categorization more frequently. Lower order behaviors are typically recognized by their repetitive nature, such as flapping of arms, shuffling feet, or repetitive use of a word or object. Higher order behaviors are more complex. Examples of higher order behaviors include a need for rituals, routines, and sameness.

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256. Roberta A. Schriber et al., Personality and Self-Insight in Individuals with Autism Spectrum Disorder, 106 J. PERSONALITY & SOC. PSYCHOL. 112, 122 (2014). The study did not specifically use law students. The authors tested neurotypical adults against adults with ASD. See id. at 116.
257. Id. at 123.
259. Schriber et al., supra note 256, at 123.
260. See Scott M. Robertson & Ari D. Ne’eman, Autistic Acceptance, the College Campus, and Technology: Growth of Neurodiversity in Society and Academia, DISABILITY STUD. Q., Fall 2008, at 14, 14 (discussing the benefits obtained by people with ASD who were able to grow their social network to include other people with ASD).
262. Id. at 114.
263. See id. at 118 (explaining how ASD is linked to self-injurious behavior due to the lack of dopamine receptors in people with ASD).
265. Lewis & Kim, supra note 261, at 114 (discussing the type of actions which are classified as “lower order”).
266. Id. at 114–15 (discussing the type of actions which are classified as “higher order”).
wardness can cause anxiety, and anxiety can trigger RRBs. Public displays of RRBs can cause any person to feel socially awkward. It can be a horrible cycle for a person with ASD and RRBs. Some experts believe that RRBs help the person deal with a stressful situation.\textsuperscript{267} It is erroneous for a professor to assume only students with ASD exhibit RRBs.

A person with ASD can also struggle with obsessive-compulsive behavior (OCB).\textsuperscript{268} A student with OCB may need to organize or arrange various items in specific configurations.\textsuperscript{269} Moreover, a person may have more than just OCB. People with ASD may also have obsessive compulsive disorder, although the rate of comorbidity varies depending on the study. Thankfully, many, but not all, OCBs wane with age;\textsuperscript{270} however, that is not true for every person with ASD. Students that struggle with visible RRBs and OCBs can experience difficulties fitting in with their classmates. An instructor that is familiar with these disorders, which are often associated with ASD, should be better equipped to respond to an expression of these behaviors.

Unfortunately, some people with ASD experience seizures. Around one-third of people with ASD also have epilepsy.\textsuperscript{271} Just as autism is on a spectrum, so too are seizures often associated with the disorder.\textsuperscript{272} Therefore, it is difficult to describe what an instructor should look for or how to react to the situation. This Article simply strives to make the law professor aware of the possible comorbidity with ASD. Ideally, the student or the school’s administration will explain how to react to such an episode before it becomes necessary.

Students with ASD may also have difficulty with communication skills.\textsuperscript{273} Obvious examples include speaking and hearing. The extent of those problems often depends on where the person falls on the ASD spectrum. For example, a person with severe ASD

\textsuperscript{268} See Suma Jacob et al., Autism Spectrum and Obsessive-Compulsive Disorders: OC Behaviors, Phenotypes and Genetics, 2 Autism Res. 293, 293–96 (2009) (discussing the similarities and overlap in behaviors exhibited by people with ASD and people who exhibit OCB).
\textsuperscript{269} Id. at 294.
\textsuperscript{270} Id. at 295 (describing the presence of OCB in young children).
\textsuperscript{272} Id.
may have difficulty understanding typical expressive language or simple directions, but a person with high-functioning ASD may understand the same speech but not understand subtle nuances in the conversation.274

As alluded to earlier, it is common for persons with ASD to have difficulty with sensory perception or change.275 Sensory perception difficulties can include hyporesponsiveness, hyperresponsiveness, or sensory seeking.276 In other words, a person with ASD may have an extreme reaction to any given stimulus. For example, people with ASD may not be able to cope with everyday noise that they consider too loud, or they may have no reaction to music that people without ASD consider far too loud. This condition does not apply simply to volume but to all senses. The texture of certain objects and ambient lighting can bother people with ASD. Though many people with ASD have problems with responding to sensory stimuli, other people have sensory perception disorder (SPD) and do not have ASD.277 Therefore, having one disorder is not dispositive of having the other. It is worth noting that some people with ADHD also have difficulty adjusting to change in their environments; but while change can upset a person with ADHD internally, a person with ASD may outwardly manifest hyporesponsiveness or hyperresponsiveness which can lead to some of the low order behaviors set out above.

Although it may not be evident in the classroom, some students with ASD—especially females—also struggle with eating disorders. It is estimated that as many as 20 percent of people with eating disorders also have ASD.278 It is sometimes only during treatment of the eating disorder that a medical professional discovers the ASD. Recent studies have shown similar neurocognitive profiles of people with anorexia nervosa (AN) and ASD, leading some scientists to question whether AN is a form of ASD.279

274. See id. (providing examples of the types of communication difficulties that people with ASD can experience).

275. See Sarah Deweerdt, Talking Sense: What Sensory Processing Disorder Says About Autism, SPECTRUM (June 1, 2016), http://bit.ly/2CZLLb7 (“Children with the clinical label SPD also have a lot in common with children diagnosed with autism, up to 90 percent of whom also have sensory difficulties.”).

276. Van Pelt, supra note 110, at 14.

277. Deweerdt, supra note 275.


For the above reasons, even people with high IQs can struggle to remain in college when they have ASD. In a recent Yale survey, 80 percent of people with ASD agreed that they possessed the academic skills necessary to succeed in college, while only 41 percent agreed that they possessed the social skills necessary to do the same.280 Unfortunately, many law school instructors lack the necessary background to help other students understand and ease the transition for students with ASD.

IV. WAYS TO HELP STUDENTS WITH ADHD AND ASD

A. Teaching Issues

Even in this brilliant age of education, knowledge of ADHD and ASD symptoms is essential. Collaborative learning281 and flipping classrooms282 may work well for neurotypical Millennials and Generation Z’ers but can cause problems for students with ADHD and ASD. The following scenario can illustrate how some of these educational innovations might affect students with these neurological disorders.

A student attends his or her criminal law class. The student’s creative instructor surprises the class with a fun group exercise. The teacher tells the class that they will discuss the Supreme Court’s recent ruling in a search and seizure case and how it might impact similar cases in the future. The class will break into groups of four to five students. After 15 minutes, each group will make their argument for the future of similar cases. Every student must then follow up the assignment with a short, written report on the same issue. The written report will be due before their next class.

While the novelty of the above exercise may sound appealing, the law instructor doesn’t need to stray so far from the Socratic method to benefit students with ADHD and ASD. In fact, some of the above scenario plays into the limitations of those students. What follows are some concerns triggered by such an exercise.

Any impromptu exercise is likely to upset a student with ASD. If an assignment is unannounced, the student with ASD has not had time to mentally prepare for what is to come. Social projects may cause the student with ASD some distress. The surprise might also prompt the student with ASD to verbally question the exercise and therefore cause a delay in commencing the exercise.

Allowing students to pick their own groups or failing to provide structure will likely cause problems for students with ASD as well. Without direction, the student with ASD will likely stand alone and apart from his or her classmates. Assigning the student to a group after everyone has picked their groups only confirms the ASD student’s feelings of low self-worth.

Although social problems more often affect people with ASD, students with ADHD can also struggle with making and keeping friends. Children with ADHD can be bossy and easily agitated. Although the symptoms may be milder in adults, those characteristics can make it difficult for law students with ADHD to make friends.

Without specific instruction as to each group member’s role, the student with ADHD or ASD might unintentionally dominate the group’s discussion. The same person might also interrupt the group’s oral presentation. As alluded to above, this characteristic is hardwired into the mental circuits of the person with ADHD but can also affect the student with ASD.

Furthermore, if the instructions are not set out in writing, students with ADHD or ASD might miss part or all of the professor’s directions. Remember the student with ASD is probably anxious and the student with ADHD might have zoned in and out on the professor. Oral instructions can delay the individual’s compliance with the group exercise and cause the possibility of a forgotten assignment.

In addition to not concentrating on instructions, students with ADHD or ASD may experience difficulty hearing during a group exercise. If you have five groups of four students, each located in one classroom, students with ADHD or ASD may struggle to pick out individual voices from the background noise. For these students, everything can sound garbled.²⁸³

The above illustration should not discourage the innovative law professor. Group exercises like this belong in law school because variety in teaching caters to neurotypical Millennial stu-

With a little fine-tuning, these exercises can also benefit students with executive dysfunction.  

B. Teaching Solutions

Our job as instructors does not include providing students medical diagnoses. Rather, our job is to help remove barriers to learning. Referring students with acknowledged learning disorders to the school’s disability services office should always be the first step. But the efforts an instructor can make to support students with undiagnosed or unrecognized executive dysfunction are limitless. What follows are several measures inspired by studying ADHD and ASD. For the sake of clarity, this Article divides the suggested alterations based on the dysfunction addressed. Thus, the proposals are categorized to separately assist with organization, set shifting, focusing, and social skills.

1. Organization

Underwriting organization in students with ADHD or ASD can begin by changing a course’s syllabus structure. An instructor can go beyond simply listing the topic covered in each class to include the goals for students between class sessions in a checklist format. This allows students to manually tick off completed assignments. For example, in addition to reading the article assigned this week, the student might have a visual reminder that he or she needs to answer a journal question. Ideally, the list of assignments should also include the estimated time needed to complete the work. For students with executive dysfunction, any assistance provided with organization and planning should be of value.

With an online course syllabus, an instructor can go even further by creating a virtual calendar of course obligations. The instructor can also structure the course so students receive email reminders of each assignment the day before the assignment is due. Yes, a professor may receive a lot of assignments on the due date, but at least the assignments are not late or forgotten. In addition to reminders for outstanding assignments, students can also receive written reminders for other types of work related to class.  

284. For suggestions on how to add variety to your class, see Heather Garretson et al., The Value of Variety in Teaching: A Professor’s Guide, 64 J. LEGAL EDUC. 65 (2014).

285. For example, conducting group activities in an online collaborative learning environment might benefit the student with executive dysfunction.

286. For example, email reminders for studying for a quiz or reviewing returned course work might be beneficial.
line information offers the additional benefit of being easier to enlarge than print instructions, which is advantageous to students with visual impairments.

Another method of assisting with organization is breaking down complicated assignments. Students receive multiple deadlines for lengthy projects in their writing classes. The same is possible in other courses. For example, a bar prep course instructor does not need to assign an entire Multistate Performance Test (MPT) as an initial assignment. Rather, the professor can first assign submitting an outline to the MPT problem. The instructor can then gauge whether the student is on track after a first effort, rather than tearing apart a finished project. Besides breaking down a task that might initially seem too complicated for the student, the step-by-step process can emphasize the need to outline essays and MPT answers.

Clinical and experiential classes can also incorporate this technique. Deadlines or timelines should accompany any research given to a student. An instructor assigning a court case to a student may provide deadlines for each stage of the process. For example, the instructor can require students to submit a draft of the documents or questions well in advance of the final deadline. In other words, the law professor can direct the progression of a project rather than leave it to the law student struggling with organization. By directing the student’s progress, the instructor is also helping the student with ADHD achieve small goals.

Another helpful tool is dividing class topics into modules. Each module should set out the goals and the work assigned to achieve those goals. In addition to helping students with executive dysfunction, goals also help placate Millennials searching for purpose in their work. Along with modules, a course can be color-coded. Color-coding may be easier to manage when a law professor is writing a coursebook, but the instructor can also color-code slides for a presentation. The advantage of color-coding is that it helps the student with ADHD or ASD compartmentalize each assigned task. For example, a reflective task might be green, while a skills task might be bright yellow.

287. See Karl Moore, Millennials Work for Purpose, Not Paycheck, FORBES (Oct. 2, 2014), http://bit.ly/2Oqw7XL (arguing a Millennial employee’s loyalty to his or her employer is largely influenced by the employer’s organizational purpose and vision).
2. Set Shifting

Executive dysfunction can also cause people with ASD and ADHD to be cognitively rigid. In other words, people with ASD and ADHD may lack flexibility when it comes to learning specifically and change in general. The problem is set shifting\textsuperscript{288} and is similar to learning to drive a stick-shift vehicle. Just as novice drivers often struggle with shifting gears, some students with ASD and ADHD struggle with deviations from a planned course of action. There may also be a correlation between response to set shifting and RRB for students with ASD.\textsuperscript{289} If you combine these traits, it is possible for a student to exhibit an extreme reaction to a deviation from the syllabus.

At the lesson level, it is best to make the in-class structure as clear as possible. For example, the instructor can announce at the beginning of each session what will transpire during that class and go so far as to mention when there will be anticipated breaks. This type of certainty and transparency comforts students with set shifting difficulty. Plus, simply knowing a break or change is coming can make it easier for the student with ADHD to focus on the given topic.

Law professors should notify students of deviations from their syllabi as soon as possible. A law professor knows at the end of every class whether the class is keeping with the anticipated pace set out in the syllabus. Inform the class what effect the delay will have on the next class or calendar. As illustrated in the earlier teaching example, students with ADHD and ASD may have difficulty taking part in social exercises. Make sure you give advance notice of these types of exercises. With advanced notice, a student can decide whether he or she wants to use an absence to avoid the class session.

If there is a change between classes or in the class structure, the instructor should send the details to the class via email ahead of time. This notice will help ease the adjustments that the student with ASD must make to the change in schedule. Simply announcing a change at the beginning of class is bound to cause some angst for the ASD student. For major course changes, consider editing the digital syllabus posted to the class page.

\textsuperscript{288} See, e.g., Helena Rohlf et al., Set Shifting and Working Memory in Adults with Attention-Deficit/Hyperactivity Disorder, 119 J. NEURAL TRANSMISSION 95, 101–03 (2012); Benjamin E. Yerys et al., Set-Shifting in Children with Autism Spectrum Disorders, 13 AUTISM 523, 533–36 (2009).

\textsuperscript{289} See Yerys et al., supra note 288, at 533–36.
If time permits, instructors can mandate individual conferences. In addition to talking with the students about their organization and focus, without drawing attention to any specific person, the two parties can work together to decide upon any necessary shifting in their educational efforts. Set shifting will not be as jarring for a student when the student is instrumental in the change.

3. Focusing

Students with ADHD generally struggle to maintain focus in a variety of settings. The obvious example is the inability to concentrate on a class topic. But these students’ writing often graphically reflects this same impediment.

One method of assisting students with focusing problems is illustrating how to transition from mind mapping to argument mapping. To better describe this process, let’s start with a problem where students are asked to draft an essay discussing the negligence liability of a tenant and landlord. Initially, an instructor can start by mind mapping the problem with the class.

MIND MAPPING typically involves an instructor asking for input on a certain issue or question without judgment or structure. In the landlord-tenant problem, the professor would probably start with negligence in the center position. The professor should then ask the class for factors to consider in determining negligence. The class’s responses would make up the lines radiating or spheres orbiting around the center issue. In this exercise, there are no wrong answers; it is similar to the notion of brainstorming. Diagram 1 below demonstrates mind mapping in the landlord-tenant problem.

The culmination of the class’s efforts may be illustrative of the typical thought process for the student with ADHD. In fact, some experts suggest mind mapping as a possible study method for people with executive dysfunction.290 But if the goal is to help students write a good answer to an essay question, the instructor should direct the class in taking the exercise a step further to fashion an argument map using the material from the mind map.

ARGUMENT MAPPING differs from mind mapping in that argument mapping has a correct or logical structure. This logical structure serves as an outline for a nice answer to an essay question. The law professor’s goal is to show the students how to get from A to B

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or, in this case, from the mind map to the argument map.\textsuperscript{291} In our example, there are two lines of query: one for the tenant and one for the landlord. Using the two lines, the instructor would go through the factors needed to establish negligence. Diagram 2 below demonstrates argument mapping in the landlord-tenant problem.

What the reader might think is an obvious argument structure may actually appear as nothing but a mind map or jumble to a student with ADHD. The advantage of converting a mind map to an argument map is that the latter can illustrate to the confused student that the student knows the answer to the question—it might just take a little effort to format the best answer. Using an argument map, the ADHD student should have an easier time writing a solid essay. For instructors trying to avoid chalkboards, computer programs are available to assist students and teachers in drawing these maps.

\begin{center}
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No matter how hard a person with ADHD tries, or how much treatment he or she undergoes, there still exists the very real possibility that he or she will miss some class discussion. It is also possible that the first time a student with ADHD hears something it did not register. To address this problem, instructors can tape their classes or make lectures available online.

Another slight concession an instructor can make is to give students some autonomy. Personal selection of assignments helps the student with ADHD, and possibly the student with ASD, to focus by allowing the student to pick something he or she finds interesting. Any amount of self-direction can help the student complete the chore of remaining focused. Autonomy is easy to provide in a writing seminar, but instructors in doctrinal or clinical classes should also consider it.

In the 21st century, there are applications (apps) available to assist the struggling student and perhaps even his or her haggard professor. There are apps that assist with focus, organization, time management, and additional sleep time. The purpose of this Article is not to promote one product over another—besides, there are no guarantees that a technological program will be available tomorrow. The online magazine ADDitude: Strategies and Support for ADHD & LD does a good job of setting out the most current
and beneficial apps available, but an instructor can find this information elsewhere on the Internet.

Switching from high tech to low tech, an easy tool for helping students maintain focus is to take a break. Maintaining focus in a lengthy, dense class is difficult for most students, but especially for students with ADHD. How many neurotypical people can maintain the same level of focus throughout a two-hour lecture? Imagine how much harder it would be to focus if you had ADHD. If possible, break up longer classes to allow for stretching, movement, and time to refocus. If that’s not possible, attempt to vary the structure of the class period.

Try to avoid structuring the entire class in only one format. Instead of straight lecturing or Socratic questioning, an instructor can break up a two-hour class into part lecture, part video, and part group work. Find a way to get the class up and moving. Most instructors know that their students are hardwired to have learning preferences. Neil D. Fleming’s VARK theory of learning includes four different preferences: visual, auditory, reading and writing, and kinesthetic. Variety in teaching will help placate the different learning styles of the entire class. Additionally, dividing the class period into different types of learning will assist the student with ADHD in trying to focus. Just remember to clearly set out the different parts of the class in advance so that set shifting does not present a problem.

Realizing goals can be more difficult for students with ADHD because it strains the already taxed executive function of their brains. When too many demands are made of a person’s executive function, it becomes difficult to remain focused. An instructor can help in this regard by writing down the goals for each class period. After achieving each goal, the instructor can cross them off the list. It is a simple process, but it helps students stay on task and gives them a feeling of accomplishment. Similarly, a teacher should always encourage and acknowledge when a student achieves a goal. Students with ADHD do better when rewarded for each positive step.

Law professors need not award gold stars for participation;


295. Id.
but positive feedback is both valuable and rewarding for students struggling to muster the focus necessary to reach a goal.

4. Social Skills

The following section consists of teaching suggestions meant to benefit all students, but especially those with ASD. Social skills programs for people with ASD have mixed results. But the focus of these suggestions is not to alter the students’ social skills. Rather, the goal is to equip students with the social tools necessary to function in the typical legal vocational setting. The best setting for conveying these skills is the legal clinic.

Limited social skills and isolation can make the student with ASD uncomfortable with the idea of a clinical class, but real-life experiences are valuable to his or her future employment. For example, consider a student with ASD who has no clinical experience and is hired straight out of law school. How will he or she respond when a client says the client’s spouse has passed away or the court has revoked visitation with the client’s children?

There is a popularly held belief that people with ASD lack empathy. A recent study shows that ASD does not cause a lack of empathy, but instead a condition called alexithymia is to blame. A person with alexithymia will have difficulty recognizing his or her own emotions. The problem is that while 10 percent of the general population may struggle with this condition, 50 percent of people with ASD struggle with the same. The frequency with which people with ASD struggle with alexithymia creates the mistaken impression that people with ASD lack empathy, when in fact they are struggling with two comorbid disorders.

Another reason that people with ASD appear to lack empathy is that they sometimes miss social cues or may not notice or understand when a situation is painful for another person. Additionally, a student with ASD may not possess the social or communication


298. Id.

299. Id.

300. Id.
skills necessary to comfort a troubled person. Thus, awkwardness in people with ASD may make their speech sound wooden or without feeling. People with ASD can actually be very empathetic. A clinical course can hopefully help a student bolster the communication skills necessary to convey that empathy.

The clinical class is also the ideal setting for honing collaborative learning, especially for students that have struggled with the same in the past. Students with ASD, and sometimes ADHD, are more likely to find themselves in this position. A clinic does not have to follow a project model to provide collaborative learning. Scheduling and attending appointments as a group is collaborative working, which should lead to collaborative learning. Well-designed collaborative learning should help every student develop communication, interpersonal, conflict management, and task management skills.

Focusing on law students with ASD does not imply that there is anything wrong or incorrect about their social skills. As Scott Barry Kaufman sets out in his article *Rethinking Autism: From Social Awkwardness to Social Creativity*, “this . . . presupposes that there is a correct way of socializing with others.” Regrettably, society still expects certain types of behavior in given circumstances, especially from legal counsel. The following suggestions should help the student with ASD in this regard.

Teach acceptance of feedback and ongoing comments towards work. “When constructive feedback is offered as part of a general atmosphere of mentoring, it has an impact well beyond that of sharpening skills.” From the first day of class, or the first one-on-one conference, try to emphasize that constructive suggestions should not be taken personally, but rather feedback is another method of teaching, just as is a lecture in a doctrinal class.

305. Kaufman, supra note 248.
neys that have been in practice for 30 years still receive feedback from judges; feedback will always be part of this profession. Mistakes in law school will hopefully lead to fewer mistakes in practice. Additionally, constant feedback helps students put their progress into context, a something that may be difficult for someone with executive dysfunction to do on his or her own.

It is important for the instructor to be mindful that some feedback can cause embarrassment. Teachers should discuss these mistakes behind closed doors. It is also helpful for the law professor to remember that the student with ASD may not know some things that seem like common sense. Patience for the clinical instructor is not just a virtue, but a necessity.

Clinical law professors need to remember that not every second- or third-year student has experience working in an office. This is probably especially true for the student with ASD. These inexperienced students may not only need directions on how to open a file; they may also need instruction on how to talk or work with support staff. In addition to the lack of professional employment, isolation and difficulties reading social cues may leave a student with ASD at a disadvantage when it comes to treating a new associate in a professional manner. Cathy Pratt, the Director of the Indiana University Resource Center for Autism, offers the following advice: “Be prepared to help the person understand the social expectations (‘rules’) of the job. These often are ‘unwritten’ or ‘hidden’ rules of the work culture, and can be critical for acceptance. Do not assume the person will ‘read’ the social climate and adjust.”

If the clinical professor wants to make this type of instruction less embarrassing for the student, he or she should consider directing the advice to the class as a whole or creating a handbook that addresses the most common situations. Unfortunately, even the most thorough professor cannot anticipate every interaction that might occur within an office setting. A clinical instructor must be prepared to offer constructive and educational responses to unexpected social faux pas for all students, but perhaps especially for those students with ASD.


Another method of teaching is the encouragement of active reflection. All law professors face an uphill battle when trying to get their students to actively reflect on what students are learning in the classroom and in the field. For example, journaling is often just concise responses to teacher-fed questions. But reflection is especially important for students struggling to catch the subtle nuances of their clients. All law students can benefit from noting what they learned from speaking with different persons in these semi-professional settings. Students can specifically note where they excel and where they need help.

Teaching is not limited to the classroom; every moment can be a teaching experience. If students are observing what someone else is doing, provide an opportunity for open dialogue on what was done and why. If an instructor veers from typical protocol, he or she should explain the purpose of the deviation to the students. The parameters of clinic coverage often allow for some down time or travel time. Try to use these moments to talk about the appointments and court appearances students have witnessed, emphasizing any social cues they should have picked up on. Open the forum for questions and discussion by all in the conversation circle. Some clinics require their students to give presentations at the end of the semester; but discussing events right after they happen compels immediate reflection and gives the participating students time to adjust their conduct while working in the clinic.

Make learning communication skills a goal for the class. By making communication skills improvement a goal for the entire class, a suggestion to include communication skills improvement in students’ individual learning plans does not seem out of place. It also opens the door for formal input at the mid-semester and final semester meetings.309

Borrow from others. Clinics afford many opportunities for students to observe their supervising attorney interviewing clients. Therefore, it may not seem necessary to also have students watch videos of strangers doing the same thing. Yet, showing students an online video of a student interview might give the students more opportunities to question the procedure and the purpose of the meeting and to offer honest critique of the same. Not all students are confident enough to question their supervising attorney’s choices. A video of a stranger doing the same thing removes that barrier and allows students with ASD to see how other individuals react to situations that might not arise within their clinic settings.

CONCLUSION

The goals of this Article are many, but the overarching purpose is to expand the reader’s knowledge of ADHD and ASD. In so doing, hopefully this Article successfully argued for the necessity of considering the needs and challenges of law students diagnosed with ADHD and ASD. The reader should also have a better idea of what symptomology to look for when considering whether a struggling student might be facing one of these disorders. The historical biases in diagnosing ADHD and ASD should alert the legal instructor to the possibility that a student has not received a diagnosis or proper treatment for the disorder. Finally, the reader should understand how to start modifying course design to best accommodate these students.

The first step toward assisting law students with these neurological disorders is to learn about them; but we must go beyond this initial goal. Theories regarding ADHD and ASD will continue to shift and expound throughout the course of the average law professor’s career. For most instructors, adapting legal instruction to benefit students with ADHD and ASD will be a life-long journey that involves some trial and error and much reflection.\textsuperscript{310} As law professors, we encourage our students to adopt a growth mindset and actively participate in their educations. Isn’t it time for law professors to follow their own advice?

\textsuperscript{310} As Peter Drucker said, “Knowledge has to be improved, challenged, and increased constantly, or it vanishes.” See Peter F. Drucker, \textit{The Drucker Lectures: Essential Lessons on Management, Society, and Economy} 1 (Rick Wartzman ed., 2010).
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