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The Cure for the Distracted Mind: Why Law Schools Should Teach Mindfulness

Shailini Jandial George Professor of Legal Writing, Suffolk University Law School

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# THE CURE FOR THE DISTRACTED MIND: WHY LAW SCHOOLS SHOULD TEACH MINDFULNESS

Shailini Jandial George<sup>1</sup>

#### Introduction

Ian the intern is working on answers to interrogatories. The supervising attorney asked him to get these done as soon as possible. This particular attorney makes him nervous, in fact, Ian gets a stomachache whenever the attorney comes into his cubicle. The attorney has never been happy with anything Ian has done. Ian is not sure if what the attorney wants him to say is accurate and he does not know what to do. No law school class prepared him for this! Ian spins the answer around and around, when ding!: he receives a text message from his roommate reminding him to upload his resume to the law school career center for an upcoming interview. He logs in and sees two rejection letters from the last interviews. His heart sinks. How will he repay his loans without a high paying job? Then he notices an email from the attorney, subject: "are you done yet????" and the stomachache is back. He knows his supervisor won't be happy. He glances down at the clock. Half an hour has passed and he hasn't even finished one interrogatory answer. He can't bill the client for this! Why can't he concentrate?

This scenario illustrates the intersection of two phenomena affecting law students and lawyers today: the constant state of distraction in which we operate and the failure of the traditional law school format to adequately address skills, ethics, and professionalism. By offering instruction in mindfulness, law schools can better equip their students to face these two challenges. If Ian had learned mindfulness techniques allowing him to focus, concentrate, and deal with this stress and anxiety, he may have avoided this scenario.

Building on scientific evidence that mindfulness meditation can improve attention, learning, working memory capacity, academic achievement, empathy, self-compassion, and creativity, and that it can reduce stress and

<sup>&</sup>lt;sup>1</sup> Professor of Legal Writing, Suffolk University Law School, Boston, Massachusetts. I would like to thank Suffolk University Law School for encouraging and supporting my work. I am thankful to have had the help of law librarian Diane D'Angelo, and my extremely capable research assistant, Christina P. Mott. I am also grateful to my colleague, Gabriel Tenninbaum, for his input on the content of this article.

anxiety, this article proposes that mindfulness should be an essential element in law school curriculum. Part I discusses how distractedness has impacted attention and learning. Part II describes the last decade of research showing the cognitive and physical benefits of mindfulness. Part III discusses the critique of the traditional law school format and advocates that law schools should follow medicine and industry in using mindfulness training to address these issues.

#### I. DISTRACTION NEGATIVELY IMPACTS ATTENTION AND LEARNING.

Today's students operate in a state of distractedness.<sup>2</sup> Many have blamed the combination of multitasking and the widespread use of digital devices.<sup>3</sup> As "digital natives," today's law students have grown up on the Internet and most have been using computers since before they entered elementary school.<sup>4</sup> In addition to computers, they use many other types of digital devices, such as smartphones and tablets, often simultaneously.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup>See Claudia Wallis, genM: The Multitasking Generation, TIME, Mar. 27, 2006, available at http://content.time.com/time/magazine/article/0,9171,1174696,00.html (observing new levels of multiprocessing among younger generations); see also Shailini Jandial George, Teaching the Smartphone Generation: How Cognitive Science Can Improve Learning In Law School, 66 ME. L. REV. 164, 164-71 (2013) (examining characteristics of current multitasking law students).

<sup>&</sup>lt;sup>3</sup>Adam Gorlick, *The Mental Price of Multitasking*, STAN. REP., AUG. 24, 2009, http://news.stanford.edu/news/2009/august24/multitask-research-study-082409.html (reporting "heavy media multitaskers are paying a big mental price. 'They're suckers for irrelevancy'") (internal citation omitted); Eyal Ophir, Clifford Nass, and Anthony D. Wagner, *Cognitive Control in Media Multitaskers*, 106 PROC. NAT'L ACAD. SCI. U.S. 15583 (Sept. 15, 2009), http://www.pnas.org/content/106/37/15583.full.pdf+html?sid=890 d90dd-1faf-4edb-98f7-62ef2beffb5e (examining relationship between chronic media multitasking and cognitive control abilities); Marc Parry, *You're Distracted. This Professor Can Help*, Chron. Higher Educ., Mar. 24, 2013, http://chronicle.com/article/Youre-Distracted-This/138079/ (cautioning classroom multitasking causes students' failure to learn).

<sup>&</sup>lt;sup>4</sup> See Joan Catherine Bohl, Generations X and Y in Law School: Practical Strategies for Teaching the "MTV/Google" Generation, 54 LOY. L. REV. 775, 779 (2008) (relaying that 20% of today's law students started using computers at age five). "Digital natives" are masters of technology, simultaneously learning the language of computers with English. See id. at 776.

<sup>&</sup>lt;sup>5</sup> See George, supra note 2, at 170-71 (describing Millenials as multitasking generation, using numerous technology forms at same time); Gorlick, supra note 3 (noting "[h]igh tech jugglers are everywhere—keeping up several e-mail and instant message conversations at once, text messaging while watching television and jumping from one website to another while plowing through homework assignments."); Bernard McCoy, Digital Distractions in the Classroom: Student Classroom Use of Digital Devices for Non-Class Related Purposes, FAC. PUBLICATIONS, C. JOURNALISM & MASS COMM. (Sept. 1, 2013), http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1070&context=journalis

This use of technology often carries over to the classroom. While student use of these devices allows for access to information, "research shows their use is causing more classroom learning distractions." Nearly 100% of college graduate and undergraduate students have access to the Internet during class, and many are using that access. Many teachers believe that "constant use of digital technology hampered their student's attention spans and ability to persevere in the face of challenging tasks... [and that] digital technologies did more to distract students than to help them academically."

All of this technology leads students to try to perform many activities at the same time, and their attention becomes divided. In an academic setting, [d]ivision of attention can have deleterious effects on student performance." Students often believe they are master multitaskers. Research shows, however, that "heavy media multitaskers . . . [are] suckers for irrelevancy . . . [because] everything distracts them." While many think they can simultaneously attend to many things at once, research shows this is not true. Attended to many things at once, research shows this is not true.

mfacpub (analyzing learning effects of today's students using laptops, tablets, smartphones while in classroom).

<sup>8</sup> McCoy, *supra* note 5 (citing AARON SMITH, LEE RAINIE & KATHRYN ZICKUHR, PEW INTERNET & AMERICAN LIFE PROJECT, COLLEGE STUDENTS AND TECHNOLOGY, (July 19, 2011), http://www.pewinternet.org/Reports/2011/College-students-and-technology/Report. aspx).

McCoy, *supra* note 5 (citing Kristen Purcell et al., , Pew Internet and American Life Project, How Teens Do Research in the Digital World (Nov. 1, 2012), http://www.pewinternet.org/Reports/2012/Student-Research/Main-Report/Part-1.aspx).

of Meditation into Higher Education: A Review of Research, CENTER FOR CONTEMPLATIVE MIND IN SOCIETY 1, 9-10 (Oct. 2008), http://www.contemplativemind.org/admin/wp-content/uploads/2012/09/MedandHigher Ed.pdf.

<sup>11</sup> Shapiro et al., *supra* note 10, at 10 (reporting presence of even one secondary task caused rote learning) (citing Karin Foerde, Barbara J. Knowlton & Russell A. Poldrack, *Modulation of Competing Memory Systems By Distraction*, 103 PROC. NAT'L ACAD. SCI. U.S. 11778 (Aug. 1, 2006), http://www.pnas.org/content/103/31/11778.full).

<sup>12</sup> Parry, *supra* note 3 (discussing student tendencies to "flit among Words with Friends, email, Words with Friends, Spotify, Words with Friends, and [a] goofy video of a cat rolling up against a sake bottle" and that "[s]ome are disturbed to observe that they got so distracted they forgot to work on the main task they had set out to accomplish, like reading an article").

<sup>&</sup>lt;sup>6</sup> See McCov, supra note 5.

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<sup>&</sup>lt;sup>13</sup> See Gorlick, supra note 3.

<sup>&</sup>lt;sup>14</sup>James Hamblin, Study: Meditation Improves Memory, Attention, THE ATLANTIC

the brain actually toggles among tasks, "leaking a little mental efficiency with every switch." There is concern, in particular, about the effect this multitasking is having on students and "feeding worries that widespread multitasking practices are comprising learning and attention." In fact, experts say, "the cost of classroom multitasking can be a failure to learn."

Learning theorists agree that this divided attention detracts from the ability to learn. "Attention is critically important to the mental processing central to learning." Simply put, adults learn by paying attention, processing information, and using it. 19 Learning involves a complicated

(June 11, 2013) (ruminating "the internet is probably destroying our attention spans and working memories, but companies still want employees who are able to 'focus'"); *see* Interview by FrontLine, digital nation with Clifford Nass, founder and director of Communication between Humans and Interactive Media (CHIMe) Lab and professor, Stanford University (Feb. 2, 2010), *available at* http://www.pbs.org/wgbh/pages/frontline/digitalnation/interviews/nass.html (responding "in general, no, our brain can't do two things at once").

[W]e all bet high multitaskers were going to be stars at something. . . [w]e were absolutely shocked. We all lost our bets. It turns out multitaskers are terrible at every aspect of multitasking. They're terrible at ignoring irrelevant information; they're terrible at keeping information in their head nicely and neatly organized; and they're terrible at switching from one task to another. One would think that, if people were bad at multitasking, they would stop. However, when we talk with multitaskers, they seem to think they're great at it and seem totally unfazed and totally able to do more and more and more.

Id.

<sup>15</sup> See George, supra note 2, at 171 (quoting Sam Anderson, In Defense of Distraction, N. Y. MAG., May 17, 2009, available at http://nymag.com/news/features/56793 (describing how the brain processes different information types on separate "channels"); Maria Konnikova, The Power of Concentration, N.Y. TIMES, Dec. 16, 2012, at SR8, available at http://www.nytimes.com/2012/12/16/opinion/sunday/the-power-ofconcent ration.html?\_r=0 (discussing why shifting attention from task to task sacrifices the quality of attention); see also David M. Levy, et al., The Effects of Mindfulness Meditation Training on Multitasking in a High-Stress Information Environment, GRAPHICS INTERFACE 2012, at 45 (May 28, 2012), available at http://faculty.washington.edu/wobbrock/pubs/gi-12.02.pdf. Levy et al. discusses students' concerns for personal health and effectiveness that are raised by multitasking, as well as studies in cognitive psychology and neuroscience suggesting that students' attention is limited. Id.

<sup>&</sup>lt;sup>16</sup> See Levy et al., supra note 15, at 45.

<sup>&</sup>lt;sup>17</sup> Parry, *supra* note 3.

<sup>&</sup>lt;sup>18</sup> Shapiro et al., *supra* note 10, at 9.

<sup>&</sup>lt;sup>19</sup> See George, supra note 2, at 173-75 (describing process of information input and transfer to short-term and potentially long-term memory); see also Hillary Burgess, Deepening the Discourse Using the Legal Mind's Eye: Lessons from Neuroscience and Psychology that Optimize Law School Learning, 29 QUINNIPIAC L. REV. 1, 23 (2011) (suggesting students must filter environmental stimuli to better pay attention); M.H. Sam Jacobson, Paying Attention or Fatally Distracted? Concentration, Memory, and Multi-

process whereby information is received and briefly registered in the brain's working memory. Depending upon the attention given to those pieces of information, they are either forgotten or moved toward long-term memory by the process of "encoding" or "chunking." Once stored in long-term memory, the information must be retrieved in order to be used. Thus, short and long-term memory work in a constant exchange. Without attention, however, there is no encoding or chunking, and thus, no learning. And thus, no learning.

"Despite its importance to learning, focused attention is rarely if ever systematically trained or cultivated in most educational settings." Parents and teachers tell kids 100 times a day to pay attention . . . but we never

Tasking in a Multi-Media World, 16 LEGAL WRITING 419, 421 (2010) (defining attention as "ability to attend to [only those] desired or necessary stimuli"); Michelle D. Miller, What College Teachers Should Know About Memory: A Perspective From Cognitive Psychology, 59 C. TEACHING 117, 118 (2011) (explaining memory consists of "three components—sensory memory, short-term memory, and long-term memory—[that] work together much like an assembly line, with information making stops at each 'station' before being passed along."). Adults experience numerous environmental stimuli in different forms: auditory, visual, tactile, olfactory, and gustatory, all of which are involuntarily stored in sensory memory. See Burgess, supra, at 23. "Of course, not every bit of information makes it all the way into long-term memory." Miller, supra, at 118.

<sup>20</sup> See Burgess, supra note 19, at 23; Timothy W. Floyd, Oren R. Griffin, & Karen J. Sneddon, Beyond Chalk and Talk: The Law Classroom of the Future, 38 OHIO N.U. L. REV. 257, 265-66 (2011).

<sup>21</sup> See George, supra note 2, at 174-75 & nn.87-92 (explaining process of encoding and chunking involves information traveling from short-term to long-term memory by rehearsal, memorization, association with prior knowledge); see also Burgess, supra note 19, at 29-30 (defining encoding); Jacobson, supra note 19, at 424 (defining chunking and providing real-world example of chunking process); Miller, supra note 19, at 119 (explaining encoding process) In short, encoding is the process by which information travels from short-term to long-term memory and can happen through rehearsal or memorization, while chunking refers to the creation of associations among similar pieces of information so that the information collectively becomes one slot in one's working memory instead of many. See Burgess, supra note 19, at 29-30; Jacobson, supra note 19, at 424.

<sup>22</sup> See George, supra note 2, at 174-75 & nn.94-99 (explaining interplay and exchange between short-term and long-term memory).

<sup>&</sup>lt;sup>23</sup> See George, supra note 2, at 175; Michael Hunter Schwartz, Teaching Law By Design: How Learning Theory and Instructional Design Can Inform and Reform Law Teaching, 38 SAN DIEGO L. REV. 347, 374 (2001). Schwartz writes, explaining this exchange, that short-term and long-term memory work in a "continuous exchange program in which learning passes back and forth between them." Schwartz, supra, at 374.

George, *supra* note 2, at 175-79 (positing key to successfully utilizing short-term memory is attention); *see* Burgess, *supra* note 19, at 24-25; Miller, *supra* note 19, at 120-21

<sup>&</sup>lt;sup>25</sup> Shapiro et al., *supra* note 10, at 10

teach them how."<sup>26</sup> Mindfulness training improves attention, and could prove instrumental in addressing the problem of distractedness.

# II. ATTENTION AND LEARNING CAN BE IMPROVED WITH MINDFULNESS MEDITATION.

The good news for both educators and students is that "[a]ttention is a flexible, trainable skill."<sup>27</sup> A growing body of neuroscience work over the last ten years has explored how "mindfulness meditation" may improve learning. These studies show that certain forms of mindfulness training "may lead to cognitive improvements, including the enhancement of one's attention, such as the ability to remain focused on an object and to ignore distractions . . [and] to improve emotion regulation."<sup>29</sup> There are many other benefits to mindfulness training as well, making the teaching of mindfulness essential.<sup>30</sup>

Mindfulness meditation is a "mental discipline."<sup>31</sup> It has been described as "moment-to-moment awareness of one's experience without judgment."<sup>32</sup> "Mindfulness . . . involves paying attention to what is actually

<sup>&</sup>lt;sup>26</sup> Patricia Lee Brown, *In the Classroom, a New Focus on Quieting the Mind*, N.Y. TIMES (June 16, 2007), http://www.nytimes.com/2007/06/16/us/16mindful.html?pagewant ed=2

<sup>&</sup>lt;sup>28</sup> See Konnikova, supra note 15 (positing ("[m]indfulness may have a prophylactic effect: it can strengthen the areas that are most susceptible to cognitive decline"); Levy et al., supra note 15, at 46 (postulating mindfulness training has capacity to improve focus and ability to ignore distractions).

<sup>&</sup>lt;sup>29</sup> Levy et al., *supra* note 15, at 46; *see* Konnikova, *supra* note 15 ("mindfulness has been shown to improve connectivity inside our brain's attentional networks . . . changes that save us from distraction").

<sup>&</sup>lt;sup>30</sup> See Amishi Jha, et al., Mindfulness Training Modifies Subsystems of Attention, 7 COGNITIVE, AFFECTIVE, & BEHAVIORAL NEUROSCIENCE 109 (2007), available at http://www.amishi.com/lab/assets/pdf/2007\_JhaKrompingerBaime.pdf (noting benefits include treatment of depression, fibromyalgia, chronic pain, substance abuse, binge eating skin diseases); Catherine Ortner et al., Mindfulness Meditation and Reduced Emotional Interferences On a Cognitive Task, 31 MOTIVATION AND EMOTION 271 (2007) (reporting benefits of mindfulness meditation include reduction in chronic pain, psoriasis, anxiety disorders and improved immune function).

<sup>&</sup>lt;sup>31</sup> Carolyn Schatz, *Mindfulness Meditation Improves Connections in the Brain*, HARV. HEALTH PUBLICATIONS, HARV. MEDICAL. SCH., (Apr. 8, 2011, 11:15am), http://www.health.harvard.edu/blog/mindfulness-meditation-improves-connections-in-the-brain201104 082253.

Daphne M. Davis & Jeffrey A. Hayes, What Are the Benefits of Mindfulness? A Practical Review of Psychotherapy-Related Research, 48 PSYCHOTHERAPY 198, 198

taking place in the present moment instead of becoming distracted or trying to avoid . . . reality."<sup>33</sup> Being mindful allows one to "reclaim focus and exercises the muscle of attention, which helps us to become more expert at paying attention."<sup>34</sup> Mindfulness is "like lifting weights. Just as you can build up your biceps by doing reps . . . meditation can strengthen attention."<sup>35</sup>

While mindfulness is inspired by the ancient practice of meditation, "an essential element in all of the world's major contemplative spiritual and philosophical traditions, [i]n recent years, meditative practices have been taught in secular forms that do not require adherence to cultural and religious beliefs." In fact, mindfulness is often practiced "in the East and the West, in ancient times and in modern societies . . . [and] [f]ocusing our attention in this way is a biological process that promotes health—a form of brain hygiene—not a religion". "Mindfulness meditation can lead to new

(2011).

33 Scott Rogers, Stop, Look, and Listen—Regain Your Focus Through Mindfulness, A.B.A.: YOUNG LAW., Jan. 2011, at 3.

Doing so creates a laboratory from within which you notice your mind's tendency to wander. So, when you realize that your mind is wandering, just take note of its wandering, noticing the thought that is distracting you; then decide to let the thought go for the moment and return to a focus on the breath. Some people benefit from joining a contemplative group that sits together in silence or in a guided meditation. Others, . . . close their office doors and listen to a recorded guided meditation. Still others prefer solitude and complete quiet.

Jacobwitz, supra, at 2.

<sup>&</sup>lt;sup>34</sup> Rogers, *supra* note 33, at 3; *see* Leonard Riskin, *The Contemplative Lawyer: On the Potential Contributions of Mindfulness Meditation to Law Students, Lawyers, and Their Clients*, 7 HARV. NEGOT. L. REV. 1, 24 (2002). Riskin analogizes mindfulness training to athletic drills: "just as practice drills help basketball players hone their jump-shots... mindfulness meditation can help people develop an ability to pay attention, calmly, in each moment, which they can apply in everyday life. It enables us to see how our minds work, to experience our lives more fully." *Id.* 

<sup>&</sup>lt;sup>35</sup> Parry, *supra* note 3; *see also* Jan L. Jacobwitz, *The Benefits of Mindfulness for Litigators*, A.B.A. Litig. J., Spring 2013, at 01-02, *available at* http://www.americanbar.org/publications/litigation\_journal/2012\_13/spring/benefits-mindfulness.html (describing mindfulness meditation process that involves sitting quietly and focusing attention on the breath).

<sup>&</sup>lt;sup>36</sup> Shapiro et al., *supra* note 10, at 6 (internal citations omitted).

<sup>&</sup>lt;sup>37</sup> Rhonda V. Magee, *Educating Lawyers to Meditate?* 79 U. Mo.–KAN. CITY L. REV. 535, 540 (2011) (quoting DANIEL J. SIEGEL, MINDSIGHT: THE NEW SCIENCE OF PERSONAL TRANSFORMATION 83 (2010)); *see also* Davis & Hayes, *supra* note 32, at 199 (discussing disciplines, practices, and religions which include mindfulness or meditative practice); Konnikova, *supra* note 15 (explaining "though the concept originates in ancient Buddhist, Hindu and Chinese traditions . . . mindfulness is less about spirituality and more about concentration: the ability to quiet your mind, focus your attention on the present, and

understandings about one's self and others, and thus is often called 'insight meditation.' . . . [I]t can help people feel better and perform better at virtually any activity."<sup>38</sup>

While there are many types of meditation practiced globally, most can be categorized into two main types: focused attention and open monitoring. In focused attention, the meditator tries to maintain focus on a particular thought and decrease thoughts that detract from that focus. This is also known as "concentrative attention." In open monitoring, or mindfulness meditation, there is no specific thought brought to focus; rather, the mind is allowed to go where it may, but the meditator seeks to non-judgmentally acknowledge thoughts that may arise, and then bring the awareness back. Mindfulness refers to a particular quality of attentional focus, mindful awareness, rather than to any particular practice or technique." The benefits of mindfulness meditation in improving focus, attention, and health are now being supported and validated by scientific research in neuroscience and psychology.

While mindfulness can certainly benefit everyone, the focus of this article is on how mindfulness training can enhance legal education, the quality of lawyering, and the mental well-being of those who practice law.<sup>45</sup>

dismiss any distractions that come your way").

<sup>&</sup>lt;sup>38</sup> Leonard L. Riskin, Awareness and the Legal Profession: An Introduction to the Mindful Lawyer Symposium, 61 J. LEGAL EDUC. 634, 635 (2012) (internal citation omitted).

<sup>&</sup>lt;sup>39</sup> Casey Helber, et al., *Meditation in Higher Education: Does it Enhance Cognition*?, 37 INNOVATIVE HIGHER EDUC., 349, 350 (2012), *available at* http://download.springer.com/static/pdf/873/art%253A10.1007%252Fs10755-012-92170.pdf?auth66=1391705121\_3103c0bc289a61047b121d4d62043072&ext=.pdf; Jha et al., *supra* note 30, at 110.

<sup>&</sup>lt;sup>40</sup> See Helber, supra note 39, at 352.

<sup>&</sup>lt;sup>41</sup> Jha et al., *supra* note 30, at 110.

<sup>&</sup>lt;sup>42</sup> See Ruth A. Baer, Mindfulness Training as a Clinical Intervention: A Conceptual and Empirical Review, CLINICAL PSYCHOL.: SCI. AND PRACTICE 125, 125 (2003); Helber, supra note 39, at 350; Levy et al., supra note 15, at 46.

<sup>&</sup>lt;sup>43</sup> Richard Chambers et al., *The Impact of Intensive Mindfulness Training on Attentional Control, Cognitive Style, and Affect*, 32 COGNITIVE THERAPY & RES. 303, 304 (2008).

<sup>&</sup>lt;sup>44</sup> See Susan L. Smalley & Diana Winston, Fully Present 1, 57-64 (2010) (underscoring positive effects of mindfulness on eating disorders, body issues, immunity, physical and sensory performance); Blakeslee, *supra* note 27 (reporting recent research shows meditation increases gray matter, improves immune system and attention); Hamblin, *supra* note 14 (correlating mindfulness training with improved working memory capacity and increased academic performance); Konnikova, *supra* note 15 (highlighting mindfulness training resulted in improved task-specific focus and concentration).

<sup>&</sup>lt;sup>45</sup> See Jacobwitz, supra note 35, at 01-02; Magee, supra note 37, at 540-41; Riskin,

### A. Mindfulness Training Improves Attention.

As discussed above, there has been much debate about the effect of multitasking and distraction on the cognitive abilities of students today. Not only is multitasking inefficient, research shows that it could be adversely affecting the part of the brain needed for focused attention. Studies in cognitive psychology and neuroscience reveal that "human attention is a limited resource, and that multitasking requires rapid task switching, which is costly in speed and accuracy." Research has confirmed that mindfulness meditation strengthens the very same areas of the brain affected by multitasking, as it is believed that meditation shares the same neural pathways needed to complete complex cognitive tasks.

Attention is central to learning.<sup>50</sup> Attentional training is the basis of all mindfulness exercises.<sup>51</sup> Mindfulness training can enhance attentional skills, "permitting people both to concentrate more deeply and to switch between objects of attention more fluidly."<sup>52</sup> There are different types of

supra note 34, at 9-10; Rogers, supra note 33, at 3.

<sup>&</sup>lt;sup>46</sup> George, *supra* note 2, at 180-182; *see* Burgess, *supra* note 19, at 4-6, 19-20 (theorizing current law school teaching methods fail to teach students to "think like a lawyer"); Andrea McAlister, Teaching the Millennial Generation, AM. MUSIC TCHR., Aug.-Sept. 2009, at 13, 14 (stating interruptions of neural pathway creation undermines students" "depth of learning"); Anthony Niedwiecki, *Teaching For Lifelong Learning: Improving the Metacognitive Skills of Law Students Through More Effective Formative Assessment Techniques*, 40 CAP. U. L. REV. 149, 157-59 (2012) (explaining focusing on "end product" inhibits development of students' metacognitive skills).

<sup>&</sup>lt;sup>47</sup> NICHOLAS CARR, THE SHALLOWS 120 (2010).

<sup>&</sup>lt;sup>48</sup> Levy et al., *supra* note 15, at 45; *see* Konnikova, *supra* note 15. Konnikova explains why "multitasking is a persistent myth: What we really do it shift our attention rapidly from task to task... we don't devote as much attention to any one thing, and we sacrifice the quality of our attention. When we are mindful, some of that attentional flightiness disappears as if of its own accord." Konnikova, *supra* note 15.

<sup>&</sup>lt;sup>49</sup> See Helber, supra note 39, at 352-53; Konnikova, supra note 15 (reporting study demonstrating mindfulness meditation associated with enhanced connectivity between part of brain involved in attention monitoring and working memory, and area of brain associated with self-monitoring of feelings and thoughts); Schatz, supra note 31 (reporting MRI scans of volunteers who completed eight-week mindfulness training showed stronger connections in brain regions associated with attention, auditory and visual processing).

<sup>&</sup>lt;sup>50</sup> See Burgess, supra note 19, at 23 (suggesting students must filter environmental stimuli to better pay attention); Jacobson, supra note 19, at 421 (defining attention as "ability to attend to [only those] desired or necessary stimuli"); Miller, supra note 19, at 121 ("Without attention, there is no memory."); Shapiro et al., supra note 10, at 9 ("Attention is critically important to the mental processing central to learning.").

<sup>&</sup>lt;sup>51</sup> See Shapiro et al., supra note 10, at 9

<sup>&</sup>lt;sup>52</sup> Levy et al., *supra* note 15, at 45.

attention, and researchers have been studying them all. For example, in one hallmark study, three attentional subsystems were evaluated: alerting, orienting, and conflict monitoring.<sup>53</sup> "Alerting involves achieving and maintaining a state of preparedness, orienting directs and limits attention to a subset of possible stimulus inputs, and conflict monitoring prioritizes among competing tasks and responses."<sup>54</sup> All three subsystems are related to attention and learning.<sup>55</sup> Researchers used the Attention Network Test (ANT)<sup>56</sup> to assess the effects of meditation on these three subsystems.<sup>57</sup>

The study involved three groups of participants and assessed each group's response time and accuracy in performing the ANT. One group of novice meditators participated in an eight-week meditation based stress reduction (MBSR) course that met weekly for three hours, focusing primarily on concentrative attention. Another group of experienced meditators participated in a full-time one-month meditation retreat. The ANT was performed before and after the meditation program, and compared with a control group who had no meditation training. Pre-test, the retreat group had better conflict monitoring than the other two groups. Post-test, the MBSR group had significantly better ability to orient attention, while the retreat group had better alerting skills than the other two. These results suggest that mindfulness training may improve attention-related behavioral responses by enhancing functioning of specific

<sup>&</sup>lt;sup>53</sup> See Jha et al., supra note 30, at 109-111; Shapiro et al., supra note 10, at 7-8 (discussing Jha et al.'s study and results).

<sup>&</sup>lt;sup>54</sup> See Shapiro et al., supra note 15, at 7-8 (citing study by Jha et al.).

<sup>&</sup>lt;sup>55</sup> See Jha et al., supra note 30, at 110.

<sup>&</sup>lt;sup>56</sup>Jha et al., *supra* note 30, at 110. An Attention Network Test (ANT) is a brief, computerized battery of tests often used to measure different behavioral aspects of attention, and it is based on the Attention Network theory. *See* Shapiro et al., *supra* note 15, at 7-8 (citing studies discussing ANT). Scientists typically use the test to measure the tester's ability to overcome stimuli while doing tasks as well as how well the tester responds to valid and conflicting cues to complete those given tasks. *See* J. Fan, et al., *Testing the Efficiency and Independence of Attentional Networks*, 14 J. Cognitive Neuroscience 340 (2002). The Attention Network theory divides the neural systems of the brain into three categories: the orientation and selection network, the executive and conflict network, and the vigilance network. *Id.* Using reaction time (RT) and conflict tasks, scientists devised the ANT to measure the response times of these networks as well as the ability for the aforementioned networks to handle conflict. *Id.* 

<sup>&</sup>lt;sup>57</sup> Jha et al., *supra* note 30, at 110.

<sup>&</sup>lt;sup>58</sup> Jha et al., *supra* note 30, at 111.

<sup>&</sup>lt;sup>59</sup> Jha et al., *supra* note 30, at 111.

<sup>&</sup>lt;sup>60</sup> Jha et al., *supra* note 30, at 111.

<sup>&</sup>lt;sup>61</sup> Jha et al., *supra* note 30, at 111.

<sup>&</sup>lt;sup>62</sup> Jha et al., *supra* note 30, at 114 fig.2, 116.

<sup>&</sup>lt;sup>63</sup> Jha et al., *supra* note 30, at 114-16 & figs.3-4.

subcomponents of attention."64

Intensive meditation training "can alter the way in which the brain allocates attentional resources to important stimuli."65 Another study involved "attentional blink," a phenomenon where the brain is so busy processing initial inputs that it cannot "see" or process subsequent input. <sup>66</sup> Participants were asked to identify two stimuli—in this case, numbers mixed with letters—and their ability to spot all the targets accurately was assessed. 67 "[T]his task gauges the ability of subjects to allocate cognitive resources efficiently when multiple stimuli compete for attention."68 Performance by seasoned meditators was compared before training and after training, as well as to a control group of novice meditators. 69 There was no meditation performed during the tests. 70 Each one of the seasoned meditators showed improved ability to detect the second target while only sixteen out of twenty-three of the novice meditators showed such improvement. 71 The authors found "this reduction in the effect of the attentional blink is consistent with the idea that after training, practitioners were allocating a smaller proportion of their brains' resources to the first target."72 The researchers also measured the electrical changes associated with neural responses to sensory stimuli or cognitive tasks, which is believed to reflect the allocation of resources to the target. 73 The authors concluded that intensive meditation training "can produce lasting and significant improvements in the efficient distribution of attentional resources among competing stimuli, even when individuals are not actively using the techniques they have learned."<sup>74</sup>

<sup>&</sup>lt;sup>64</sup> Jha et al., *supra* note 30, at 109.

<sup>&</sup>lt;sup>65</sup> Rachel Jones, *Learning to Pay Attention*, 5 PUB. LIBR. SCI. BIOLOGY 1188, 1188 (June 2007), *available at* http://www.plosbiology.org/article/fetchObject.action?uri=info% 3Adoi%2F10.1371%2Fjournal.pbio.0050166&representation=PDF.

<sup>&</sup>lt;sup>66</sup> See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>67</sup> See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>68</sup> See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>69</sup> See Jones, supra note 65, at 1188. Jones explains that seasoned meditators attended an intensive three month, ten-to-twelve hour training course while the novice meditators received only one hour of training. *Id*.

 $<sup>^{70}</sup>$  See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>71</sup> See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>72</sup> See Jones, supra note 65, at 1188.

<sup>&</sup>lt;sup>73</sup> See Jones, supra note 65, at 1189.

<sup>&</sup>lt;sup>74</sup> See Jones, supra note 65, at 1189; see also Antoine Lutz et al., Mental Training Enhances Attentional Stability: Neural and Behavioral Evidence, 29 J. NEUROSCIENCE 13418, 13418 (2009) (finding three months of intensive mindfulness training enhanced attentional stability and promoted more efficient processing); Heleen A. Slagter et al., Mental Training Affects Distribution of Limited Brain Resources, 5 Pub. Libra. Sci. Biology 1228 (2007), available at http://www.plosbiology.org/article/fetchObject.action?

Even short-term mindfulness training can improve attentional skills.<sup>75</sup> In another study, participants received five days of meditation or relaxation training, and were tested before and after training.<sup>76</sup> The meditation group showed significantly greater improvement than the relaxation group in various tests, including the ANT, and they showed "lower anxiety, depression, anger, and fatigue, and higher vigor on the Profile of Mood States scale, a significant decrease in stress-related cortisol, and an increase in immunoreactivity."<sup>77</sup> Thus, not surprisingly, attention and learning can benefit from even a short amount of mindfulness training.

## B. Mindfulness Training Can Improve Working Memory.

The more information that can be held in working memory, the greater the potential for learning. Thus, improving working memory capacity improves learning. Mindfulness training can aid in the brain's ability to take information held in working memory and convert it to long-term memory, which is key to learning. The service of the potential of t

Mindfulness training can help increase working memory capacity because it helps strengthen the area of the brain responsible for higher cognitive functioning, the prefrontal cortex.<sup>80</sup> The hippocampus, which helps convert working memory into long-term memory, is found in the

uri=info%3Adoi%2F10.1371%2Fjournal.pbio.0050138&representation=PDF (finding three months intensive mental training resulted in smaller attentional blink, reduced brain resource allocation to first target).

<sup>&</sup>lt;sup>75</sup> YiYuan Tang, et al., *Short-Term Meditation Training Improves Attention and Self-Regulation*, 104 PROC. NAT'L ACAD. SCI. U.S.A. 17152 (2007), *available at* http://www.pnas.org/content/104/43/17152.full.pdf+html.

<sup>&</sup>lt;sup>76</sup> See Tang, supra note 75, at 17152-53 (detailing structure of study).

The Chart (May11, 2011 11:15 am), http://thechart.blogs.cnn.com/2011/05/11/seeking-serenity-when-lawyers-go-zen/. Enayati discussed a Harvard study showing that as little "as 30 minutes a day for 8 weeks resulted in measurable changes in the brain regions involved in learning, memory, emotion regulation, and stress." *Id.* The Profile of Mood States scale, commonly abbreviated as POMS, is commonly used clinical instrument to assess mood and feeling statesu, and measure levels of psychological distress. *See* Shelly L. Curran, *Short Form of the Profile of Mood States (POMS-SF): Psychometric information*, 7 PSYCHOL. ASSESSMENT 80, 80-83 (1995).

<sup>&</sup>lt;sup>78</sup> See supra notes 20-24 and accompanying text (linking working, short-, and long-term memory to learning capacity).

<sup>&</sup>lt;sup>79</sup> See infra notes 20-21 and accompanying text.

<sup>80</sup> SCOTT ROGERS, THE SIX MINUTE SOLUTION: A MINDFULNESS PRIMER FOR LAWYERS 22-23 (2009).

frontal cortex.<sup>81</sup> Thus, the effective use of the hippocampus is central to learning.<sup>82</sup> The functioning of the hippocampus can be negatively affected by emotions and stress.<sup>83</sup> The limbic system, which includes the amygdala, is associated with emotions.<sup>84</sup> Daily hassles can fire up the amygdala, a region of the brain associated with fear, anxiety, and stress.<sup>85</sup> The prefrontal cortex and hippocampus can be

hijacked by the more primitive [amygdala] ... as too much stress hormone cortisol is released. As a result, attentional focus drops, along with the smooth functioning of the hippocampus and [the] capacity to learn. Working memory is diminished, mental creativity and flexibility are compromised, and there are fewer resources available to plan and organize. 86

This interplay, known as the "frazzle effect" negatively affects learning.<sup>87</sup> Mindfulness exercises can improve the functioning of the prefrontal cortex and the hippocampus, and tone down the amygdala, helping us to perform better in high-stress situations.<sup>88</sup>

<sup>81</sup>See ROGERS, supra note 80, at 22; CARR, supra note 47, at 188-90 (equating hippocampus to "orchestra conductor in directing . . . symphony of . . . conscious memory" to form long-term memories).

<sup>&</sup>lt;sup>82</sup> See CARR, supra note 47, at 188-90 (teaching hippocampus fixes and merges various contemporaneous memories, forming single recollection, and links new memories to old); DANIEL GOLEMAN, SOCIAL INTELLIGENCE: THE NEW SCIENCE OF HUMAN RELATIONSHIPS 1, 273 (2006) ("The hippocampus, near the amygdala in the midbrain, is our central organ for learning.").

<sup>&</sup>lt;sup>83</sup> See GOLEMAN, supra note 82, at 273; ROGERS, supra note 80, at 23.

 $<sup>^{84}</sup>$  Rogers,  $\it supra$  note 80, at 23; Daniel J. Siegel, The Mindful Brain 1, 33 & fig.2.1, 34 (2007).

<sup>&</sup>lt;sup>85</sup> See ROGERS, supra note 80, at 22-23; Schatz, supra note 31, see also In the Journals: Mindfulness Meditation Practice Changes the Brain, HARV. WOMEN'S HEALTH WATCH, at 6-7 (Apr. 2011 [hereinafter Harvard Health Watch].

<sup>&</sup>lt;sup>86</sup> See ROGERS, supra note 80, at 22

<sup>&</sup>lt;sup>87</sup> See ROGERS, supra note 80, at 22-23; GOLEMAN, supra note 82, at 267-69 (defining "frazzle" as "neural state in which emotional upsurges hamper . . . workings of . . . executive center").

<sup>&</sup>lt;sup>88</sup>See ROGERS, supra note 80, at 22; see also Harvard Health Watch, supra note 85, at 6-7; Lisa A. Kilpatrick et al., Impact of Mindfulness-Based Stress Reduction Training on Intrinsic Brain Connectivity, 56 NEUROIMAGE 290, 295 (2011) ("Our results demonstrate that MBSR-trained subjects during mindful awareness of sounds have greater synergy/positive coherence between a region involved in fine-grained perceptual processing of auditory information and other auditory-related regions as well as salience/control regions."); Schatz, supra note 31.

In one study, participants attended an eight-week mindfulness-based stress-reduction class, which met once a week for two-and-one-half hours.<sup>89</sup> They practiced mindfulness meditation in class and were given audio recordings to guide them in daily practice at home. 90 Magnetic Resonance Imaging tests (MRIs) were taken before and after the training, and showed that, as compared to the control group of non-meditators who showed no changes, the meditators had "increased concentrations of gray matter (the "computing" or processing neurons) in several brain areas, including the hippocampus . . . and other regions associated with remembering the past and imagining the future . . . [such as] introspection, empathy, and the ability to acknowledge the viewpoints of others."91 In answer to questions, the meditators also indicated that they felt more capable of acting with awareness, observing, and remaining non-judgmental. <sup>92</sup> In an earlier study of the same participants, MRIs revealed that the meditators had reduced gray matter in the amygdala and that this reduction was associated with lower stress. 93

Other studies have shown that working-memory capacity is increased in proportion to the actual amount of meditation practice. For example, inexperienced meditators who attended an intensive ten-day mindfulness meditation class were compared with a control group who had no mindfulness training. The mindfulness-training group's working capacity increased significantly, demonstrating a statistically significant improved capacity for sustained attention during tasks. Thus, short or long-term mindfulness training can improve working memory capacity and learning.

<sup>&</sup>lt;sup>89</sup> Kilpatrick, *supra* note 88, at 290-91; *Harvard Health Watch*, *supra* note 85.

<sup>&</sup>lt;sup>90</sup> Kilpatrick, *supra* note 88, at 290-91; *Harvard Health Watch*, *supra* note 85.

<sup>&</sup>lt;sup>91</sup> Harvard Health Watch, supra note 85, at 7.

<sup>&</sup>lt;sup>92</sup> Harvard Health Watch, supra note 85, at 7.

<sup>&</sup>lt;sup>93</sup> Harvard Health Watch, supra note 85, at 7.

<sup>&</sup>lt;sup>94</sup> See e.g., Chambers et al., supra note 43, at 303 (finding meditation group had significantly better working-memory capacity, attention capabilities during performance task than control group); Helber, supra note 39, at 349-58; Amishi P. Jha, et al. Examining the Protective Effects of Mindfulness Training on Working Memory Capacity and Affective Experience, 10 Emotion 54 (2010); Marieke K. van Vugt & Amishi P. Jha, Investigating the Impact of Mindfulness Meditation Training on Working Memory: A Mathematical Modeling Approach, 11 Cognitive, Affective, & Behavioral Neuroscience 344 (2011).

<sup>(2011).</sup> See Chambers et al., supra note 43, at 304-15 (suggesting mindfulness training has benefits for psychological functioning).

<sup>&</sup>lt;sup>96</sup> Chambers et al., *supra* note 43, at 315-16 (noting statistically significant increase in working-memory capacity helps treat Attention Deficit Hyperactivity Disorder, post-traumatic-stress disorder, schizophrenia).

### C. Mindfulness Training Can Improve Academic Achievement.

Mindfulness has even been shown to improve academic achievement, including grades and standardized test scores. 97 For example, researchers at the University of Southern California randomly assigned forty-eight undergraduate students to either a mindfulness class or a nutrition class. 98 The classes met for forty-five minutes four times per week for two weeks. 99 Experts taught the classes, and the mindfulness class provided a conceptual introduction and practical instruction on how to practice mindfulness in targeted exercises and daily life. 100 The nutrition class taught ways for healthier eating and required students to log their daily food intake. 101 The students in both classes took a verbal-reasoning section from the Graduate Record Examination (GRE) and a working memory capacity test before and after the two weeks of classes. 102 The scores of the mindfulness-trained group improved, but not the nutrition-trained group. 103 The mindfulness students improved both their verbal GRE score by an average of sixteen percentile points, as well as their scores on the working memory capacity The study serves as convincing evidence that mindfulness can improve working memory and reading, and reduce mind wandering. 105 "The research established with greater certainty that some cognitive abilities often seen as immutable, such as working memory capacity, can be improved through mindfulness training." <sup>106</sup>

In another study involving college students, two groups were studied: one group attended a one-hour concentration-based meditation class twice a week and the other group met once a week as a study group, but they were

<sup>&</sup>lt;sup>97</sup> Michael D. Mrazek et al., *Mindfulness Training Improves Working Memory Capacity and GRE Performance While Reducing Mind Wandering*, 24 PSYCHOL. SCI. 776, 776-77 (2013), *available at* https://labs.psych.ucsb.edu/schooler/jonathan/sites/labs.psych.ucsb.edu.schooler.jonathan/files/biblio/10.1177 0956797612459659 0.pdf.

<sup>98</sup> Mrazek et al., *supra* note 97, at 777.

<sup>&</sup>lt;sup>99</sup> Mrazek et al., *supra* note 97, at 777.

<sup>&</sup>lt;sup>100</sup> Mrazek et al., *supra* note 97, at 777.

<sup>&</sup>lt;sup>101</sup> Mrazek et al., *supra* note 97, at 777.

<sup>&</sup>lt;sup>102</sup> Mrazek et al., *supra* note 97, at 777.

<sup>&</sup>lt;sup>103</sup> Mrazek et al., *supra* note 97, at 778.

<sup>&</sup>lt;sup>104</sup> Mrazek et al., *supra* note 97, at 778.

<sup>&</sup>lt;sup>105</sup> Mrazek et al., *supra* note 97, at 780.

Mindfulness Improves Reading Ability, Working Memory, and Task Focus, say UC Santa Barbara Researchers, U. C. SANTA BARBARA PUB. AFF. & COMM. (Mar. 26, 2013), http://www.ia.ucsb.edu/pa/display.aspx?pkey=2970 (announcing results of study by Mrazek et al., *supra* note 97).

not introduced to meditation. <sup>107</sup> This meditation class included attentional focusing and relaxation exercises, and students meditated during the first and last ten minutes of class, as well as outside of class and before exams. <sup>108</sup> The other group met only as a study group with no particular exercises. <sup>109</sup> Both groups had similar cumulative Grade Point Averages (GPAs) at the end of the fall semester, but at the end of the spring semester, the meditation group not only had higher GPAs for the spring semester, but also had significantly higher cumulative GPAs than the control group. <sup>110</sup> This study lends substantial support to the proposition directly linking mindfulness training to increased academic achievement, and suggests mindfulness training should be encouraged in academic environments. <sup>111</sup>

# D. Mindfulness Training Can Improve Other Sources of Stress, Which Interfere with Focus and Learning.

Mindfulness training may benefit people suffering from a variety of ailments, including chronic pain, fibromyalgia, cancer, heart disease, anxiety, binge eating disorder, psoriasis, borderline personality disorder, major depressive disorder, and stress. It has also been shown to reduce anxiety and increase positive emotions. Mindfulness has even been

<sup>&</sup>lt;sup>107</sup> Pamela D. Hall, *The Effect of Meditation on the Academic Performance of African American College Students*, 29 J. BLACK STUD. 408, 410 (1999); *see* Shapiro et al., *supra* note 10, at 9 (summarizing results of Hall study).

<sup>&</sup>lt;sup>108</sup> Hall, *supra* note 107, at 411.

<sup>&</sup>lt;sup>109</sup> Hall, *supra* note 107, at 411.

<sup>&</sup>lt;sup>110</sup> Hall, *supra* note 107, at 411-13. The meditation and non-meditation groups began the study with cumulative GPAs of 2.77 and 2.64, respectively. After undergoing meditation training, the meditation and non-meditation groups had spring semester GPAs of 2.85 and 2.55, respectively, and cumulative GPAs of 2.93 and 2.48, respectively.

<sup>&</sup>lt;sup>111</sup> See Hall, supra note 107, at 414-15; Hamblin, supra note 14 (linking mindfulness training to improved academic performance).

<sup>112</sup> See Harvard Health Watch, supra note 85, at 6; Jha et al., supra note 30, at 109 (reporting myriad health benefits of MBSR programs); Kimberly Roberts & Sharon Danoff-Burg, Mindfulness and Health Behaviors: Is Paying Attention Good for You?, 59 J. AM. C. HEALTH 165 (2010) (suggesting mindfulness training decreases stress, which contributes to better overall health and health behaviors). See generally SHAUNA L. SHAPIRO & LINDA E. CARLSON, THE ART AND SCIENCE OF MINDFULNESS: INTEGRATING MINDFULNESS INTO PSYCHOLOGY AND THE HELPING PROFESSIONS 1, 48-60 (2009) (relating common mindfulness-based therapies' application to various illnesses, ailments, and health conditions).

by Mindfulness Meditation, 65 PSYCHOSOMATIC MED. 564-570 (2003); Tang, supra note 75, at 17152 (reporting even short-term mindfulness meditation training reduced anxiety and improved overall mood). Positive moods such as enjoyment, joy, interest, and excitement are typically referred to as being positive affects, while feelings such as anger, disgust, dissmell, distress, fear, and shame are referred to as negative affects.

shown to improve immune function. 114 Stated more generally, mindfulness can improve and enhance health and quality of life, which in turn can improve academic and cognitive performance. 115

### 1. Mindfulness Can Reduce Stress, Anxiety, and Negative Emotions.

"Since the early 1980s, mindfulness meditation has increasingly found a place in mainstream health care and medicine because of evidence that it's good for emotional and physical health." Mindfulness Based Stress Reduction (MBSR) is well studied and documented as a useful tool in medicine and has been widely taught and practiced over the last three decades. Numerous studies have confirmed that an eight-week MBSR program can significantly reduce stress, negative moods and rumination, and increase positive moods. 118

the right PFC is more associated with anxiety and discomfort and experiential avoidance and the left is more associated with, well, the catchword is happiness: wellbeing, calm and emotional intelligence.

Until we did that study, it was thought that the ratio of right/left activity in the

<sup>&</sup>lt;sup>114</sup> See Blakeslee, supra note 27 (linking meditation practice with increased immunity); Davidson et al., supra note 113 (demonstrating mindfulness meditation produced significantly improved immune function); Ortner et al., supra note 30 (noting improved immune function with mindfulness training).

<sup>&</sup>lt;sup>115</sup> See Hall, supra note 107, at 414-15 (reporting increased GPAs as result of meditation); Hamblin, supra note 14 (reporting mindfulness training improves academic achievement); Jha et al., supra note 30, at 109, 116-17(noting meditation training improved concentration and attention); Shapiro et al., supra note 10, at 8-9 (highlighting Hall and Slagter findings).

<sup>116</sup> Harvard Health Watch, supra note 85, at 6.

<sup>&</sup>lt;sup>117</sup> See Jha et al., supra note 94, at 54 (asserting mindfulness training is now "widely available, with more than 250 medical centers around the United States offering mindfulness based stress reduction programs").

<sup>&</sup>lt;sup>118</sup> See Harvard Health Watch, supra note 85; Kilpatrick, supra note 88, at 290-91; Schatz, supra note 31 (reporting MRI scans of volunteers who completed eight-week mindfulness training); Maia Szalavitz, O&A: Jon Kabat-Zinn Talks About Bringing Mindfulness Meditation to Medicine, TIME, (Jan. 11, 2012), http://healthland.time.com/ 2012/01/11/mind-reading-jon-kabat-zinn-talks-about-bringing-mindfulness-meditation-tomedicine/#ixzz2smGlCmzd (discussing eight-week MBSR training "can actually produce thickening in particular regions of the brain important for learning, memory, executive decision-making and perspective-taking"); Shapiro et al., supra note 10, at 10 (highlighting archetypal MBSR studies); Shauna L. Shapiro et al., The Effects of Mindfulness-Based Stress Reduction on Medical and Premedical Students, 21 J. BEHAV. MED. 581, 592-94 (1998) (discussing results of eight-week MBSR included reductions in self-reported depression and anxiety, and increased empathy). In 2012, researcher Jon Kabat-Zinn discussed that eight weeks of MBSR training showed a significant shift in MBSR-trained individuals' brains: the MBSR-trained group switched from exhibiting a right-side brain activation in their pre-frontal cortex (PFC) to a more left-sided activation. Szalavitz, supra. The shift from right-side to left-side brain activation was a groundbreaking discovery:

Reducing stress and anxiety has clear implications for improving learning. Stress "handicaps our abilities for learning, for holding information in working memory, for reacting flexibly and creatively, for focusing attention at will, and for planning and organizing effectively." In addition to reducing stress and anxiety, mindfulness supports better regulation of emotional affect. This appears to extend beyond mere relaxation. As discussed above, the "[w]hen an individual is able to

PFC was pretty much a fixed trait once you reached adulthood — that you were the way the you were; if you were a nervous nelly, you were pretty much going to stay that way, and if you happened to be Ms. Relaxation, you stayed that way, too.

Id.

119 See J. D. Bremner & M. Narayan, The Effects of Stress on Memory and the Hippocampus Throughout the Life Cycle: Implications for Childhood Development and Aging, 10 Dev. AND Psychopathology 871 (1998); Chambers et al., supra note 43, at 303 (noting meditation increases working-memory capacity); Kilpatrick, supra note 88, at 290-91 (finding mindfulness-trained group's MRIs showed increased concentrations of gray matter in PFC and hippocampus); Roberts & Danoff-Burg, supra note 112 (demonstrating stress reduction as result of mindfulness training); Maria Konnikova, An Antidote for Mindlessness, New Yorker, (Jan. 29, 2014), http://www.newyorker.com/online/blogs/elements/2014/01/an-antidote-for-mindlessness.html?utm\_source=tny (explaining studies by Jha, effects of mindfulness training on combating stress); supra notes 80-87 and accompanying text (explaining brain's structure, positive mindfulness-training effects on PFC performance, working memory, and high-stress performance). "Mindfulness training... may work as a protective factor against the typical stresses of student life—or any stress, for that matter, since it improves emotional equilibrium and enables people to better handle distractions." Konnikova, supra.

GOLEMAN, *supra* note 82, at 268; *see also* Shapiro et al., *supra* note 10, at 9-10 (presenting studies supporting proposition that mindfulness training decreases stress); Konnikova, *supra* note 119 (correlating mindfulness training with improved handling of stress)

stress).

SIEGEL, *supra* note 84, at 225, 337 app. III; Shapiro et al., *supra* note 10, at 11-12; see also ROGERS, supra note 80, at 22-23; Kirkpatrick, supra note 88, at 295; Kirk Warren Brown et al., Mindfulness: Theoretical Foundations and Evidence for its Salutary Effects, 18 PSYCHOL. INQUIRY 211, 220 (2007) (correlating cognitive and affective mental-health and well-being indicators with specific trait measures of mindfulness); J.D. Creswell, et al., Neural Correlates of Dispositional Mindfulness During Affect Labeling, 69 PSYCHOSOMATIC MED. 560 (2007) (measuring amygdala activation after threatening emotional visual stimuli); supra notes 86-88 and accompanying text (highlighting "frazzle effect" and its impact). Brown et al. explain that "[t]he trait MAAS has been associated with lower levels of emotional disturbance (e.g., depressive symptoms, anxiety, and stress), higher levels of subjective well-being (lower negative affect, higher positive affect, and satisfaction with life) and higher levels of eudaimonic well-being (e.g., vitality, selfactualization)." Brown et al., supra, at 220. In their study measuring amygdala activity in response to threatening emotional visual stimuli, Creswell et al. found that those with higher MAAS-assessed mindfulness levels exhibited less reactivity to emotionally threatening stimuli than those with lower MAAS levels. See Creswell et al., supra.

122 See Shapiro et al., supra note 10, at 11; S. Jain et al., A Randomized Controlled

successfully self-regulate . . . they experience a release of physical tension that acts to oppose the stress response and creates a calm state of mind and body." <sup>123</sup> In one study involving college students, functional MRIs revealed that those with higher dispositional mindfulness reacted less to threatening visual stimuli, as evidenced by lower activation of the amygdala and stronger prefrontal cortex activation, indicative of better executive control. <sup>124</sup> Other studies reveal that mindfulness allows for a quicker turnaround from negative emotions, as compared to the other common strategies of distraction and rumination. <sup>125</sup>

Law school and lawyering are high-stress situations. Law school can be a very demanding environment as students wrestle with complex material and time pressures they likely have not seen before. Likewise,

Trial of Mindfulness Meditation Versus Relaxation Training: Effects on Distress, Positive States of Mind, Rumination, and Distraction, 33 Annals of Behav. Med. 11 (2007) (reporting month-long mindfulness-meditation and somatic-relaxation programs produced similar effects on "distress reduction and enhancement of positive mood relative to notreatment control students"). While mindfulness training and somatic relaxation both reduced stress and increased overall emotional well-being, Jain et al. indicates that "mindfulness meditation may be specific in its ability to reduce distractive and ruminative thoughts and behaviors, and this ability may provide a unique mechanism by which mindfulness meditation reduces distress." Jain et al., supra.

Among the primary complaints that lawyers cite as contributing to their stress are time pressures, work overload, and inadequate time for themselves and their families. Simple statistics as well as descriptive accounts suggest that many legal workplaces are like working class (or blue collar) sweat shops. The typical City/Wall Street lawyer is expected to log a minimum of 1800 billable hours per year; many lawyers are expected to far exceed this figure. An 1800 hour minimum translates into almost 7 hours per day, 5 days per week, 52 weeks a year. Since this does not include, eating, socializing, going to meetings, reading mail, seeking new clients, etc., it has been estimated that to bill 7 hours one must work 9-12 hours. Thus, it is common for lawyers to take work home, to work on weekends, and to not take their allotted vacation or holiday time.

More on Lawyer Stress, supra.

<sup>123</sup> Shapiro et al., *supra* note 10, at 11

See Creswell et al., supra note 121.

<sup>&</sup>lt;sup>125</sup>See Patricia C. Broderick, *Mindfulness and Coping with Dysphonic Mood: Contrasts with Rumination and Distraction*, 29 COGNITIVE THERAPY & RES. 501 (2005) (reporting mindfulness best reduced negative moods and increased relaxation, compared with distraction and rumination).

<sup>&</sup>lt;sup>126</sup> See Riskin, supra note 34, at 1, 4 (discussing high levels of unhappiness, stress, and depression among law students and lawyers); see also More on Lawyer Stress, FUTUREVISIONS.ORG, http://www.futurevisions.org/law\_crr\_stress\_more.htm (last visited Feb. 23, 2014) (describing environmental and occupational stressors of lawyers).

<sup>&</sup>lt;sup>127</sup>See Riskin, supra note 34, at 10. Riskin reasons that pervasive rates of depression and mental illness are common among lawyers because "law schools tend to overemphasize analytical reasoning at the expense of developing interpersonal skills, and they

"it is common knowledge . . . the practice of law is stressful." Research reveals that lawyers are more prone to depression than members of any other profession, and that as many as twenty percent of lawyers abuse alcohol or other substances. Because mindfulness training is linked with helping many conditions that negatively affect law students and lawyers, law schools should include it as part of their academic requirements, giving students and practicing lawyers tools they can use to combat these conditions.

## 2. Mindfulness can enhance creativity.

Creativity is essential to learning. 130 "Creativity traits and capacities include perceptual skill, ideational fluency, openness to experience, and emotional flexibility." 131 While essential to learning, unfortunately creativity has been on the decline, with some blaming technology and the devaluation of creativity in education. 132

incline students to seek satisfaction from external sources—such as 'winning' in general, and especially through grades, awards, and prestigious jobs—rather than from internal sources, such as a secure sense of self." *Id.* 

J. Patton Hyman, *The Mindful Lawyer: Mindfulness Meditation and Law Practice*, 33 VT. B.J. 40 (2007) (referencing studies confirming depression, substance abuse, domestic difficulties more common among lawyers than general public); Riskin, *supra* note 34, at 10-11 (noting "lawyers have higher rates of depression and anxiety, divorce, and substance abuse than the general population and members of other professions").

<sup>129</sup> See Enayati, supra note 77 (referencing American Bar Association statistics on lawyer alcoholism, substance abuse). See generally G. Andrew H. Benjamin et al., The Prevalence of Depression, Alcohol Abuse, and Cocaine Abuse Among United States Lawyers, 13 INT'L J.L. & PSYCHIATRY 233 (1990) (discussing alcoholism and other substance abuse rates of American lawyers); LAWYERS WITH DEPRESSION (last visited Feb. 23, 2014), http://www.lawyerswithdepression.com/ (providing online resource for lawyers with depression, and highlighting disproportionate depression rates among lawyers).

<sup>130</sup> See Samantha A. Moppett, Lawyering Outside the Box: Confronting the Creativity Crisis, 37 S. ILL. U. L.J. 253, 261 (2013) (articulating that "the unprecedented challenges and frantic page of change today renders creativity an indispensable trait").

131 Shapiro et al., *supra* note 10, at 12, *see* Moppett, *supra* note 130, at 266-86.

132 See Moppett, supra note 130, at 290-92 (discussing effect of technology and No Child Left Behind Act in stifling creativity); see also Peter Gray, As Children's Freedom Has Declined, So Has Their Creativity, in Freedom to Learn, PSYCHOL. TODAY, (Sept. 12, 2012), http://www.psychologytoday.com/blog/freedom-learn/201209/children-s-freedom-has-declined-so-has-their-creativity (describing decline in children's creativity, noting largest decline in "Creative Elaboration" measure). Gray explains that a recent research report documenting this continuous creativity decline among American school children indicates that over the past two to three decades,

'children have become less emotionally expressive, less energetic, less talkative and verbally expressive, less humorous, less imaginative, less unconventional, less lively and passionate, less perceptive, less apt to connect seemingly irrelevant

Research and experts point to mindfulness meditation as being able to increase creativity, and thus, improve learning. One study compared two groups of undergraduate students: one received meditation training and the other received relaxation training. The meditating group exhibited improvements in creativity, specifically, by showing greater consciousness of problems, invention, sensory experience, expression of emotion, feeling, humor, and fantasy. Mindfulness training ultimately has the potential to address the decline in creativity and improve learning.

#### 3. Mindfulness can enhance empathy, compassion and counseling skills.

Mindfulness can enhance other skills such as empathy, compassion, and counseling, skills that are valued and needed to practice good lawyering. <sup>136</sup> Many critics have cited the lack of these skills as indicative of a problem with the current state of legal education. <sup>137</sup>

things, less synthesizing, and less likely to see things from a different angle.' Gray, *supra* (quoting Kyung Hee Kim, *The Creativity Crisis: The Decrease in Creative Thinking Scores on the Torrance Tests of Creative Thinking*, 23 CREATIVITY RES. J. 285-95 (2011)).

133 Ernest L. Cowger, Jr. & E. Paul Torrance, Further Examination of the Quality of Changes in Creative Functioning Resulting from Meditation (Zazen) Training, 7 CREATIVE CHILD & ADULT Q., 211, 211-17 (1982); Eric Hoover, Filmmaker Wants Students to Chill Out with Transcendental Meditation, CHRON. OF HIGHER EDUC., (Aug. 5, 2005) ("Proponents [of meditation] say that meditating also can improve students' academic performances and foster their creativity.").

<sup>134</sup> See Cowger & Torrance, supra note 133, at 212.

135 Cowger and Torrance, *supra* note 133, at 213-17 (discussing results and comparing with prior study of U.S. and Japanese students). Cowger and Torrance described parallels between their research and a previous study of U.S. and Japanese students where U.S. students worked faster but with less accurate results than their Japanese counterparts, who were raised in a Zen culture. *Id*.

136 See Davis & Hayes, supra note 32, at 202 (highlighting empathy, compassion, counseling skills, and decreased stress and anxiety as benefits); Charles Halpern, The Mindful Lawyer: Why Contemporary Lawyers are Practicing Meditation, 61 J. LEGAL EDUC. 641, 641 (2012) ("A growing body of scientific evidence suggests that meditation affects brain structure and function and that it improves concentration, empathy and listening skills—all important to the effective practice of law."); Magee, supra note 37, at 563 ("mindfulness has been shown to increase feelings of empathy and compassion:"); Rogers, supra note 33, at 3 ("By practicing mindfulness you will become a more effective attorney able to better cope with stress, listen more deeply to clients, and obtain greater perspective on your work and the challenges presented in daily life."); Shapiro et al., supra note 10, at 12-14 (supporting claims that mindfulness training enhances interpersonal relationship skills, empathy, and compassion).

<sup>137</sup> See infra note 148 and accompanying text (noting twin concerns with current legal education system).

Mindfulness training has been shown to improve empathy in therapists. Two studies of medical students and graduate psychology students showed that those who received eight or ten weeks of mindfulness training experienced increased levels of self-reported empathy. The studies showed that therapists were able to "develop their ability to experience and communicate a felt sense of clients' inner experiences, be more present to client's suffering; and help clients express . . . their feelings." 140

Mindfulness training also increases self-compassion, and may help deal with negative life events. <sup>141</sup> Self-compassion has been defined as "being kind and understanding toward oneself in instances of pain or failure; perceiving one's experiences as part of the larger human experience; and holding painful thoughts and feelings in balanced awareness rather than over-identifying with them." <sup>142</sup> It is connected to other positive psychological characteristics including "wisdom, personal initiative, curiosity, and exploration, happiness, optimism, and positive affect." <sup>143</sup> Two studies showed that mindfulness meditation increased self-

<sup>138</sup> See generally Davis & Hayes, supra note 32; Shauna L. Shapiro, et al., Mindfulness-Based Stress Reduction for Health Care Professionals: Results from a Randomized Trial, 12 INT'L J. STRESS MGMT. 164 (2005).

<sup>&</sup>lt;sup>139</sup> See Davis & Hayes, supra note 32, at 202-03 (reporting mindfulness training improved therapists communication and empathy with clients' situations, helped clients express themselves); Shapiro et al., supra note 118, at 589-90, 594 (evidencing mindfulness training caused improved empathy among medical students); Shapiro et al., supra note 10, at 13 (citing multiple studies supporting proposition that mindfulness training encourages empathic tendencies).

<sup>&</sup>lt;sup>140</sup> Davis & Hayes, *supra* note 32, at 202.

<sup>&</sup>lt;sup>141</sup> See Davis & Hayes, supra note 32, at 202 (strongly correlating elements of MBSR training with developing self-compassion); Shapiro et al., supra note 10, at 14 (citing relevant studies demonstrating mindfulness cultivates self-compassion); see also M. R. Leary et al., Self-Compassion and Reactions to Unpleasant Self-Relevant Events: The Implications of Treating Oneself Kindly, 92 J. PERSONALITY AND SOC. PSYCHOL. 887-904 (2007) (finding, among college students, self-compassion more beneficial than self-esteem in dealing with negative life events).

<sup>&</sup>lt;sup>142</sup> Shapiro et al., *supra* note 10, at 14 (citing K. D. Neff et al., *An Examination of Self-Compassion in Relation to Positive Psychological Functioning and Personality Traits*, 41 J. RES. IN PERSONALITY 908 (2007)).

<sup>&</sup>lt;sup>143</sup> Shapiro et al., *supra* note 10, at 14; *see also* K. D. Neff et al., *An Examination of Self-Compassion in Relation to Positive Psychological Functioning and Personality Traits*, 41 J. RES. IN PERSONALITY 908 (2007); Shauna L. Shapiro, Kirk Warren Brown, & Gina M. Biegel, *Self-Care for Health Care Professionals: Effects of MBSR on Mental Well Being of Counseling Psychology Students*, 1 TRAINING & EDUC. IN PROF. PSYCHOL. 105 (2007).

compassion. 144 In one study, self-compassion helped college students deal with negative personal and interpersonal events in a way that may be even more helpful than self-esteem. 145 In a second study, health-care professionals demonstrated a twenty-two percent increase in selfcompassion after undergoing an eight-week MBSR intervention. 146 The research suggests that mindfulness training "contributes to qualities that produce well-rounded persons, reflected in higher creativity and greater capacities for positive interpersonal behavior and social relationships." <sup>147</sup>

#### III. LAW SCHOOLS SHOULD TEACH MINDFULNESS.

Educating law students in mindfulness has the potential to address the twin concerns of the multitasking but shallow-thinking mindset, as well as the critique that the conventional law school curriculum does not adequately address or teach professionalism and ethics. 148

Critics argue that traditional law school curriculums fail to "focus on the ethical development of students in an integrated and pervasive wav."149

those who completed the training enjoyed a myriad of personal benefits, including elevated levels of self-compassion and a decrease in psychological ills such as anxiety, depression, and burnout. In comparison, a group of teachers placed on a wait list for the course actually increased in their stress and burnout levels, But what made this study unique is that it also looked at the participants' classroom performance, such as their behavior management skills and their emotional and instructional support of students. What it discovered was this: The practice of mindfulness made them more effective teachers, possibly by buffering them from the impact of stressful experiences as they were happening.

<sup>&</sup>lt;sup>144</sup> See Shapiro et al., supra note 10, at 14 (noting positive effect of mindfulness training on positive interpersonal behaviors and relationships); Shapiro, et al., supra note 138, at 164 (reporting significant increases in self-compassion among health care professionals who underwent MBSR training); Shapiro et al., supra note 143, at 105 (finding enhanced rates of self-compassion among graduate students after completing mindfulness training).

<sup>&</sup>lt;sup>145</sup> See Leary et al., supra note 141, at 887-904; see also Shapiro et al., supra note 10, at 14.

146 See Shapiro et al., supra note 138, at 164, 170.

<sup>147</sup> Shapiro et al., *supra* note 10, at 14

<sup>&</sup>lt;sup>148</sup> While the focus of this article is on how mindulness can help students, research also reveals that mindfulness can improve teaching as well. See Vicki Zakrzewski, Can Mindfulness Make Us Better Teachers?, GREATER GOOD: THE SCIENCE OF A MEANINGFUL LIFE, (Oct. 2, 2013), http://greatergood.berkeley.edu/article/item/can mindfulness make \_us\_better\_teachers (describing eight-week mindfulness study of teachers). Zakrzewski reports on this study of the effects of mindfulness training on teachers, which found that

Id.

 $<sup>^{149}</sup>$  Magee,  $\mathit{supra}$  note 37, at 568 (citing William M. Sullivan Et Al., Educating

The authors of the Carnegie Report call for education reforms "which would assist in the 'moral development of practitioners," that combine professionalism with knowledge and skills, and which allow students more opportunities for self-reflection, and allow students to develop a habit of self-assessment. Critics also argue that law schools suppress creativity. Mindfulness training would enable law students and lawyers to address these shortcomings, while simultaneously addressing the issue of the decline in attention and concentration that is affecting learning. While some may think mindfulness training is too "new age" for law school, its acceptance and use in many other situations show that law schools are behind in the trend toward teaching mindfulness.

# A. Mindfulness Training Is Widely Used In Medicine, Industry, and Other Educational Settings.

Mindfulness training is "common in hospitals, corporations, professional sports and even prisons, [but] is relatively new in . . . education." As discussed above, it is offered in more than 250 medical centers and has been used in the medical setting for over thirty years. In the corporate sector, mindfulness meditation has experienced a "great surge of interest." Major corporations like Google . . have . . . instituted mindfulness programs for their employees." The Chicago Bulls and L.A. Lakers basketball teams use mindfulness to improve focus and work on the

LAWYERS: PREPARATION FOR THE PROFESSION OF LAW 30-31 (2007)).

<sup>150</sup> Magee, *supra* note 37, at 568-75 (citing WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW 132 (2007)); *see also* WILLIAM M. SULLIVAN ET AL., EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW (2007) [HEREINAFTER CARNEGIE REPORT]. The authors of the Carnegie Report underscore that, "[u]nder today's conditions, students' great need is to begin to develop the knowledge and abilities that can enable them to understand and manage these tensions in ways that will sustain their professional commitment and personal integrity over the course of their careers." CARNEGIE REPORT, *supra*, at 128.

<sup>&</sup>lt;sup>151</sup> See, e.g., Moppett, supra note 130, at 294.

<sup>&</sup>lt;sup>152</sup> Brown, *supra* note 26.

<sup>&</sup>lt;sup>153</sup> See supra, notes 117-118 and accompanying text.

<sup>&</sup>lt;sup>154</sup> See Riskin, supra note 34, at 4 & n.6 (noting some 300 books published on the subject).

Including an Ethics Course Incorporating Mindfulness, IDEALAWG, (Nov. 4, 2009 2:35pm), http://westallen.typepad.com/idealawg/2009/11/more-mindfulness-events-for-lawyers-and-law-students-including-an-ethics-course-incorporating-mindfu.html.; Tony Schwartz, More Mindfulness Less Meditation, N.Y. TIMES DEALBOOK, http://dealbook.nytimes.com/2014/01/31/more-mindfulness-less-meditation/?\_php=true&\_type=blogs&\_r=0 (proclaiming "mindfulness as a practice is sweeping through Silicon Valley").

team aspect of the game. 156 Environmental organizations, philanthropists, journalists, and prisoners have all found a use for some form of mindfulness training. 157

Relatively recently, secondary, undergraduate. graduate. professional schools have added components of mindfulness training to their curriculums. 158 Educational experts recognize that "the real educational potential of mindfulness lies . . . in addressing some of the . . . intractable problems of education such as the flexible transfer of skills and knowledge to new contexts, the development of deep understanding, student motivation and engagement, the ability to think critically and creatively, and the development of more self-directed learners." For example, about 3000 students in Britain have been taught mindfulness techniques through the Mindfulness in Schools program as a way to improve students' concentration, test taking, and focus. 160 In Piedmont, California, one school experimented with a five-week mindfulness-training class for its elementary students, while in Lancaster, Pennsylvania, one district taught mindfulness in twenty-five classes each week at eight schools. 161 At the Middlesex School in Concord, Massachusetts, incoming freshman students are

<sup>157</sup> See Riskin, supra note 34, at 5-6 & nn.11-16 (discussing numerous mindfulness programs used by environmental sector, leaders, philanthropists, journalists, prisoners, and green berets).

<sup>158</sup> See Riskin, supra note 34, at 5 & nn.17-18 (calling attention to programs used in medical schools, graduate, undergraduate, and professional schools); see also Brown, supra note 26 (highlighting fifth graders at Piedmont Elementary School in Oakland, CA); Parry, supra note 3 (discussing mindfulness elements used at University of Washington).

<sup>160</sup> See Oenone Crossley-Holland, Could Beditation Be the Answer to Exam Nerves?, THE GUARDIAN, (Mar. 4, 2013 2:30pm), http://www.theguardian.com/education/2013/mar/04/mindfulness-based-stress-reduction-meditation (revealing mindfulness techniques taught to British secondary students). For example, "beditation," the practice of meditation while lying down, is one technique incorporated in the "Stop, Breathe, and Be" curriculum of the Mindfulness in Schools program developed by two UK teachers that is now taught in twelve countries. See id.

<sup>&</sup>lt;sup>156</sup> Riskin, *supra* note 34, at 4 & n.9.

The Effect of Meditation on Self-Reported Measures of Stress, Anxiety, Depression, and Perfectionism in a College Population, 25 J. C. STUDENT PSYCHOTHERAPY, 132, 136-37 (2011), available at http://dx.doi.org/10.1080/87568225.2011.556947 (describing inner-city high-school "quiet time" program increased graduation rates, self-concept, academic performance, and reduced stress, school violence). See generally DEBORAH SCHOEBERLEIN, MINDFUL TEACHING AND TEACHING MINDFULNESS: A GUIDE FOR ANYONE WHO TEACHES ANYTHING (2009) (presenting teachers implementation strategies for mindfulness to improve students' mental focus, academic performance, emotional balance).

<sup>&</sup>lt;sup>161</sup> Brown, *supra* note 26 (describing effect of mindfulness on elementary students).

required to take a mindfulness course, which meets for forty minutes per week for nine weeks. At the University of Washington, one professor starts every class with a few minutes of meditation. These are just a few examples of the growing trend. Head

### B. Mindfulness Training is Essential to the Law School Curriculum.

Given that law students are operating with a multitasking mindset, and the criticism that law schools are not teaching students the skills of self-reflection and self-assessment, any activity which can foster better attention, learning, empathy, creativity, self-compassion, stress reduction, and general overall well-being should be taught. In fact, "[m]indfulness meditation has [already] entered the legal community." Programs introducing mindfulness to the legal community articulate a myriad of goals, such as

<sup>&</sup>lt;sup>162</sup>See Mindfulness, MIDDLESEX SCHOOL, https://www.mxschool.edu/mindfulness (presenting students' reports that mindfulness course helped their schoolwork and sports focus, reduced stress, improved relationships). The Middlesex school uses the Mindfulness in Schools program highlighted in Crossley-Holland, *supra* note 160.

<sup>&</sup>lt;sup>163</sup>See Parry, supra note 3 (describing Professor Levy's beginning-of-class mindfulness ritual at University of Washington).

<sup>&</sup>lt;sup>164</sup> See Penny Cunningham, Mindfulness in the Classroom: A Growing Trend, NAT'L INST. FOR STUDENT-CENTERED EDUC., (Oct. 3, 2013), http://nisce.org/blog/features/mindfulness-in-the-classroom-a-growing-trend/. Cunningham describes how "more and more teachers are introducing contemplative or mindful based practices into their classrooms" and how "using these approaches . . . [sets] a routine that supports self-regulation and creates a positive emotional climate." *Id.* Not surprisingly, school curriculums have started incorporating mindfulness programs, "teaching kids as young as five years old how to use body scans, mindful breathing and attention to their thoughts and emotions to become more focused." *Id.* (citing Carolyn Gegoire, Mindfulness Programs in Schools Reduce Symptoms of Depression Among Adolescents: Study, HUFFINGTON POST, (Mar. 13, 2013), http://www.huffingtonpost.com/2013/03/15/mindfulness-in-schools-re n 2884436.html).

Attention, Suffolk Univ. L. Sch. Res. Paper No. 13-15, at 1, 45-50 (June 7, 2013), available at <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2269726">http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2269726</a> (advocating mindfulness training during law school important for developing successful lawyering skills); Katherine Larkin-Wong, A Newbie's Impression: One Student's Mindfulness Lessons, 61 J. LEGAL EDUC. 665, 670 (2012) ("Mindfulness is challenging for law students because living with mindful awareness is almost the direct opposite of the way many students live their lives."); Riskin, supra note 34, at 38-40 (presenting mindfulness curriculum elements, workshops, seminars at numerous law schools).

<sup>&</sup>lt;sup>166</sup> See Riskin, supra note 34, at 33, 33-45 (tracing legal community's incorporation of mindfulness training since 1989); Law Schools Involved in Mindfulness and the Law, MINDFULNESS IN LAW, http://mindfulnessinlaw.org/Law%20Schools/index.html (listing law schools which offer mindfulness courses or integrate it into their curricula).

spiritual enlightenment to just lightening up, and include feeling and performing better as a law student or lawyer or other conflict resolver (e.g., judge, mediator, negotiator); developing a deeper understanding of ourselves, each other, and the nature of reality; enhancing one's ability to cope with stress; developing emotional intelligence competencies [like self-regulation, motivation, empathy, and social skills]; and promoting ethical behavior. <sup>167</sup>

Mindfulness programs began to take off in the late 1980s and early 1990s. 168 In 1989, Jon Kabat-Zinn, the director of the Center for Mindfulness in Medicine, Health Care and Society at UMass Hospital offered a session on mindfulness based stress reduction (MBSR) training to trial court judges. 169 Mediators for the U.S. Court of Appeals for the Ninth Circuit attended meditation training in the mid-1990s. 170 In 1998 and 1999, Boston's Hale and Dorr (now Wilmer Cutler Pickering Hale and Dorr LLP) and Nutter, McClennan and Fish, LLP offered their lawyers MBSR training that included before and after program interviews, eight weekly two-hour classes, homework assignments, and a daylong retreat teaching both formal and informal meditation practices, among other features. 171 In fact, growing numbers of attorneys are embracing some form of practice to

<sup>&</sup>lt;sup>167</sup> Riskin, *supra* note 38, at 635; *see also* Larkin-Wong, *supra* note 165, at 672-73. Larkin-Wong similarly describes the numerous advantages to law students including increasing their ability to pay attention and focus, improving their strategies for dealing with anxiety and stress, helping them learn to slow down and be more calm, and bettering their capacity to recognize what makes them happy. *See* Larkin-Wong, *supra* note 165, at 672-73.

<sup>&</sup>lt;sup>168</sup> See Riskin, supra note 34, at 33-34.

<sup>&</sup>lt;sup>169</sup> Riskin, *supra* note 34, at 33 & n.137 (citing Jon Kabat-Zinn, Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness 125-26 (1990)); *see also* Magee, *supra* note 37, at 548 (noting groundbreaking of Jon Kabat-Zinn's MBSR training to trial court judges); *Mindfulness for Lawyers, Judges, and Prisoners*, Mindfulnet.org, http://www.mindfulnet.org/page8.htm (describing use of mindfulness by the judiciary). Jon Kabat-Zinn's book provides an especially relevant example:

There was a famous trial in Massachusetts a few years ago. After the jury had been selected, the judge delivered instructions on how to listen to evidence. It was pure mindfulness teaching: moment-to-moment, dispassionate, non-judgmental awareness - listening mind. The lawyer approached the judge later and asked, "Where the hell did you get that?" The judge replied "Oh, I'm taking the mindfulness stress reduction class at the U. Mass, Medical Center, and it seemed we could use a little more mindfulness in our judicial proceedings."

Mindfulness for Lawyers, Judges, and Prisoners, supra.

<sup>&</sup>lt;sup>170</sup> Riskin, *supra* note 34, at 33 & n.138; *see also* Magee, *supra* note 37, at 549-550.

<sup>&</sup>lt;sup>171</sup> Riskin, *supra* note 34, at 33-34.

achieve mindfulness. 172 Their reasons for doing so are varied, but chief among them are stress management and improved mental and physical health. 173

The American Bar Association (ABA) has been promoting mindfulness for the past five years. <sup>174</sup> The ABA sponsored a book, *Transforming* Practices: Finding Joy and Satisfaction in the Legal Life, by Steven Keeva, which includes discussions of mindfulness practices for lawyers. <sup>175</sup> The ABA also sponsors discussions and Continuing Legal Education (CLE) seminars based on the book and its principals. 176 Various other bar associations and organizations have organized events centered on mindfulness and meditation around the country, including in Boston, MA; Silver Spring, Maryland; New York City, NY; Kansas City, MO; and in various cities in Northern California. 1777 Leonard Riskin, a leading advocate and proponent of mindfulness training has taught workshops on mindfulness and negotiation, mediation or lawyering at events in Wisconsin, Michigan, Iowa, Austria, Denmark, Southern Methodist University, Missouri, California, and Alabama. 178 "Legal historians will likely mark 2002 as the seminal year . . . [when] the Harvard Negotiation Law Review hosted a forum to discuss the implications of mindfulness meditation for legal practice and alternative dispute resolution, in conjunction with its publication of a symposium relating to an article by Professor Leonard L. Riskin. . . . "179

The University of California's Berkeley School of Law first hosted a conference called *The Mindful Lawyer* in October of 2010 to explore the

173 See Enayati, supra note 77. "[S]ome form of reflective silence, active and open attention on the present, and freedom from judgment on a regular basis" will produce positive effects linked with mindfulness training. *Id*.

<sup>&</sup>lt;sup>172</sup> See Enayati, supra note 77; Riskin, supra note 34, at 36-38.

<sup>&</sup>lt;sup>174</sup> See Becky Beaupre Gillespie, Mindfulness in Legal Practice is Going Mainstream, ABA JOURNAL, (Feb. 1, 2013), http://www.abajournal.com/magazine/article/mindfulness\_in\_legal\_practice\_is\_going\_mainstream/ (explaining within past five years, mindfulness in law has reached "almost mainstream perspective").

<sup>&</sup>lt;sup>175</sup> See Steven Keeva, Transforming Practices: Finding Joy and Satisfaction in the Legal Life (2009) (exploring strategies for incorporating mindfulness into law practice); Riskin, *supra* note 34, at 34.

<sup>&</sup>lt;sup>176</sup> See Jacobwitz, supra note 35, at 2;Riskin, supra note 34, at 34.

<sup>&</sup>lt;sup>177</sup> See Riskin, supra note 34, at 34 (describing programs organized by ABA section on Dispute Resolution, Shambala Meditation Center, City University of New York School of Law, Kansas City Holistic Lawyers group); Riskin, supra note 38, at 638.

Riskin, *supra* note 34, at 34-38 & nn.143-163 (chronicling mindfulness training seminars and events throughout U.S.).

<sup>&</sup>lt;sup>179</sup> Magee, *supra* note 37, at 549.

development of meditation as it relates to lawyering. 180 Over 180 "lawyers, judges, professors and law students from twenty-three states and two other countries . . . convened to explore the development of meditation as it has grown over the last decade in law schools and law practice." Sponsored by Berkeley Law, and law schools at the University of Buffalo, The University of California, Hastings, the City University of New York, the University of Florida, and the University of San Francisco, the conference turnout reflected the attention mindfulness and meditation has received over the past years. 182 The conference "looked at the ways that lawyers and judges have brought a meditative perspective to their work, enhancing their empathy, effectiveness, and creativity. It has made them happier in their work and less stressed." 183 It was so successful that it became an annual event, and inspired the Dean of Berkeley Law, Christopher Edley, to establish the Berkeley Initiative for Mindfulness in the Law in the fall of 2011 while "expand[ing] course offerings grounded in mindfulness, to explore the relevance of mindfulness to law practice and legal education, [and] to make mindfulness a more substantial presence in the Berkeley law community." 184

Mindfulness meditation has begun appearing on law school curricula as well, sometimes as a course on its own or often as part of another course. 185 Yale, Columbia, and U.C. Berkeley were the first to offer mindfulness programs as meditation retreats for law students. 186 These programs began to be offered at more law school campuses, including for-credit classes primarily teaching some form of mindfulness as well as clinics and other classes that integrate aspects of mindfulness into their curriculum. 187 Law school offerings that include a mindfulness component include courses on emotional intelligence at the University of Miami and the University of Missouri, professional responsibility courses the University of Miami, and

<sup>&</sup>lt;sup>180</sup> Halpern, *supra* note 136, at 641.

<sup>&</sup>lt;sup>181</sup> Halpern, *supra* note 136, at 641.

Halpern, supra note 136, at 641; Riskin, supra note 38, at 631.

<sup>&</sup>lt;sup>183</sup> Halpern, *supra* note 136, at 646.

<sup>&</sup>lt;sup>184</sup> Halpern, *supra* note 136, at 642. Materials from this conference, including links to guided meditations, books and articles on meditation and mindfulness training, course materials, syllabi, and YouTube clips of speakers and lectures are available online at http://www.mindfullawyerconference.org/resources.htm.

Halpern, *supra* note 136, at 643-44 (distinguishing some of first mindfulness programs in New York, Hawaii, and California law schools); Riskin, *supra* note 34, at 3, 38-40 & nn. 164-174.

<sup>&</sup>lt;sup>186</sup> Riskin, *supra* note 38, at 636.

<sup>&</sup>lt;sup>187</sup> Riskin, *supra* note 38, at 637; *see also* Baker & Brown, *supra* note 165, at 45 & app. at51-55 (introducing controlled concentration training exercises in law classes to improve students' attention).

dispute resolution courses at the University of Florida and Northwestern. The University of Buffalo Law School offers a class entitled "Mindfulness and Professional Identity: Becoming a Lawyer While Keeping Your Values Intact." Other law schools offer mindfulness training in not-for-credit classes. Examples include the Lawyer in Balance Program at Georgetown, Vanderbilt's Supportive Practices Group, Mindfulness-Based Stress Reduction Programs and weekly meditation sessions at several law schools." Law students and lawyers of all experience levels are likely to benefit from learning mindfulness tools alongside a refresher course on legal ethics. <sup>192</sup>

A few law schools offer more than just a course or two incorporating mindfulness. At the University of Miami, for example, Professor Scott Rogers directs the Mindfulness in Law Program, which integrates mindfulness through courses and workshops based on "Jurisight," a system that Rogers "developed to teach mindfulness to law students and lawyers, using legal terms of art to explain mindfulness-related concepts." This

The curriculum includes readings from the vast literatures on lawyering and the legal profession, and visits from lawyers and judges who take holistic approaches to resolution of legal disputes. These, in conjunction with training in "mindfulness" techniques, will help future lawyers understand and empathize with their clients, along with developing skills that can reduce stress, manage the emotional ups and downs that lawyers consistently face, and stay connected to their "sense of humor and deepest ethical and professional ideals," according to the course syllabus . . . Teaching young lawyers the skills to be compassionate and self-reflective in their professional lives will serve their personal lives as well. Through mindfulness practices, law students, attorneys and judges develop equanimity, along with the ability to pay attention to the actual person or situation presented . . . without allowing prejudices or preconceptions to distort the process.

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<sup>&</sup>lt;sup>188</sup> Riskin, *supra* note 38, at 637.

<sup>&</sup>lt;sup>189</sup> See Charles Anzalone, Law School to Cultivate Peaceful and Ethical Lawyers Through 'Mindfulness' Techniques, UNIV. AT BUFFALO NEWS CTR., (Aug. 23, 2010), http://www.buffalo.edu/news/releases/2010/08/11656.html (describing course).

Id.

<sup>&</sup>lt;sup>190</sup> See Riskin, supra note 34, at 39 (citing meditation seminar and retreats at CUNY, Yale, and Columbia did not provide academic credit).

<sup>&</sup>lt;sup>191</sup> Riskin, *supra* note 38, at 637; *see also* Magee, *supra* note 37, at 549-52 & n.78; <sup>192</sup> See Alan Lerner, *Using Our Brains: What Cognitive Science and Social Psychology Teach Us About Teaching Law Students to Make Ethical, Professionally Responsible, Choices*, 23 QUINNIPIAC L. REV. 623 (2004). Lerner suggests that experiential learning activities would be useful learning tools because "[i]nevitably, we look for solutions to problems we face by first scanning our memories for similar situations, and applying the principles and methods that we used in those situations. In the case of lawyers, particularly newer lawyers, our memories for solving legal problems were created in law school." *Id.* at 652.

<sup>&</sup>lt;sup>193</sup>ROGERS, supra note 80, at 1; see SCOTT L. ROGERS, MINDFULNESS FOR LAW

program has gained some support since its inception, and undoubtedly inspired the City University of New York's Contemplative Urban Lawyering Program, the University of California at Berkeley's Berkeley Initiative for Mindfulness and the Law, and the University of Florida's Initiative on Mindfulness in Law and Dispute Resolution. <sup>194</sup>

Given this growing trend, and the clear evidence that mindfulness training improves attention, learning, working memory capacity, academic achievement, empathy, self-compassion, and creativity, and that it can reduce stress and anxiety, more law schools should be developing and offering courses or instruction on mindfulness.

#### **CONCLUSION**

Mindfulness training can address the twin concerns of distracted students and the call for law school reform. Lawyers and law students are beginning to discover the benefits of mindfulness. By making mindfulness training a core concept in the law school curriculum, law schools will enable and empower their students to better handle the pressures of working in a distracted society where complex situations are the norm.

Ian takes a deep breath after the supervising attorney leaves his office before he begins to work on the answers to interrogatories. He notes the time and contemplates what he was asked to do. As he breathes, he reminds himself that this attorney can be brusque but that this attitude is not directed at Ian. Ian must only do what he was asked to the best of his ability. He begins reviewing the file in order to draft the answers. He hears his phone: ding! But he does not take it out of his desk or look at it. He knows it can wait the half an hour it will take him to work on this discovery. Ian is not sure what the attorney wants him to say is accurate, so he does his best to work with what the client said and what he knows the attorney wants. In half an hour, the attorney calls to ask if the answer is done, and Ian is happy to respond that it is. While he knows the attorney may not be completely pleased with the answer, Ian is satisfied that he did the best he could. He hands the work off to the attorney, and checks his phone. Time to work on his resume before anyone asks for him! Ian is

STUDENTS: USING THE POWER OF MINDFULNESS TO ACHIEVE BALANCE AND SUCCESS IN LAW SCHOOL 23, 30-32 (2009); Scott L. Rogers, *Jurisight*, Inst. for Mindfulness Stud., (last visited Feb. 9, 2014), http://jurisight.com/index.html (providing list defining all Jurisight terms).

<sup>&</sup>lt;sup>194</sup> See Magee, supra note 37, at 550-51 & n.83; Riskin, supra note 38, at 637-38.

thankful that he learned to focus his attention in a law school class that prepared him for such situations.

Do not dwell in the past.
Do not dream of the future
Concentrate the mind on the present moment.
The Gospel of Buddha