

Pace Law Review

Volume 36
Issue 1 Fall 2015

Article 4

September 2015

Grit and Legal Education

Emily Zimmerman
Drexel University Thomas R. Kline School of Law

Leah Brogan
Drexel University

Follow this and additional works at: <http://digitalcommons.pace.edu/plr>

 Part of the [Legal Education Commons](#)

Recommended Citation

Emily Zimmerman and Leah Brogan, *Grit and Legal Education*, 36 Pace L. Rev. 112 (2015)
Available at: <http://digitalcommons.pace.edu/plr/vol36/iss1/4>

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Law Review by an authorized administrator of DigitalCommons@Pace. For more information, please contact cpittson@law.pace.edu.

Grit and Legal Education

Emily Zimmerman and Leah Brogan*

I. Introduction

In the last few years, the legal academy has been paying much attention to the declining numbers of law school applicants.¹ To be sure, the fact that fewer people are applying to law schools has implications for those who are employed in law schools, those who wish to be employed in law schools, and those who would actually like to attend law school.² Law schools are faced with the financial consequences of smaller

*Emily Zimmerman is an Associate Professor of Law at the Drexel University Thomas R. Kline School of Law; J.D., Yale Law School; A.B., Bryn Mawr College. Leah Brogan is a doctoral student in the Psychology Department at Drexel University; M.S., Drexel University; B.A., University of Pennsylvania. Eli Tsukayama, Ph.D., University of Pennsylvania, was our co-investigator on the empirical research project that we present in this article. At the time we conducted this research, Eli Tsukayama was a post-doctoral research fellow in the Psychology Department at the University of Pennsylvania and was a member of Angela Duckworth's lab in the Positive Psychology Center at the University of Pennsylvania. We are grateful to Eli Tsukayama for his contributions throughout the project. In addition, we thank Kristin Brown and Sarah Filone for their invaluable assistance. We also thank Jerry Arrison, Sunita Balija, Alanna Bridgett, Susan Brooks, David Cohen, David DeMatteo, Roger Dennis, Angela Duckworth, Peter Egler, Lauren Eskreis-Winkler, Daniel Filler, Theresa Gallo, Naomi Goldstein, Casey LaDuke, Mary McGovern, Kevin Oates, Steven Thorpe, and Jay Wussow, among others, for their support at various stages of the project. We appreciate having had the opportunity to present this research at Psychology and Lawyering: Coalescing the Field at UNLV William S. Boyd School of Law (Emily Zimmerman) and at the American Psychology-Law Society Annual Conference (Emily Zimmerman, Leah Brogan, and Eli Tsukayama) (poster presentation). We appreciate the feedback that we received in connection with these presentations.

1. See, e.g., Elizabeth Olson & David Segal, *A Steep Slide in Law School Enrollment Accelerates*, N.Y. TIMES (Dec. 17, 2014), <http://dealbook.nytimes.com/2014/12/17/law-school-enrollment-falls-to-lowest-level-since-1987/>.

2. The declining numbers of law school applicants—and consequent declining numbers of law school graduates—also has implications for potential future clients in need of legal representation.

numbers of tuition-paying students.³ Law schools are also focusing on strategies to attract entering students, and some law schools are admitting students with undergraduate grade point averages (GPAs) and Law School Admission Test (LSAT) scores that are lower than usual.⁴ Although fewer people are pursuing a legal education,⁵ from the perspective of someone who is interested in attending law school, this is an excellent time to be doing so. Legal education is a buyers' market these days, as law schools try to attract entering students and compete for the students with the highest undergraduate GPAs and LSAT scores.⁶ As a result, although there are declining numbers of law school applicants, there may be more students entering law school who in previous years might not have been admitted or who are attending schools that are more highly ranked than those students would have been able to get into in previous years.⁷ Some law schools, then, might be facing

3. See, e.g., Ethan Bronner, *Law Schools' Applications Fall as Costs Rise and Jobs Are Cut*, N.Y. TIMES (Jan. 30, 2013), <http://www.nytimes.com/2013/01/31/education/law-schools-applications-fall-as-costs-rise-and-jobs-are-cut.html?smid=pl-share>; Danielle Douglas-Gabriel, *Why Law Schools Are Losing Relevance—And How They're Trying to Win it Back*, WASH. POST (Apr. 20, 2015), http://www.washingtonpost.com/business/economy/why-law-schools-are-losing-relevance—and-how-theyre-trying-to-win-it-back/2015/04/20/ca0ae7fe-cf07-11e4-a2a7-9517a3a70506_story.html; Ashby Jones & Jennifer Smith, *Amid Falling Enrollment, Law Schools Are Cutting Faculty*, WALL STREET J. (July 15, 2013), <http://www.wsj.com/articles/SB10001424127887323664204578607810292433272>.

4. See Elizabeth Olson, *Study Cites Lower Standards in Law School Admissions*, N.Y. TIMES (Oct. 26, 2015), <http://www.nytimes.com/2015/10/27/business/dealbook/study-cites-lower-standards-in-law-school-admissions.html?action=click&pgtype=Homepage&version=MoTh-Visible&module=inside-nyt-region®ion=inside-nyt-region&WT.nav=inside-nyt-region&r=0>; Ry Rivard, *Lowering the Bar*, INSIDE HIGHER ED (Jan. 16, 2015), <https://www.insidehighered.com/news/2015/01/16/law-schools-compete-students-many-may-not-have-admitted-past>.

5. See Olson & Segal, *supra* note 1.

6. *Id.*; Tania Karas, *Facing Significant Declines in Applications, Many Institutions Shave Enrollments and Costs*, 250 N.Y. L.J. 1 (2013).

7. To the extent that undergraduate GPA and LSAT scores are indicators of the ability to successfully complete law school and pass the bar, this situation raises serious concerns about whether law schools are admitting students who will ultimately be authorized to practice law. See Rivard, *supra* note 4; see also *Is the Bar Too Low to Get into Law School?*, N.Y. TIMES: ROOM FOR DEBATE (Sept. 24, 2015), <http://www.nytimes.com/roomfordebate/2015/09/24/is-the-bar-too-low-to-get->

entering first year classes that are more diverse in terms of the range of undergraduate GPAs and LSAT scores of their students.

One potential positive consequence of the declining numbers of law school applicants and the publicity about the downsides of law school⁸ could be that more of those students who actually do decide to attend law school are truly interested in being there.⁹ All of the discussion of the high cost of law school, the overwhelming educational debt of law school graduates, and the difficulty of finding employment after law school could mean that those students who are still choosing to come to law school are truly committed to studying law and becoming lawyers.¹⁰ If this were the case, then it might be a silver lining to the dark cloud of declining enrollment hanging over legal education. On the other hand, those students who

into-law-school (presenting short essays regarding bar passage, law school admissions, legal education, and the bar exam). *But see* Marjorie M. Shultz & Sheldon Zedeck, *Predicting Lawyer Effectiveness: Broadening the Basis for Law School Admission Decisions*, 36 LAW & SOC. INQUIRY 620, 621 (2011) (noting that measures such as undergraduate GPA and LSAT score “do not account for success in the legal profession or for law school outcomes other than first-year grades”).

8. Prospective law students might be most likely to see this publicity in online articles and blog postings. *See* Bronner, *supra* note 3; Ashby Jones, *Thinking About Law School? These Blogs Tell You Why You Shouldn't*, WALL STREET J.: LAW BLOG (Mar. 29, 2010), <http://blogs.wsj.com/law/2010/03/29/thinking-about-law-school-these-blogs-tells-you-why-you-shouldnt/>.

Law professors have also been writing about some of the negative aspects of law school for quite some time. *See, e.g.*, BRIAN Z. TAMANAHA, *FAILING LAW SCHOOLS* (2012); B.A. Glesner, *Fear and Loathing in the Law Schools*, 23 CONN. L. REV. 627, 630-31 (1990-91); Lawrence S. Krieger, *Institutional Denial About the Dark Side of Law School, and Fresh Empirical Guidance for Constructively Breaking the Silence*, 52 J. LEGAL EDUC. 112, 113 (2002); Suzanne C. Segerstrom, *Perceptions of Stress and Control in the First Semester of Law School*, 32 WILLAMETTE L. REV. 593, 593-96 (1996).

9. *See* Karas, *supra* note 6, at 6 (quoting a law school dean as saying, “‘Students who are coming to us now have thought about it long and hard’ ‘We have a really motivated student body. That has real advantages because they’re really determined to become lawyers.’”).

10. *See* Diane M. Downs, *A Shrinking Pool, but Committed Lawyers*, N.Y. TIMES (Sept. 24, 2015), <http://www.nytimes.com/roomfordebate/2015/09/24/is-the-bar-too-low-to-get-into-law-school/a-shrinking-pool-but-committed-lawyers> (noting that one perspective on “the declining number of law school applicants” is to “see the [students who do apply to law school] as a group who have thought long and hard about their decision to go to law school and have demonstrated a strong commitment to practicing law”).

are choosing to come to law school now may not necessarily be more committed to law study or to a legal career. Rather, these students may be attracted by their relative competitive advantage given that fewer students are applying to law school.¹¹ In addition, the current economic climate of student debt coupled with limited job opportunities might mean that the students who are choosing to come to law school are distinguished from students who are choosing not to come to law school not by their commitment to law study and law practice but by their economic wherewithal. In short, the current climate in legal education is a complicated one.

However, while the declining numbers of students entering law school may be the focus of much attention in legal education these days, we must also concentrate on those students who *do* enter law school. While there may be some differences between students entering law school today and students entering law school in previous years, there are likely more similarities than differences between these groups. The fact remains that for many law students, law school is their most challenging academic experience. Further, for most law students, law school is not only the culmination of their formal educations but also the beginning of their professional legal careers. We must devote attention to the experience that students have in law school and how we can promote students' success both in and after law school. Moreover, to the extent that law students may, in the aggregate, be entering with less strong skills,¹² it is more important than ever to focus on factors that are relevant to and promote law students' success.

11. In addition, for those prospective law students who have strong undergraduate GPAs and LSAT scores (or even not-so-strong undergraduate GPAs and LSAT scores), they may find that law schools are willing to provide substantial financial incentives to secure their attendance, thus diminishing some of the economic disincentives of attending law school. See Olson & Segal, *supra* note 1; Rivard, *supra* note 4.

12. At least some law professors believe that entering law students are less academically prepared for law school than entering law students in previous years. See, e.g., Courtney G. Lee, *Changing Gears to Meet the "New Normal" in Legal Education*, 53 DUQ. L. REV. 39, 42 (2015); see also Teaching the Academically Underprepared Law Student, Fourth Colonial Frontier Legal Writing Conference at the Duquesne University School of Law (Dec. 6, 2014). Of course, even if this is true for some law students, it is certainly not true for all law students.

One factor that has received much attention in recent years is “grit,” which has been defined as “perseverance and passion for long-term goals.”¹³ Although grit has been studied in a number of different contexts, grit is understudied in the context of legal education. In light of the existing research regarding grit and performance, and the ongoing interest in law student learning, motivation, and performance, we undertook a research project to investigate the relationship between grit and law school academic performance.¹⁴ Although we hypothesized that grit would be positively related to law school GPA, we did not find a statistically significant relationship (positive or negative) between grit and law school GPA.¹⁵ In addition to examining the relationship between grit and law school GPA, we also conducted exploratory analyses to compare the grit scores of women and men. These analyses indicated a statistically significant difference between the grit levels of female and male participants, with female participants having higher levels of grit.¹⁶ The results of our research project raise questions about the role of grit in legal education and, most importantly, point the way for future

13. Angela L. Duckworth, Christopher Peterson, Michael D. Matthews & Dennis R. Kelly, *Grit: Perseverance and Passion for Long-Term Goals*, 92 J. PERSONALITY & SOC. PSYCHOL. 1087, 1087 (2007) [hereinafter Duckworth et al., *Grit: Perseverance and Passion*]. Researchers have highlighted the “persistence over time” aspect of grit, stating “[g]rit is not just about working hard on tasks at hand but, rather, working diligently toward the same higher-order goals over extremely long stretches of time.” Lauren Eskreis-Winkler, Elizabeth P. Shulman, Scott A. Beal & Angela L. Duckworth, *The Grit Effect: Predicting Retention in the Military, the Workplace, School and Marriage*, 5 FRONTIERS PSYCHOL. 1, 2 (2014). In addition, researchers describe the “passion” component of grit as “consistency of interests,” “interest” or “consistent interests.” Duckworth et al., *Grit: Perseverance and Passion*, *supra*, at 1090; Katherine R. Von Culin, Eli Tsukayama & Angela L. Duckworth, *Unpacking Grit: Motivational Correlates of Perseverance and Passion for Long-Term Goals*, 9 J. POSITIVE PSYCHOL. 306, 306, 310, 311 (2014).

14. One of the initial goals of this research project was to investigate the relationship between grit and bar passage. However, largely because of the small number of participants who failed a bar exam, this article focuses on our investigation of the relationships between grit, law school performance, and sex.

15. *See infra* Part IV. We also did not find a statistically significant relationship between grit and undergraduate GPA, and grit and LSAT score. *See infra* Part IV.

16. *See infra* Part IV.

research regarding grit, legal education, and law practice.

The remainder of this article will discuss our research and the implications of this research. Specifically, Part II of the article situates our research within existing research regarding grit and performance, and regarding the law school experiences of female and male law students. Part III describes the methodology of our research project. Part IV presents the results of the project. Part V of the article discusses these results and the implications of these results. Part V also discusses the limitations of this research and identifies avenues for further research regarding law students and grit. Part VI concludes.

II. Putting Our Research in Context

A. *Grit, Performance, and Legal Education*

Given how challenging law school is for many students, grit (“perseverance and passion for long-term goals”¹⁷) would be expected to serve law students well. Research suggests that grit predicts successful performance in a variety of contexts.¹⁸ For example, researchers have found grit to be positively correlated with undergraduate grade point average.¹⁹ The same researchers also found that grit predicted completion of

17. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1087; *see also* Christopher A. Wolters & Maryam Hussain, *Investigating Grit and Its Relations with College Students’ Self-Regulated Learning and Academic Achievement*, METACOGNITION LEARNING (2014) (providing an overview of grit research).

18. *See* Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1100 (noting that, in light of the authors’ and others’ research, “in every field, grit may be as essential as talent to high accomplishment.”). *But see* Wolters & Hussain, *supra* note 17, at 3 (“The evidence linking grit specifically to students’ academic achievement, however, is still very limited and somewhat inconsistent.”). Although noting the “not entirely consistent” findings regarding grit and academic achievement, Wolters and Hussain “anticipated that grittier students would tend to get better grades.” *Id.* at 6.

19. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1093; *see also* Terrell L. Strayhorn, *What Role Does Grit Play in the Academic Success of Black Male Collegians at Predominantly White Institutions?*, 18 J. AFR. AM. STUD. 1, 5 (2014) (finding a statistically significant positive correlation between grit and undergraduate academic performance, as well as between grit and high school academic performance).

summer cadet training at West Point and the final round reached in the Scripps National Spelling Bee.²⁰

Grit has been receiving a growing amount of attention, not only in terms of research but also in the popular media.²¹ Researchers have explored the role of grit at different educational levels,²² and there seems to be continuing (and,

20. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1095, 1097; *see also* Salvatore R. Maddi, Michael D. Matthews, Dennis R. Kelly, Brandilynn Villarreal & Marina White, *The Role of Hardiness and Grit in Predicting Performance and Retention of USMA Cadets*, 24 MIL. PSYCHOL. 19, 24-25 (2012) (finding that grit predicted cadets' completion of the first year at West Point, although grit did not predict performance when two other factors were taken into account).

21. *See, e.g.*, Eskreis-Winkler et al., *supra* note 13; Tovia Smith, *Does Teaching Kids to Get 'Gritty' Help Them Get Ahead?*, NPR ED (Mar. 17, 2014), <http://www.npr.org/blogs/ed/2014/03/17/290089998/does-teaching-kids-to-get-gritty-help-them-get-ahead>; *see also* PAUL TOUGH, HOW CHILDREN SUCCEED: GRIT CURIOSITY, AND THE HIDDEN POWER OF CHARACTER (2012); Janet L. Yellen, Chair, Bd. of Governors, Fed. Reserve Sys., Remarks at the New York University Commencement (May 21, 2014) (discussing grit). Grit in the context of education has also received attention outside of the United States. *See* Serhat Arslan, Ahmet Akin & Nihan Çitemel, *The Predictive Role of Grit on Metacognition in Turkish University Students*, 55 STUDIA PSYCHOLOGICA 311 (2013) (Turkey); Patrick L. Hill, Anthony L. Burrow & Kendall Cotton Bronk, *Persevering with Positivity and Purpose: An Examination of Purpose Commitment and Positive Affect as Predictors of Grit*, J. HAPPINESS STUD. (2014) (Canada, as well as United States); Kamlesh Singh & Shalini Duggal Jha, *Positive and Negative Affect, and Grit as Predictors of Happiness and Life Satisfaction*, 34 J. INDIAN ACAD. APPLIED PSYCHOL. 40 (2008) (India); *see also* Josie Gurney-Read, *Lessons in 'Grit and Resilience' Recognised by New Award*, TELEGRAPH (Jan. 7, 2015), <http://www.telegraph.co.uk/education/educationnews/11330877/Lessons-in-grit-and-resilience-recognised-by-new-award.html> (England).

22. Eskreis-Winkler et al., *supra* note 13, at 4-8 (secondary); Zorana Ivcevic & Marc Brackett, *Predicting School Success: Comparing Conscientiousness, Grit, and Emotion Regulation Ability*, 52 J. RES. PERSONALITY 29, 31 (2014) (secondary); Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1093-94 (undergraduate); Wolters & Hussain, *supra* note 17, at 6 (undergraduate); *see also* Angela L. Duckworth, Teri A. Kirby, Eli Tsukayama, Heather E. Bernstein & K. Anders Ericsson, *Deliberate Practice Spells Success: Why Grittier Competitors Triumph at the National Spelling Bee*, 2 SOC. PSYCHOL. & PERSONALITY SCI. 174, 175 (2011) [hereinafter Duckworth et al., *Deliberate Practice Spells Success*] (investigating grit with participants in the National Spelling Bee, who had an average age of 12.88 years); Stacy L. Hawkins, *Mismatched or Counted Out? What's Missing from Mismatch Theory and Why It Matters*, 17 U. PA. J. CONST. L. 855, 867-71, 886-89 (2015) (discussing grit as a contributor to academic and professional success).

evidently, growing) interest in studying students' grit levels.²³ Educators have endorsed "grit" as a valuable trait that should be encouraged in students.²⁴ Angela Duckworth, one of the leading grit researchers, was named a MacArthur Fellow (commonly known as the "MacArthur Genius Grant").²⁵ Duckworth has also gained wide recognition for her TED talks and other appearances in the media.²⁶

However, grit is not without its detractors. Some criticism of grit focuses on the "persistence" aspect of grit and notes that persistence is not always an asset.²⁷ Rather, there are times when persistence can be detrimental and when it is better to change course.²⁸ Moreover, the scale for assessing grit

23. See Valerie Strauss, *U.S. Government to Collect Data on 'Grit' Levels of Students*, WASH. POST (July 11, 2015), <http://www.washingtonpost.com/blogs/answer-sheet/wp/2015/07/11/u-s-government-to-collect-data-on-grit-levels-of-students/>.

24. See *Character Counts*, KIPP, <http://www.kipp.org/our-approach/character> (last visited Oct. 28, 2015) (noting that grit is one of the seven strengths on which the school focuses and defining grit as "perseverance and passion for long-term goals."). Angela Duckworth and Dave Levin, the co-founder of KIPP, are two of the co-founders of Character Lab, "a nonprofit on a mission to develop, disseminate, and support research-based approaches to character that enable kids to learn and flourish." *Our Team*, CHARACTER LAB, <https://characterlab.org/people/our-team> (last visited Oct. 28, 2015); *What We Do*, CHARACTER LAB, <https://characterlab.org/what-we-do> (last visited Oct. 28, 2015). Character Lab identifies grit as one component of character. *Grit*, CHARACTER LAB, <https://characterlab.org/character/grit> (last visited Oct. 28, 2015).

25. *Angela Duckworth - MacArthur Fellows Program*, MACARTHUR FOUNDATION (Sept. 25, 2013), <http://www.macfound.org/fellows/889/>.

26. Angela Lee Duckworth, *The Key to Success? Grit*, TED (Apr. 2013), http://www.ted.com/talks/angela_lee_duckworth_the_key_to_success_grit?language=en; Angela Lee Duckworth, *True Grit: Can Perseverance Be Taught?*, TEDx (Oct. 18, 2009), <http://tedxtalks.ted.com/video/TEDxBlue-Angela-Lee-Duckworth-P>.

27. Alfie Kohn, *Grit A Skeptical Look at the Latest Educational Fad*, INDEP. SCH., Fall 2014, at 2.

28. *Id.* Even the proponents of grit do not advocate persistence at all costs. See Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1092 ("[A] strong desire for novelty and a low threshold for frustration may be adaptive earlier in life: Moving on from dead-end pursuits is essential to the discovery of more promising paths."); *Grit*, *supra* note 24 (noting that it can be fine "to quit" but that one should quit after being "thoughtful and reflective, and definitely not in a moment of frustration"); see also Angela Lee Duckworth & Lauren Eskreis-Winkler, *True Grit*, OBSERVER (Apr. 2013), <http://www.psychologicalscience.org/index.php/publications/observer/2013/april-13/true-grit.html> (mentioning potential, although "not yet tested

developed by Duckworth and her colleagues²⁹ has been criticized for focusing more on “perseverance,” than “passion.”³⁰ In addition, to the extent that grit encourages a single-minded focus, one criticism of grit counters that children should not always be encouraged to pursue one activity to the exclusion of others.³¹ Criticism also suggests that grit research (and, in particular, the research of Duckworth and her colleagues) focuses too much on the relationship between grit and academic achievement, when there are other aspects of students’ educational experience that should be promoted.³² Another concern is that focusing on grit’s role in achievement promotes the belief that the educational playing field is level and that individuals are solely responsible for their own success or failure. As a result, the emphasis on grit is criticized for failing to recognize other forces that influence student achievement and absolving policymakers of the need to focus on systemic inequalities that influence student achievement.³³

These criticisms of grit do not suggest that grit is without merit. Rather, these criticisms suggest that a single-minded focus on grit would be misguided and incomplete. Examining grit as a factor in achievement and motivation, however, would seem worthwhile. Moreover, while some of the concerns about grit certainly apply to contexts beyond primary and secondary

empirically,” downsides of grit). Grit in the context of self-harming behaviors may also raise serious concerns. See Michael D. Anestis & Edward A. Selby, *Grit and Perseverance in Suicidal Behavior and Non-Suicidal Self-Injury*, 39 DEATH STUD. 211 (2015).

29. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1090.

30. Kenneth J. Saltman, *The Austerity School: Grit, Character, and the Privatization of Public Education*, 22 SYMPLOKE 41, 49 (2014).

31. Kohn, *supra* note 27, at 3. Grit researchers, including Duckworth, would seem to recognize that younger individuals might benefit from exploring different pursuits rather than focusing single-mindedly (and, perhaps, prematurely) on one interest. See Duckworth & Eskreis-Winkler, *supra* note 28. Researchers have also noted that undergraduate students likely have multiple goals that they need to prioritize and that grit does not help understand how students select among different (perhaps competing) goals. Wolters & Hussain, *supra* note 17, at 16.

32. Kohn, *supra* note 27, at 4.

33. *Id.* Kenneth J. Saltman is a particularly harsh critic of grit, whose critique of grit is situated in an explicitly political context. Saltman, *supra* note 30.

school students, other concerns might be less salient in other contexts. For example, professional students have already completed primary, secondary, and undergraduate school and have chosen to pursue advanced studies in a particular discipline, so the concern that a focus on grit might cause students to focus too narrowly and too prematurely might not be nearly as salient with these students. Rather, at the point of professional school, educators might be more concerned with promoting students' success in their chosen field of study. Of course, there are some students in professional school who reconsider their chosen fields of study and for whom persistence would not be beneficial, but there are many professional school students whose priority is successfully completing their studies and entering their chosen profession.

In light of the existing research regarding grit and performance—and ongoing interest in law student learning, motivation, and performance—we undertook a research project to investigate the relationship between grit and law school academic performance.³⁴ There is much interest in factors that predict law school performance.³⁵ Legal educators should want to understand as much as possible about factors that relate to our students' performance, both in law school and in law practice. Moreover, legal educators should appreciate the importance of grades to both our law students themselves³⁶ and potential employers of our students.³⁷

While there is hardly any empirical research regarding the

34. Investigating the relationship between grit and law school academic performance was one, but not the exclusive, focus of our project. *See supra* note 14.

35. *See, e.g.*, Rolando J. Díaz, Carol R. Glass, Diane B. Arnkoff & Marian Tanofsky-Kraff, *Cognition, Anxiety, and Prediction of Performance in 1st-Year Law Students*, 93 J. EDUC. PSYCHOL. 420 (2001). Research has examined the relationships between a number of different factors and law school performance. *See, e.g., id.*; Daniel E. Ho & Mark G. Kelman, *Does Class Size Affect the Gender Gap? A Natural Experiment in Law*, 43 J. LEGAL STUD. 291 (2014). In general, but not always, both undergraduate GPA and LSAT score have been found to be positively related to first year law school GPA. Shultz & Zedeck, *supra* note 7, at 622-23.

36. *See* Emily Zimmerman, *Do Grades Matter?*, 35 SEATTLE U. L. REV. 305, 326-27 (2012).

37. *See, e.g., id.* at 309; Ho & Kelman, *supra* note 35, at 300.

relationship between grit and law school performance,³⁸ there is recently developing interest in the role of grit in both legal education and law practice. For example, there have been presentations that address grit at academic conferences, and some law professors have integrated the concept of grit into their teaching.³⁹

Duckworth and her colleagues spoke with lawyers, among others, in connection with the development of their initial grit scale,⁴⁰ and grit has been empirically investigated in the context of female lawyers at large law firms.⁴¹ Specifically, for her graduate work, Milana Hogan investigated, among other things, grit among women lawyers at large law firms.⁴² Hogan

38. To our knowledge, there are not yet any published research findings regarding the relationship between grit and law school academic performance.

39. *See, e.g.*, Carolyn Broering-Jacobs & Kristina L. Niedringhaus, Grit, Tenacity, and Perseverance: Applying Current Research in the Legal Skills Classroom, Presentation at the Biennial Conference of the Legal Writing Institute (July 2, 2014); Tracy Turner, Core Values: Mindset, Grit, and Responsibility as Guiding Principles in the Classroom, Presentation at the Association of Legal Writing Directors 2015 Biennial Conference (June 5, 2015); Emily Zimmerman, Law Students, Lawyering, and Grit, Presentation at the Conference on Lawyering and Psychology: Coalescing the Field (Feb. 22, 2014); Emily Zimmerman, Leah Brogan & Eli Tsukayama, Investigating Grit Among Law School Graduates: Is Grit Related to Law School Performance?, Poster Presentation at the American Psychology-Law Society Annual Conference (Mar. 8, 2014); *see also* Sarah J. Bannister, *Building a Grittier Law Student*, 26 NALP BULL. 15 (2014) (discussing grit in the context of career counseling of law students); Denitsa R. Mavrova Heinrich, *Got Grit? Building Grit Through Deliberate Practice in the Legal Writing Classroom* (Aug. 31, 2015), <http://ssrn.com/abstract=2653815>.

40. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1090. Specifically, these researchers note that, “[o]ur overarching goal for scale development was to capture the attitudes and behaviors characteristic of the high-achieving individuals described to us in early, exploratory interviews with lawyers, businesspeople, academics, and other professionals.” *Id.*

41. Milana Lauren Hogan, *Non-Cognitive Traits That Impact Female Success in BigLaw* (2013) (unpublished Ph.D. dissertation, University of Pennsylvania) (on file with the University of Pennsylvania).

42. Hogan focused on women lawyers in “BigLaw.” *Id.* Hogan defined “BigLaw” as the “group of large law firms (the minimum would be 101 attorneys or more) that pay attorneys the market rate (the current starting salary for a first year, entry-level associate is \$160,000 a year), demand long hours (typically an average of fifty or more billable hours per week), and tend to represent large corporations rather than individuals.” *Id.* at 1-2. Hogan administered an online survey to female lawyers at ten BigLaw firms. *Id.* at

was interested in exploring whether there was an association between grit and “success” for these lawyers.⁴³ Hogan found that the average grit score for the women in her study was 3.94 (out of a maximum of five).⁴⁴ None of the women in her study had a grit score that was less than three.⁴⁵ Hogan found statistically significant, moderate positive correlations between grit and ambition, and grit and the strength of a lawyer’s desire to become a partner.⁴⁶ Hogan also attempted to determine the extent to which grit predicted particular variables, on its own and taking other factors into account.⁴⁷

50. Hogan also conducted interviews with nine of the respondents to her survey. *Id.* at 52. Hogan “suspected that most women in BigLaw would be somewhat gritty . . . because the path to BigLaw is a challenging one that requires hard work and long term commitment” *Id.* at 121. Hogan is currently conducting a research project on behalf of the American Bar Association Commission on Women in the Profession that is investigating “how [grit and mindset] influence women lawyers currently practicing law in law firms of all sizes, as well as solo practitioners, non-profit and government employees, and lawyers working in-house.” E-mail from ABA Commission on Women in the Profession to Emily Zimmerman (Sept. 24, 2015, 6:00 PM) (on file with Emily Zimmerman). This email, which invited recipients to participate in the research project by completing a survey, noted that “[i]nitial research focused on the 200 largest law firms.” *Id.*

43. *Id.* at 46.

44. *Id.* at 122. Hogan was able to calculate a grit score for 456 of the 477 respondents to her online survey. *Id.* at 59. The standard deviation of the average grit score of her respondents was 0.477. *Id.* Standard deviation describes the extent to which respondents’ scores vary from the mean. FREDERICK J. GRAVETTER & LARRY B. WALLNAU, STATISTICS FOR THE BEHAVIORAL SCIENCES 108 (9th ed. 2013). The smaller the standard deviation relative to the scale used the less the respondents’ scores vary from the mean. See BRYAN RAUDENBUSH, STATISTICS FOR THE BEHAVIORAL SCIENCES: A SHORT COURSE AND STUDENT MANUAL 47 (2004).

45. Hogan, *supra* note 41, at 58, 122.

46. *Id.* at 63-64, 66. There was one item on Hogan’s survey that assessed respondents’ “desire to become a partner.” *Id.* at 150. Hogan does not explain how she calculated her respondents’ “ambition scores,” but there are a number of items on her survey that appear to relate to ambition. *Id.* at 61, 151. Hogan found statistically significant correlations between grit and other variables, but they were weaker than the correlations she found between grit and ambition, and grit and the strength of a lawyer’s desire to become a partner. *Id.* at 66.

47. *Id.* at 67-86. Specifically, Hogan attempted to model the relationships among factors such as grit and academic performance, and particular outcome variables, such as the performance rating that the attorney received at her last performance review (e.g., “outstanding,” “below average”) and the attorney’s average yearly billable hours. *Id.* at 140. Although Hogan did not explicitly identify which statistical analyses she

Even when other factors were taken into account, grit remained a significant predictor of an attorney's annual billable hours⁴⁸ and an attorney's perception of the significance of the work that she was given to do within her firm.⁴⁹ However, grit explained a relatively small percentage of the variance in these outcomes.⁵⁰

Although Hogan's results did not confirm the strong relationship between grit and performance that one might intuitively expect,⁵¹ Hogan's research has given rise to further

employed, it appears that she used multiple linear regression. In multiple linear regression, several explanatory variables are used to predict one dependent or outcome variable. GRAVETTER & WALLNAU, *supra* note 44, at 572.

48. For the purposes of this analysis, Hogan used billable hours not including time spent on pro bono work. Hogan, *supra* note 41, at 72. Hogan's survey asked each respondent to indicate her number of billable hours, not including pro bono work, from a choice of ranges of hours. *Id.* at 140. Hogan's survey also asked respondents to report the number of pro bono hours that they billed per year, from a choice of ranges. *Id.*

49. For the purposes of this analysis, Hogan used the participants' responses to the survey item, "How often do you get to work on the most high profile, complex matters at the firm?" *Id.* at 142.

50. *Id.* at 74-76, 78-80. In a regression analysis, "variance" refers to "the systematic changes in [the outcome variable] that occur when the value of [the predictor variable] increases or decreases." GRAVETTER & WALLNAU, *supra* note 44, at 570.

With respect to grit as a predictor of performance rating, grit did not significantly predict performance rating when other factors together were taken into account, although grit alone did "account[] for roughly 5.5% of a lawyer's . . . performance [rating]." Hogan, *supra* note 40, at 70. Grit was also not a statistically significant predictor of compensation, either on its own or when other factors were taken into account. *Id.* at 81. With respect to compensation, Hogan collected information from partners only. *Id.* at 142. Hogan asked partners to indicate how their compensation compared with that of their "peers." *Id.* Hogan did not ask the respondents how much they were actually paid. Although a statistically significant relationship emerged between grit and a lawyer reporting that she was "on partnership track," this relationship was no longer statistically significant when other factors together were taken into account. *Id.* at 84, 86. With respect to the variable of being on partnership track, this applied to only those respondents who indicated that they were not partners. *Id.* at 84.

51. Certain limitations may have contributed to these results. *See* Hogan, *supra* note 41, at 129-31 (discussing the limitations of the research project). In addition to quantitatively analyzing the responses to her survey, Hogan also interviewed nine of the lawyers who responded to her survey (four partners and five lawyers who were not partners). *Id.* at 101. In summarizing these interviews, Hogan noted that the partners she interviewed appeared to be "more outwardly gritty than the [lawyers who

attention to the role of grit in the professional development of lawyers who are women. Specifically, motivated by Hogan's research, and in light of both the attrition of women from law firms and the underrepresentation of women in leadership positions in law firms,⁵² the American Bar Association's Commission on Women in the Profession has initiated "the Grit Project," in order to educate female lawyers about grit (and mindset theory⁵³).⁵⁴

were not partners].” *Id.* at 105. In particular, Hogan observed that all of the lawyers whom she interviewed “worked extremely hard” but that the partners seemed to feel more “passionately” about their work than the lawyers who were not partners. *Id.*

52. Letter from Roberta D. Liebenberg, Chair, Am. Bar Ass’n Comm’n on Women in the Profession, to Am. Bar Ass’n Colleagues (June 19, 2014) (http://www.americanbar.org/content/dam/aba/marketing/women/grit_toolkit_chair_letter.authcheckdam.pdf). Other researchers have noted “the gender imbalance in high-level positions,” and have explored factors that might relate to this situation. Francesca Gino, Caroline Ashley Wilmuth & Alison Wood Brooks, *Compared to Men, Women View Professional Advancement as Equally Attainable, but Less Desirable*, PNAS EARLY EDITION (2015), www.pnas.org/cgi/doi/10.1073/pnas.1502567112, at 1.

53. See generally CAROL S. DWECK, MINDSET: THE NEW PSYCHOLOGY OF SUCCESS (2006); Carol S. Dweck, Gregory M. Walton & Geoffrey L. Cohen, *Academic Tenacity: Mindsets and Skills that Promote Long-Term Learning*, BILL & MELINDA GATES FOUNDATION (2014), <https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf>; Corie Rosen, *Creating the Optimistic Classroom: What Law Schools Can Learn from Attribution Style Effects*, 42 MCGEORGE L. REV. 319, 337-38 (2011) (discussing Carol Dweck’s work on mindset theory in the context of legal education).

Hogan’s research also investigated mindset, and Hogan found a statistically significant, but relatively weak, positive correlation between grit and mindset. Hogan, *supra* note 41, at 66; cf. Duckworth & Eskreis-Winkler, *supra* note 28 (“In as yet unpublished cross-sectional studies of school-age children, we have found moderate, positive associations between grit and growth mindset . . .”). As she did with grit, Hogan examined the role of mindset as a predictor of performance rating, billable hours, perception of significance of assigned work, partner compensation, and partnership track. Hogan, *supra* note 41, at 87-99. Hogan found that mindset taken on its own was a statistically significant but weak predictor of performance rating but that mindset was not a statistically significant predictor of performance rating when other predictor variables were taken into account. *Id.* at 87-89. Otherwise, Hogan did not find statistically significant relationships between mindset and the outcome variables, either when mindset was taken alone or when taking the other predictor variables into account together. *Id.* at 87-99.

54. *The Grit Project: True Grit and a Growth Mindset*, ABA, http://www.americanbar.org/groups/women/initiatives_awards/grit.html (last visited Sept. 2, 2015); see also Martha Middleton, *True Grit: A New ABA Project Helps Women Learn Personal Characteristics That Will Help Them*

Another reason to investigate grit in the context of legal education is the relative lack of research regarding positive psychology and law students. Scholars have discussed ways in which legal education might seek to promote students' well-being and minimize the distress experienced by law students,⁵⁵ and some scholars have suggested that positive psychology offers a valuable perspective through which to explore law students' well-being and motivation.⁵⁶ Empirical research suggests that law students may experience distress and declines in well-being while they are in law school.⁵⁷ There is also quite a bit of literature that anecdotally describes the challenges of law school and law students' loss of enthusiasm and developing psychological distress while they are in law school.⁵⁸

Grit's combination of "perseverance and passion for long term goals" seems particularly fitting in the context of legal education, where students must persevere through three years of law school. To be sure, the work required of law students is

Advance in the Legal Profession, 62 ABA J., 62-63 (2014); Sarah Rohne, *Developing True Grit and a Growth Mindset*, L. PRAC., July-Aug. 2015, at 12. Other publications have also discussed grit in the context of law practice. See Mark W. Bennett, *Eight Traits of Great Trial Lawyers: A Federal Judge's View on How to Shed the Moniker "I Am a Litigator"*, 33 REV. LITIG. 1 (2014); Paula Davis-Laack, *Grit: A Critical Success Strategy*, 87 WIS. LAW. 49 (2014). Obviously, a focus on grit should supplement, not supplant, addressing systemic problems that may impede women's achievement in the profession. Cf. *Women in the Profession*, ABA, <http://www.americanbar.org/groups/women.html> (last visited Sept. 2, 2015) (discussing the work of the ABA's Commission on Women in the Profession and Gender Equity Task Force).

55. See, e.g., Kennon M. Sheldon & Lawrence S. Krieger, *Understanding the Negative Effects of Legal Education on Law Students: A Longitudinal Test of Self-Determination Theory*, 33 PERSONALITY & SOC. PSYCHOL. BULL. 883, 894-95 (2007); Emily Zimmerman, *An Interdisciplinary Framework for Understanding and Cultivating Law Student Enthusiasm*, 58 DEPAUL L. REV. 851, 895-917 (2009) [hereinafter Zimmerman, *An Interdisciplinary Framework*].

56. Todd David Peterson & Elizabeth Waters Peterson, *Stemming the Tide of Law Student Depression: What Law Schools Need to Learn from the Science of Positive Psychology*, 9 YALE J. HEALTH POL'Y L. & ETHICS 357, 395 (2009); Dara E. Purvis, *Female Law Students, Gendered Self-Evaluation, and the Promise of Positive Psychology*, 2012 MICH. ST. L. REV. 1693, 1694 (2012).

57. Sheldon & Krieger, *supra* note 55, at 883-84.

58. See, e.g., Krieger, *supra* note 8, at 113-14. For a review of some of this literature, see Zimmerman, *An Interdisciplinary Framework*, *supra* note 55, at 851 n.2.

intense and challenging.⁵⁹ Law students must persevere in the face of the many demands of law school. Moreover, even after students successfully complete law school, they must study for and pass the bar exam in order to practice law. There is intuitive appeal to the idea that grittier law students will be more successful law students.⁶⁰ Our initial exploration of grit and law student performance set out to examine whether the data supported this intuition.

Particularly in light of the relationships found between grit and performance in previous research,⁶¹ we hypothesized that grit would be positively related to students' law school performance, as well as their undergraduate GPA and LSAT score. In her unpublished research with practicing female lawyers, Hogan did not find a statistically significant relationship between grit and law school GPA.⁶² However, these participants were reporting both their law school GPAs and grit levels further away from their actual law school experience.⁶³ Our research investigated the relationship between grit and law school GPA for recent law school

59. Glesner, *supra* note 8, at 630-31.

60. See Hogan, *supra* note 41, at 34 (suggesting that grit "may well be among the keys to success for women in law school" and that, without grit, female law students "may find themselves overwhelmed by the pressures of law school"). There is no reason why we would not expect Hogan's statements about female law students and grit to apply equally well to male law students. Other authors have suggested that grit is a trait that is associated with lawyers' success. See JENNIFER K. ROBBENOLT & JEAN R. STERNLIGHT, *PSYCHOLOGY FOR LAWYERS: UNDERSTANDING THE HUMAN FACTORS IN NEGOTIATION, LITIGATION, AND DECISION MAKING* 424 (2012) ("One factor that is associated with long-term success is grit. . . . Gritty lawyers set long-term goals and stick to them over the long haul."); Jean R. Sternlight & Jennifer K. Robbennolt, *Psychology and Effective Lawyering: Insights for Legal Educators*, 64 J. LEGAL EDUC. 365, 366 (2015) (identifying grit, among other things, as "central to effective lawyering").

61. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1088; Angela Lee Duckworth & Patrick D. Quinn, *Development and Validation of the Short Grit Scale*, 91 J. PERSONALITY ASSESSMENT 166, 170 (2009).

62. Hogan, *supra* note 41, at 66. In a recently published study, other researchers did not find a statistically significant correlation between grit and GPA for students at a private high school. Ivcevic & Brackett, *supra* note 22, at 32.

63. Hogan, *supra* note 41, at 55. The participants in Hogan's study were asked to report what range their GPA fell into, rather than reporting their GPA itself. *Id.* at 145.

graduates, as will be discussed in more detail in the following Parts of this article.⁶⁴

B. *The Law School Experiences of Women and Men*

To our knowledge, there is no published research that investigates whether there are differences in grit between female and male law students. However, existing research that investigates grit in other contexts has generally not found differences in grit scores between male and female participants.⁶⁵

Decades ago, the percentage of women enrolled in law school was in the single digits.⁶⁶ Under these circumstances, it would not be surprising that the grit scores of women would be higher than the grit scores of men, given the impediments in the way of women attending and graduating from law school at the time. However, in recent years, the percentage of women in law school has exceeded 45%.⁶⁷ Given the greater prevalence of women in law school and law practice—and that overt discrimination against women in law school is presumably much less common and accepted than it once was⁶⁸—we would not have expected that the grit levels of

64. We also investigated the relationship between grit and undergraduate GPA. *See infra* Part IV. Hogan did not find statistically significant correlations between grit and undergraduate GPA, or grit and high school GPA for the participants in her study. Hogan, *supra* note 41, at 66.

65. Duckworth & Quinn, *supra* note 61, at 173; Eskreis-Winkler et al., *supra* note 13, at 8; *see also* Claire Robertson-Kraft & Angela Lee Duckworth, *True Grit: Trait-Level Perseverance and Passion for Long-Term Goals Predicts Effectiveness and Retention Among Novice Teachers*, 116 *TEACHERS C. REC.* 1, 13, 18 (2014) (not finding a statistically significant correlation between grit and sex). *But see* Eskreis-Winkler et al., *supra* note 13, at 7 (indicating a weak but statistically significant correlation between grit and sex for juniors in high school).

66. *First Year and Total J.D. Enrollment by Gender 1947-2011*, ABA, http://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/statistics/jd_enrollment_1yr_total_gender.authc heckdam.pdf (last visited Sept. 16, 2015).

67. *Id.*

68. Purvis, *supra* note 56, at 1695. Of course, this does not mean that overt discrimination is nonexistent, and it also does not address the presence of implicit bias. *See* Sari Bashi & Maryana Iskander, *Why Legal Education Is Failing Women*, 18 *YALE J.L. & FEMINISM* 389, 425 (2006) (examining the

contemporary female and male recent law school graduates would differ.

While there is some prior research regarding the academic performance of men and women in law school, the findings of this research are mixed.⁶⁹ One researcher found that while there were no differences between the first-year academic performance of men and women, female law students' final law school GPAs were higher than those of their male counterparts.⁷⁰ Other researchers have found that, on average, women tend to receive lower grades than men in law school.⁷¹ Wightman examined the relationship between sex and first year law school GPA and found that although women did have first year law school GPAs that were statistically significantly lower than those of men, the difference was so small as to not be of "practical significance."⁷² However, Wightman reported that women did "tend to underperform academically in law school relative to their previous academic achievement."⁷³ A more recently published article suggests that while female law students may receive lower grades than male law students in large courses, factors such as class size, pedagogy, and grading scheme may "eliminate, and even reverse, [this] gender gap."⁷⁴

Other researchers have examined the experiences of women in law school and have raised concerns about disparities between women's and men's experiences in law school, although these disparities certainly do not describe the experiences of all female and male law students.⁷⁵ While

experiences of female and male law students at Yale Law School).

69. See Ho & Kelman, *supra* note 35, at 293 ("[N]umerous scholars examine the gender gap in law school grades, with heterogeneous findings across schools."); *id.* at 293 n.3.

70. Timothy T. Clydesdale, *A Forked River Runs Through Law School: Toward Understanding Race, Gender, Age, and Related Gaps in Law School Performance and Bar Passage*, 29 L. & SOC. INQUIRY 711, 740 (2004).

71. Díaz et al., *supra* note 35, at 423.

72. LINDA F. WIGHTMAN, *WOMEN IN LEGAL EDUCATION: A COMPARISON OF THE LAW SCHOOL PERFORMANCE AND LAW SCHOOL EXPERIENCES OF WOMEN AND MEN* 11 (1996).

73. *Id.* at 26.

74. Ho & Kelman, *supra* note 35, at 295, 310.

75. For a review, see Bashi & Iskander, *supra* note 68, at 395-96; Ho & Kelman, *supra* note 35, at 293; Purvis, *supra* note 56, at 1694-1703; see also ELIZABETH MERTZ, *THE LANGUAGE OF LAW SCHOOL: LEARNING TO "THINK LIKE A*

noting that previous studies suggested “that the law school experience is significantly less satisfactory to women than it is to men,” Wightman found that, in general, both women and men expressed satisfaction with their decision to attend law school.⁷⁶ However, Wightman did report relatively high percentages of women who “reported discrimination or adverse treatment due to their gender.”⁷⁷ In addition, Wightman found some statistically significant differences between the perceptions of women and men with respect to their first-year law school experiences.⁷⁸ For example, women reported to a statistically significantly greater degree than men that law school coursework was more difficult than they had expected.⁷⁹ Also, both at the beginning and end of the first year of law school, women tended to rate themselves lower than men to a

LAWYER,” 185-97 (2007); Bashi & Iskander, *supra* note 68, at 402 (“recogniz[ing] the importance of race, ethnicity, and sexual orientation in shaping students’ law school experiences”); Susan Sturm & Lani Guinier, *The Law School Matrix: Reforming Legal Education in a Culture of Competition and Conformity*, 60 VAND. L. REV. 515, 516 n.4 (2007); Eli Wald et al., *Looking Beyond Women’s Gender: Women’s Experiences at Law School*, 48 TULSA L. REV. 27, 32 (2012) (presenting narratives of the experiences of nine female law students to “illuminate the diversity and richness of women’s experiences in law school” and explore the “interplay [of gender] with other aspects of students’ identity and background conditions”).

76. Wightman divided the respondents into categories by “ethnic group.” Wightman, *supra* note 72, at 36. Wightman then compared the responses of men and women within each ethnic group. *Id.* The only statistically significant difference in satisfaction level was between African-American men and women (on average, women were less satisfied than men), although African-American women were still, on average, satisfied with their decision to attend law school and the difference between the responses of African-American men and women “[did] not meet the criterion for practical significance.” *Id.*

77. *Id.* at 60. While the percentages of women reporting that they “experienced discrimination or adverse treatment due to their gender” ranged from a “low” of 28.80% (for white women) to a high of 34.16% (for African-American women), the percentages of men who reported discrimination based on their gender ranged from a low of 2.85% (for Asian American men) to a high of 6.60% (for white men). *Id.*

78. In addition to the differences that she found between the responses of women and men, Wightman also found that there were differences between the experiences of women based on ethnic group and that these differences raised serious concerns about the experiences of women of color in law school. *Id.* at 74.

79. *Id.* at 39. On the other hand, men reported spending “significantly more time than women in recreation and relaxation activities.” *Id.* at 72.

statistically significant degree with respect to “academic ability, competitiveness, public speaking ability, [and] self-confidence in academic situations.”⁸⁰ At the beginning of their second year of law school, women were more concerned than men to a statistically significant degree “about getting good grades [and] passing the bar.”⁸¹

More recently, Bashi and Iskander reported on the results of research regarding the experiences of women and men at Yale Law School.⁸² This research found differences between the extent of class participation of women and men, with fewer women than men speaking in class.⁸³ Men also tended to volunteer to speak in class more than women.⁸⁴ The research disclosed perceived differences between the nature of women’s and men’s classroom comments⁸⁵ and between how professors responded to the comments of female and male students.⁸⁶ In addition, women were less likely to develop mentoring relationships with professors⁸⁷ and were “less comfortable” approaching professors outside of formal class discussions.⁸⁸ Bashi and Iskander note the consequences of these findings not only for women’s experiences in law school but also for women’s experiences after law school.⁸⁹

Particularly in light of existing research suggesting that

80. *Id.* at 54. There were statistically significant differences between the ratings of men and women within ethnic group for all items, except for Asian American respondents with respect to academic ability and public speaking ability (although women’s ratings were still lower than men’s for these items). *Id.* There was no statistically significant difference between the ratings of men and women with respect to “writing ability.” *Id.*

81. *Id.* at 67. At the beginning of the second year of law school, women were also more concerned than men to a statistically significant degree “about having enough time for family and friends.” *Id.* at 73-74.

82. Bashi & Iskander, *supra* note 68.

83. *Id.* at 405-06.

84. *Id.* at 406.

85. *Id.* at 407-08, 412-13.

86. *Id.* at 409-10.

87. *Id.* at 422-23.

88. *Id.* at 419-21. Bashi and Iskander note a discrepancy between women’s and men’s perceptions of gender differences in out-of-class interactions with faculty. *Id.* at 419 (noting that more than sixty-percent of women but less than thirty-percent of men “observed differences in the way men and women interact with faculty outside the classroom”).

89. *Id.* at 418.

there may be differences in the law school experiences of women and men, the data regarding differences between the grit scores of the female and male participants in our research project suggest that further exploration of the law school experiences of women and men is warranted. We will discuss our data and the implications of this data for future research in the following Parts of this article.

III. The Research Project

A. *Methodology*

In August 2013, we administered an online survey to recent law school graduates at a law school in a major metropolitan city on the east coast of the United States. Students in this law school's class of 2013 received an email inviting them to participate in the research project.⁹⁰ Students were told that their participation was voluntary, and the cover page of the survey gave the students the option of choosing to participate or declining to participate in the project. Participants' responses were anonymous to the researchers.⁹¹

90. The initial email was sent in the morning. Due to a problem with the link to the survey in the initial email, a follow-up email was sent later that same morning with a corrected link.

All but two of the respondents indicated that they graduated in May 2013. One respondent indicated having graduated prior to May 2013, and another respondent indicated having graduated after May 2013 (but prior to the start of the 2013-2014 academic year). There were a total of 138 graduates in the class of 2013. Almost all of these graduates graduated in May 2013; a few of these graduates graduated in December 2012 or July 2013.

91. The last question on the survey asked for the participant's name, but participants' names were not provided to the researchers. The participants' names were requested so that a third party intermediary (not one of the researchers) could look up the participants' publicly available bar exam results once they were available. To protect the anonymity of survey participants, study investigators did not directly extract survey data from the electronic database on which the survey responses were stored. After the survey closed, the third party intermediary downloaded the participants' responses, removed participants' names for individuals who voluntarily chose to provide their names for later bar examination outcome review by the third party intermediary, and then supplied the investigators with a de-identified dataset of all survey responses. The third party intermediary assigned each respondent an identification number before giving this data to the

Participants were allowed to complete the survey until August 28, 2013 and were only allowed to complete it once. Two follow-up emails were sent to these recent law school graduates reminding them of the invitation to participate in the survey.

For this survey, we used a modified version of the Short Grit Scale.⁹² Questions comprising the Short Grit Scale are Likert-type items where a statement is presented to the respondent and the respondent is asked to indicate how much the statement describes the respondent with responses ranging from one (“Not like me at all”) to five (“Very much like me”). This version of the scale includes six items measuring grit interspersed with six items measuring openness to experience.⁹³ The openness to experience items (for example, “I am curious about many different things”) describe individuals who tend to be creative and original, and have aesthetic sensibilities.⁹⁴ Because the openness to experience items

researchers. Readers are invited to contact the first author for further information about the methodology of this research project.

92. Duckworth & Quinn, *supra* note 61, at 167. We are very grateful to Lauren Eskreis-Winkler, a member of Angela Duckworth’s lab, for providing the modified version of the Short Grit Scale to us for use in our research project. As discussed subsequently, the modified version of the Short Grit Scale that we used included six items assessing grit. The Short Grit Scale (which is an eight item grit scale) is a modified version of a twelve item grit scale. *Id.* Other grit research has assessed grit using four grit items and making additional modifications to the items on the Short Grit Scale. Eskreis-Winkler et al., *supra* note 13, at 6. We calculated Cronbach’s alpha for the grit items on the scale that we used. Cronbach’s alpha is a measure of the internal consistency of the items on a scale. Mohsen Tavakol & Reg Dennick, *Making Sense of Cronbach’s Alpha*, 2 INT’L J. MED. EDUC. 53, 53 (2011). Cronbach’s alpha was 0.77, which is in the range of Cronbach’s alpha values found in previous grit research. *See, e.g.*, Duckworth & Quinn, *supra* note 61, at 167 (reporting values for Cronbach’s alpha ranging from .73 to .83 for the Short Grit Scale); *see also* Tavakol & Dennick, *supra*, at 54 (“There are different reports about the acceptable values of alpha, ranging from 0.70 to 0.95.”).

93. Jennifer M. George & Jing Zhou, *When Openness to Experience and Conscientiousness Are Related to Creative Behavior: An Interactional Approach*, 86 J. APPLIED PSYCHOL. 513, 514 (2001). The grit and openness to experience items were the first items on the survey.

94. *See id.* (“Openness to experience describes the extent to which individuals are imaginative, sensitive to aesthetics, curious, independent thinkers, and amenable to new ideas, experiences, and unconventional perspectives; it distinguishes between those amenable to variety, novelty, and depth of experience and those who prefer the conventional, routine, and familiar.”) (citations omitted).

provide respondents with positive descriptors that may be negatively related to grit, this may promote respondents providing responses that are more accurate self-assessments rather than providing the responses that respondents believe will make them “look good.”⁹⁵ The six items pertaining to grit measure facets of grit: specifically, commitment over time (for example, “I have been obsessed with a certain idea for a short time but later lost interest”) and perseverance (for example, “Setbacks don’t discourage me”). Table 1 includes all of the grit items on the grit scale that we used for the research project.⁹⁶ In order to obtain a respondent’s overall grit score, the respondent’s responses to each grit item are scored and then averaged. The maximum obtainable score on the grit scale is five, indicating that a respondent possesses much grit.

In addition to other items on the survey, participants were asked to report their final law school GPA, undergraduate

95. The authors are grateful to Eli Tsukayama for providing us with this rationale for the modified version of the Short Grit Scale that we used. Socially desirable responding refers to “the tendency to give positive self-descriptions” or “overly positive self-descriptions” on “questionnaire items.” Delroy L. Paulhus, *Socially Desirable Responding: The Evolution of a Construct*, in *THE ROLE OF CONSTRUCTS IN PSYCHOLOGICAL AND EDUCATIONAL MEASUREMENT* 49, 49-50 (Henry I. Braun, Douglas N. Jackson & David E. Wiley eds., 2002).

The research is mixed regarding the relationship between grit and openness to experience. Research has found a statistically significant positive correlation between grit and conscientiousness, while other research has found a negative (although not statistically significant) relationship between conscientiousness and openness to experience. Duckworth & Quinn, *supra* note 61, at 169; George & Zhou, *supra* note 93, at 518; Casey Straud, Mary McNaughton-Cassill & Robert Fuhrman, *The Role of the Five Factor Model of Personality with Proactive Coping and Preventative Coping Among College Students*, 83 *PERSONALITY & INDIVIDUAL DIFFERENCES* 60, 62 (2015). However, we did not find a statistically significant relationship (negative or positive) between openness to experience and grit for the participants in our study, which is consistent with some other research findings. Duckworth & Quinn, *supra* note 61, at 169; Hill et al., *supra* note 21, at 5. *But see* Duckworth et al., *Deliberate Practice Spells Success*, *supra* note 22, at 178 (reporting a relatively weak but statistically significant positive correlation between grit and openness to experience).

96. Three grit items are phrased to convey low grit (for example, “I have been obsessed with a certain idea for a short time but later lost interest) and thus were reverse-scored. For the reverse scored items, a response of “Very much like me” was scored as one and a response of “Not like me at all” was scored as five. Table 1 indicates which items on the grit scale were reverse scored.

GPA, and LSAT score.⁹⁷ Participants were also asked to provide demographic information regarding their sex, age, and race/ethnicity.⁹⁸

B. *Analysis*

Pearson r correlations were computed to examine the relationships between total grit score and law school GPA, undergraduate GPA, and LSAT score.⁹⁹ Measures of central

97. Participants were instructed to report their highest LSAT score if they took the LSAT more than once. One respondent included two LSAT scores; we used the higher of the two in our analyses.

98. For sex, participants were given a choice of identifying as “Female” or “Male.” Of the forty-nine recent law school graduates participating in this study, 28 reported that they were female and 21 reported that they were male. The survey asked participants to “identify [their] sex.” The survey did not also ask participants to identify their “gender,” and the survey did not include a definition of “sex.” Although asking participants to identify only their “sex” and giving participants a choice between identifying as “Female” or “Male” was not an unusual methodology for a research project of this type, there are other approaches that could be taken (and have been suggested). See Laurel Westbrook & Aliya Saperstein, *New Categories Are Not Enough: Rethinking the Measurement of Sex and Gender in Social Surveys*, 29 GENDER & SOC’Y 534, 538, 542-44, 555 (2015); see also Jenny Cheshire, *Sex and Gender in Variationist Research*, in THE HANDBOOK OF LANGUAGE VARIATION AND CHANGE 423, 423 (J.K. Chambers, Peter Trudgill & Natalie Schilling-Estes eds., 2004) (“Sex . . . is one of the most widely used social demographic categories, and so categorizing individuals into ‘females’ and ‘males’ has long been standard practice in the social sciences.”).

The mean age of the participants was 27.15 years ($SD = 3.11$).

Participants were asked to identify their “race/ethnicity” by selecting “all that apply” from the following options: “Asian”; “Black or African American”; “Hispanic or Latino”; “Native American or Alaska Native”; “Native Hawaiian or other Pacific Islander”; “White or Caucasian”; or “Other.” The largest percentage of participants identified themselves as being “White or Caucasian” (69.4%), with fewer participants identifying themselves as “Black or African American” (14.3%) or “Asian” (8.2%). The remaining participants were categorized as “Other” (4.1%) or did not report their race/ethnicity (4.1%). There were two participants who selected two options for race/ethnicity, and these participants were categorized as “Other.” Although “Other” was a response option for race/ethnicity on the survey, no participants selected “Other” in response to this survey item.

99. Pearson r is a correlation coefficient, and it refers to the strength “and the direction of the linear relationship between two variables.” GRAVETTER & WALLNAU, *supra* note 44, at 514. Whether r is positive or negative indicates the direction of the relationship between two variables. *Id.* at 511. A positive relationship means that “the two variables tend to change in the same direction”; for example, as one variable increases, so does

tendency and dispersion were computed for female and male participants' law school GPA, undergraduate GPA, LSAT score, total grit score, and scores on the grit items on the grit scale.¹⁰⁰ Differences between male and female participants on these variables were examined using two-tailed, independent samples *t*-tests.¹⁰¹

the other variable. *Id.* at 512. A negative relationship means that “the two variables tend to go in opposite directions”; for example, as one variable increases, the other variable decreases. *Id.* The value of *r* ranges from -1 to 1. RUSSELL T. HURLBURT, COMPREHENDING BEHAVIORAL STATISTICS 391 (4th ed. 2006). The closer *r* is to -1 or 1, the stronger the relationship between the two variables. *Id.* at 391-92. Of course, a strong relationship between two variables does not mean that one variable causes the other variable. *Id.* at 400. The closer *r* is to zero, the weaker the relationship between the two variables. RAUDENBUSH, *supra* note 43, at 76. Although there are not definitive rules for what size *r* constitutes a weak, moderate, or strong correlation, a general rule of thumb is that a correlation coefficient of *r* = .1 constitutes a weak correlation, *r* = .3 constitutes a moderate correlation, and *r* = .5 constitutes a strong correlation. JEREMY MILES & PHILIP BANYARD, UNDERSTANDING AND USING STATISTICS IN PSYCHOLOGY 210 (2007).

100. The most common method for describing and summarizing a distribution of scores in statistics is to report central tendency, which is a single value that represents “the center of a distribution.” GRAVETTER & WALLNAU, *supra* note 44, at 73. “The goal of central tendency is to find the single score that is most typical or most representative of the entire group.” *Id.* There are three ways of measuring central tendency: the mean, the median, and the mode. *Id.* We report means in this article. The mean refers to the average (the value calculated from summing all scores in a distribution and dividing that sum by the number of scores). *Id.* at 74. We calculated standard deviation to measure dispersion. The standard deviation “describes how variable, or how spread out, the scores are in a distribution.” *Id.* at 121. The “[s]tandard deviation provides a measure of the typical, or standard, distance from the mean” and indicates if scores are clustered closely around or widely scattered from the mean. *Id.* at 121-22. A larger standard deviation (based on the scale used) suggests a wider dispersion of scores from the mean. *Id.*

101. An independent samples *t*-test is used to evaluate differences between the means of two groups on select measures. GRAVETTER & WALLNAU, *supra* note 44, at 318. The independent samples *t*-test is used to evaluate whether there is a statistically significant difference between the means of two groups. *Id.* To evaluate the results of a statistical test, researchers set what is referred to as a level of significance (otherwise known as the “alpha level”); the alpha level is the standard used to judge whether the results of a statistical test are statistically significant. *Id.* at 237. For this study, we used a significance level of .05. *See id.* Each statistical test results in a *p*-value (which, roughly speaking, represents the probability that the observed result is due to chance), and the *p*-value is then compared to the selected alpha level to determine whether a particular result is statistically significant. HURLBURT, *supra* note 99, at 193-94.

IV. Results

A. *Total Grit Scores and Academic Performance of Participants*

Participants' average total grit score was 3.81 ($SD = 0.63$). Nearly one fifth of participants had a total grit score above four.¹⁰²

Participants reported an average law school GPA of 3.21 ($SD = 0.32$) and an undergraduate GPA of 3.41 ($SD = 0.37$). On average, participants reported taking the LSAT 1.61 times ($SD = .64$) and receiving an average LSAT score of 158.28 ($SD = 4.97$).¹⁰³

Total grit score was not significantly related to final law school GPA ($r = .003$, $p = .98$). Total grit score was also not significantly related to undergraduate GPA ($r = .17$, $p = .25$), or LSAT score ($r = -.27$, $p = .07$).

B. *Comparisons Between Female and Male Participants*

Independent samples *t*-tests found statistically significant differences between average total grit scores, with women

In addition to the *p*-value, an effect size should be reported for hypothesis testing because it indicates the magnitude of an outcome. Gail M. Sullivan & Richard Feinn, *Using Effect Size—Or Why the P Value Is Not Enough*, 4 J. GRADUATE MED. EDUC. 279, 279 (2012). For independent samples *t*-tests, Cohen provides guidelines for interpreting the magnitude of effect sizes. *Id.* at 280; Jacob Cohen, *A Power Primer*, 112 PSYCHOL. BULL. 155, 157 (1992). According to Cohen's conventions for interpreting effect size, an effect size for an independent samples *t*-test (or *d* value) of .20 would be considered small, an effect size of .50 would be considered medium, and an effect size of .80 would be considered large. Cohen, *supra*; see also Sullivan & Feinn, *supra*, at 280.

102. The largest proportion of participants (18.4%) had a total grit score of 4.17. The next largest proportion of participants (10.2%) had a total grit score of 2.83 and 3.17 (in other words, 10.2% of participants had a total grit score of 2.83, and 10.2% of participants had a total grit score of 3.17).

103. The survey asked participants to report the number of times they had taken the LSAT: 46.9% of participants reported taking the LSAT once; 44.9% reported taking it twice; and 8.2% reported taking it three times.

tending to report more grit than men.¹⁰⁴ In addition, there were also statistically significant differences between the scores of women and men on certain individual grit scale items. Specifically, there was a statistically significant difference between the responses of women and men to an item assessing diligence, with women reporting higher scores on this item than men.¹⁰⁵ Women also had higher scores than men on items reflecting interest over time.¹⁰⁶ Table 1 presents comparisons by sex of overall grit scores and scores on each individual grit item.

No significant differences emerged between female and male participants' average final law school GPA or LSAT score. However, there was a statistically significant difference between the average undergraduate GPA of female and male participants, with female participants having a higher average undergraduate GPA than the male participants.¹⁰⁷ Table 1 also presents a comparison by sex for these academic performance measures.¹⁰⁸

104. Women had a higher average total grit score than men. The mean grit score for women was 4.05, and the mean grit score for men was 3.50. This difference was statistically significant.

105. This survey item stated, "I am diligent. People say I am an extremely hard worker." The mean score for women on this item was 4.57, and the mean score for men on this item was 3.71. This difference was statistically significant.

106. Women had a higher average score than men on the item, "I often set a goal but later choose to pursue a different one." This item was reverse scored. The mean score for women on this item was 4.00, and the mean score for men on this item was 3.43. This difference was statistically significant.

Women had a higher average score than men on the item, "I have difficulty maintaining my focus on projects that take more than a few months to complete." This item was reverse scored. The mean score for women on this item was 4.18, and the mean score for men on this item was 3.38. This difference was statistically significant.

Women had a higher average score than men on the item, "I have been obsessed with a certain idea for a short time but later lost interest." This item was reserve scored. The mean score for women on this item was 3.86, and the mean score for men on this item was 3.00. This difference was statistically significant.

107. This finding is consistent with Wightman's findings regarding the undergraduate academic performance of female and male law students. WIGHTMAN, *supra* note 72, at 67, 73.

108. We also examined whether there was a correlation between grit and law school GPA for women only and for men only. We did not find a statistically significant correlation between grit and law school GPA for

Table 1. Comparisons of Female and Male Participants' Grit Scores and Academic Performance Measures

| | Females | Males | Total | <i>df</i> | <i>t</i> | <i>d</i> |
|---|--|--|--|--------------------|----------|----------|
| | <i>M</i> (<i>SD</i>) <i>n</i> = 28 | <i>M</i> (<i>SD</i>) <i>n</i> = 21 | <i>M</i> (<i>SD</i>) <i>n</i> = 49 | | | |
| Grit Item | | | | | | |
| Setbacks don't discourage me. | 3.46 (1.00) | 3.71 (0.64) | 3.57 (0.87) | 46.09 ^a | -1.06 | -0.30 |
| I have been obsessed with a certain idea for a short time but later lost interest. ^b | 3.86 (0.85) | 3.00 (1.00) | 3.49 (1.00) | 47 | 3.24** | 0.92 |
| I am diligent. People say I am an extremely hard worker. | 4.57 (0.63) | 3.71 (0.78) | 4.20 (0.82) | 47 | 4.23*** | 1.21 |
| I often set a goal but later choose to pursue a different one. ^b | 4.00 (0.86) | 3.43 (1.03) | 3.76 (0.97) | 47 | 2.12* | 0.60 |
| I have difficulty maintaining my focus on projects that take more than a few months to complete. ^b | 4.18 (0.77) | 3.38 (0.80) | 3.84 (0.87) | 47 | 3.51** | 1.01 |
| I finish whatever I begin. | 4.21 (0.88) | 3.76 (1.00) | 4.02 (0.95) | 47 | 1.69 | 0.48 |
| Total Grit | 4.05 (0.57) | 3.50 (0.57) | 3.81 (0.63) | 47 | 3.33** | 0.96 |
| Academic Performance | | | | | | |
| Undergrad GPA ^c | 3.50 (0.36) | 3.28 (0.33) | 3.41 (0.37) | 47 | 2.22* | 0.65 |
| Law GPA ^d | 3.20 ^e (0.35) | 3.22 (0.28) | 3.21 (0.32) | 46 | -0.30 | -0.09 |
| LSAT | 157.54 ^f (4.96) | 159.19 (4.95) | 158.28 (4.97) | 45 | -1.14 | -0.33 |

either women only or men only. In addition, using analysis of variance, we failed to find any statistically significant main effect of level of grit score or sex on law school GPA (meaning that there was not a statistically significant difference between the law school GPAs of participants with grit scores that were less than the average grit score of the sample or that were equal to or greater than the average grit score of the sample, and that there was not a statistically significant difference in law school GPA between the male and female participants). See GRAVETTER & WALLNAU, *supra* note 44, at 469. We also investigated whether there was any interaction effect of level of grit score and sex on the outcome variable of law school GPA. An interaction effect is “the unique effect produced by two factors working together.” *Id.* at 471. There is an interaction between two predictor variables when the influence of one predictor variable on the outcome “depends on” the other predictor variable. *Id.* at 472. Using analysis of variance, we also failed to find any statistically significant interaction between level of grit score and sex on law school GPA.

Note. ^a Levene's test of homogeneity significant, thus degrees of freedom for equal variances not assumed reported.¹⁰⁹ ^b Reverse scored grit items; higher scores = greater grit. ^c The survey did not instruct participants to report their undergraduate GPA on a specific scale, but respondents appear to have provided responses on a 4.0 point scale. ^d The participants' law school uses a 4.0 grading scale. ^e $N_{\text{Female}}: n = 27$. ^f $N_{\text{Female}}: n = 26$. $*p < .05$. $**p < .01$. $***p < .001$.

V. Discussion

The results of our research project did not support our hypothesis that grit would be positively correlated with law school GPA, as well as undergraduate GPA and LSAT score. However, to our surprise, the female participants in our research project reported more grit than the male participants. This section will explore some of the implications of our findings, the limitations of our research project, and avenues for future research regarding grit and both legal education and law practice.

Our research adds to findings that call into question the relationship between grit and academic performance (as measured by GPA).¹¹⁰ We hypothesized that grit would be positively related to law school GPA (in other words, greater grit would correspond to higher law school GPA), consistent with the research of Angela Duckworth and her colleagues that

109. The independent samples *t*-test assumes that the two samples being measured and compared "have equal variances." GRAVETTER & WALLNAU, *supra* note 44, at 337. Levene's test of homogeneity (or equality) of variance is used to evaluate whether it is appropriate to make this assumption. See MILES & BANYARD, *supra* note 99, at 145-46. If Levene's test of homogeneity of variance indicates that the variances are not equal, then different values are reported for the *t*-test results. See *id.* For this survey item, analysis suggested that the variances for the responses of men and women were not equal. Thus, we report the results of the independent samples *t*-test for this item not assuming the variances to be equal.

110. Hogan, *supra* note 41, at 66; Ivcevic & Brackett, *supra* note 22, at 32; see also Robertson-Kraft & Duckworth, *supra* note 65, at 13, 18 (finding no statistically significant correlation between grit (as assessed by third party raters, not self reports) and undergraduate GPA or SAT score).

found a positive correlation between grit and undergraduate GPA.¹¹¹ In addition, we hypothesized that grit would be positively related to law school GPA because law school is challenging and effortful. We expected that grittier students would be more academically successful in this environment.¹¹² Inconsistent with our hypothesis, no significant positive relationships emerged between grit and law school GPA.¹¹³ Although our findings were contrary to those of Duckworth and her colleagues,¹¹⁴ they were consistent with Hogan's research, which did not find a statistically significant correlation between grit and law school GPA (or undergraduate GPA) for practicing female lawyers.¹¹⁵ Moreover, in research published

111. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1093; *see also* Strayhorn, *supra* note 19, at 5 (finding a statistically significant positive correlation between grit and undergraduate academic performance, as well as between grit and high school academic performance).

112. We used overall law school GPA as an indicator of law school academic success. One would hope that law school grades accurately reflect learning. At the least, law school grades would seem to be an accurate reflection of academic success to the extent that academic success means meeting the expectations of one's law school professors.

113. *See supra* Part IV.

114. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1093. Contrary to Duckworth and her colleague's findings, we also did not find a statistically significant positive correlation between grit and undergraduate GPA. *See supra* Part IV. Although we did not find a statistically significant correlation between grit and LSAT score, Duckworth and her colleagues found a statistically significant negative correlation between grit and SAT score for undergraduate students. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1093. *But see* Strayhorn, *supra* note 19, at 5 (finding a statistically significant positive correlation between grit and ACT score).

115. Hogan, *supra* note 41, at 66. Unlike our research project, where we investigated grit and law school GPA shortly after law school graduation, Hogan assessed the grit levels of practicing lawyers and asked these lawyers to report their law school grade point average further removed from their actual law school experience. Also, Hogan did not ask participants to report their exact law school GPA. Rather, Hogan asked participants to indicate which GPA range their law school GPA fell within (*e.g.*, 3.7-3.9, 3.4-3.6, 3.0-3.3). *Id.* at 145. Hogan also asked participants to indicate which GPA range their undergraduate and high school GPAs fell within. *Id.* at 145-46. As with law school GPA, Hogan reports that she did not find a statistically significant correlation between grit and undergraduate GPA, or grit and high school GPA. *Id.* at 66. In addition, in a conversation after Emily Zimmerman's presentation at the Lawyering and Psychology: Coalescing the Field, *supra* note 39, another law professor told Zimmerman that she had investigated grit and first-year GPA for students at her law school and had

after we conducted our research project, other researchers reported that they did not find a statistically significant correlation between grit and GPA for high school students.¹¹⁶

The fact that we did not find a statistically significant correlation between grit and law school GPA raises a number of questions regarding the role of grit in law school academic performance (and, perhaps, regarding the role of grit in academic performance more generally).

On the one hand, our research may suggest that grit is not related to the academic performance of law students. On the other hand, a more nuanced possibility is that once individuals possess a certain amount of grit, individual differences beyond that amount do not relate to differences in academic performance. The participants in our study were recent law school graduates. These individuals not only were accepted to law school but also successfully completed law school. Moreover, these individuals chose to complete a survey in connection with our research project. Participation in this research project was voluntary, and participants received no compensation for their participation. Although our participants did vary in their levels of grit, perhaps they were just a generally gritty group. The average overall grit score of our participants was 3.81 ($SD = 0.63$). These results are consistent with Hogan's research with female lawyers at large law firms, in which the mean grit score of the participants was 3.94 ($SD = .477$).¹¹⁷ Thus, our research may suggest that, for

not found a statistically significant correlation between the two.

116. Ivcevic & Brackett, *supra* note 22, at 32.

117. Hogan, *supra* note 41, at 58. Hogan also reported that the lowest grit score of any of her participants was three. *Id.* Hogan assessed her participants' grit using twelve grit specific items; we assessed our participants' grit using six grit specific items. *Id.* at 147, 149. However, the scoring of the participants' responses was the same, such that the highest overall grit score possible for each participant was five. In their research, Duckworth and Quinn reported an average grit score of 3.2 ($SD = 0.7$) for participants between the ages of twenty-five to thirty-four years. Duckworth & Quinn, *supra* note 61, at 168. In other research, Duckworth and her colleagues reported average grit scores of 3.65 ($SD = 0.73$) and 3.41 ($SD = 0.67$) for participants who were twenty-five years and older, and 3.46 ($SD = 0.61$) for participants who were undergraduates. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1092. Duckworth and her colleagues reported that the average grit scores of the new West Point cadets who participated in their studies was 3.78 ($SD = 0.53$) and 3.75 ($SD = 0.54$).

law students, individual differences in grit beyond a certain baseline grit level may not relate to differences in GPA. To be sure, further research should be conducted to see whether this finding is replicated. However, if this finding is replicated, it would suggest the importance of investigating factors other than grit as correlates of law students' academic performance.¹¹⁸

If grit is not related to law school GPA, one might ask whether this reflects a problem with law school grading. In other words, why isn't grit related to law school GPA, and should law school assessment be rewarding grittier students?¹¹⁹ Certainly, law practice is challenging and requires persistence over the long term. To the extent that students' grades are being determined by a single end of semester exam or paper, this grading scheme might encourage and reward an intensive burst of effort at the end of a course rather than sustained effort throughout a course. This grading scheme does not necessarily reflect (or prepare students for) the sustained and prolonged effort that a lawyer needs to engage in throughout a legal career.

One of the challenges of transitioning to law practice from law study (and one of the ongoing challenges of law practice) can be the lack of closure in law practice because matters can continue for long periods of time before they are resolved.

Id.

118. For example, Angela Duckworth and James Gross have recently distinguished grit from self-control and stated that “[d]omain-general measures of self-control are generally more predictive of everyday measures of adaptive functioning (e.g., grades, physical health) than are domain-general measures of grit.” Angela Duckworth & James J. Gross, *Self-Control and Grit: Related but Separable Determinants of Success*, 2014 CURRENT DIRECTIONS PSYCHOL. SCI. at 2 (citation omitted). Future research could investigate the relationship of both grit and self-control to law students' academic performance. *Cf. id.* at 5 (noting that “there may be synergistic effects” between grit and self-control “with respect to specific success outcomes”).

119. Another question is whether legal educators should be trying to cultivate grit in their students; a related question is whether grit can, in fact, be cultivated. Thus far, empirical research has not focused on this last question, although efforts are nonetheless underway to encourage students to be “gritty.” *See, e.g., supra* note 24; *see also* Strayhorn, *supra* note 19, at 8 (suggesting possible ways to promote grit among African-American male college students and noting that “future research might test the efficacy of such interventions on raising grit among racially diverse students”).

Perhaps law schools should consider whether there are ways to promote and reward students for grit because grit will help students transition to law practice and will serve students well in their legal careers.¹²⁰

While there might be value in educating students about grit and helping students become self-aware about their own grit levels, explicitly grading students on their levels of grit does not seem like a constructive step for law schools to take. However, there are other ways that grit might be rewarded. For example, law schools might require students to complete assignments that require more long-term, sustained effort rather than using a single final exam at the end of a semester to determine students' course grades.¹²¹ Certainly, not all law school courses are currently graded based on a single final exam, but it is worth considering ways to promote sustained effort throughout a law school course, rather than a concentrated burst of effort at the end of a course. Requiring sustained effort and commitment over a semester or year is one benefit of experiential courses, such as clinics. Sustained effort over the long-term could help students better prepare for the rigors of law practice and could help students develop strategies (hopefully, with the support and assistance of the law school) to manage the sustained effort required in law practice.

In addition, law school pedagogy could explicitly prepare students to manage challenge (in other words, help students develop skills that can help them persevere in the face of challenge). For example, professors could make it a point to

120. Grit's utility in law practice has strong intuitive appeal. However, further research is needed to investigate both whether there are ways to promote law students' grit and whether grit does, in fact, serve lawyers well. Milana Hogan's research, *supra* note 41, discussed previously in this article, represents one effort to investigate grit in the context of law practice.

121. Of course, there may be drawbacks to these types of assignments. For example, some students might prefer to have a single exam at the end of the semester. Emily Zimmerman, *What Do Law Students Want?: The Missing Piece of the Assessment Puzzle*, 42 RUTGERS L.J. 1, 52 (2010). Students may have any number of reasons for this preference, for example because they are skilled test takers or because they prefer to concentrate their efforts at the end of the semester. However, to the extent that law school should be preparing students for law practice, helping students develop strategies for sustaining effort over time would be valuable.

talk with students about both the effort required in law school and law practice, and ways to manage the challenges of doing difficult work and working under pressure.¹²² Some law professors (including academic support professionals) already do this, as do other members of the law school community, such

122. “Managing challenge” includes, for example, anticipating that work will be challenging, developing strategies for handling challenge, persevering in the face of challenge, and becoming more comfortable with challenge (and the discomfort that can accompany challenge). There are many different ways to try to help students manage challenge. For example, law professors can try to normalize challenge and effort. Law professors might emphasize to students that the work required of law students is hard and that there is nothing wrong with students if they are finding the work challenging. Emily Zimmerman, *Humanizing Legal Education by Acknowledging and Preparing Students for Challenge*, Presentation at the Association of Legal Writing Directors 2015 Biennial Conference (June 5, 2015); cf. Robin L. Wellford-Slocum, *The Law School Student-Faculty Conference: Towards a Transformative Learning Experience*, 45 S. TEX. L. REV. 255, 269 (2004) (“The student conference is also an ideal forum in which professors can motivate and encourage students who are defeated by the challenge of the writing process.”); Wellford-Slocum, *supra*, at 333-39 (discussing how law professors can help students overcome feelings of failure in the face of challenge). As part of these discussions, law professors might talk with students about mindset, encouraging students to adopt a growth versus a fixed mindset. Cf. Rosen, *supra* note 53, at 338 (suggesting that law professors interact with students in “a way that promotes” a growth mindset). See generally DWECK, *supra* note 53. Law professors might also talk with students about law professors’ own experiences of facing “setbacks” and persevering in the face of challenge. See Bannister, *supra* note 39, at 15-16. In addition, law professors might address with students time management strategies and ways to avoid procrastination. See Christine P. Bartholomew, *Time: An Empirical Analysis of Law Student Time Management Deficiencies*, 81 U. CIN. L. REV. 897, 901 (2013) (“Starting time management training early helps law students to survive and thrive both in school and after graduation.”); Camille Lamar Campbell, *Timing Is Everything: Teaching Essential Time Management Skills for “Real World” Legal Writing*, 22 PERSPECTIVES: TEACHING LEGAL RES. & WRITING 125 (2014). Helping students manage challenge is also a part of promoting law students’ resilience (which, like grit, is another positive psychology construct). See, e.g., Penelope Watson & Rachael Field, *Promoting Student Well-Being and Resilience at Law School*, in EXCELLENCE AND INNOVATION IN LEGAL EDUCATION 389 (Sally Kift, Michelle Sanson & Jill Cowley eds., 2011); Kath Hall, Molly Townes O’Brien & Stephen Tang, *Developing a Professional Identity in Law School: A View from Australia*, 4 PHOENIX L. REV. 21, 48-50 (2010); Scott L. Rogers, *The Mindful Law School: An Integrative Approach to Transforming Legal Education*, 28 TOURO L. REV. 1189, 1201 (2012); Rosen, *supra* note 53, at 339 n.167. It might also be useful for law professors to recognize that there might be differences between themselves and their students (and among students) regarding perceptions of and attitudes towards challenge.

as career strategies advisors.¹²³ It might be worth considering (and investigating) whether there are other ways that law schools can promote and reward grit in order to better prepare students for both the rigors of law school and, even more importantly for the long term, law practice.¹²⁴

Even if grit is not related to law school academic performance, grit might be related to other aspects of an individual's experience in law school or as a practicing lawyer.¹²⁵ Much has been written about the negative psychological impact of law school on law students¹²⁶ and some scholars have tried to identify ways to make law school a more

123. See sources cited *supra* note 122.

124. Hogan recommends that “law firms . . . design and implement policies and procedures that reward female employees for demonstrations of [grit].” Hogan, *supra* note 41, at 132. Hogan also suggests that law firms can recruit female lawyers who are gritty. See *id.* at 131 (“[E]mployers can recruit the kinds of women who are likely to withstand the challenges that they may encounter along the path to leadership.”); see also Angela Lee Duckworth, Patrick D. Quinn & Martin E.P. Seligman, *Positive Predictors of Teacher Effectiveness*, 4 J. POSITIVE PSYCHOL. 540, 545 (2009) (“[W]hen recruiting and selecting teachers, schools should consider that positive traits such as grit . . . may be as important, if not more so, than traditional indicators of performance . . .”) [hereinafter Duckworth et al., *Positive Predictors*]; Maddi et al., *supra* note 20, at 26 (suggesting the possibility of “using [grit] as a selection device” for cadets at West Point); Strayhorn, *supra* note 19, at 8 (suggesting that colleges could take factors such as grit into account in making admissions decisions); Robertson-Kraft & Duckworth, *supra* note 65, at 22 (“We suggest that school administrators consider grit as one factor—among many—in identifying promising new teachers.”). Especially in light of ongoing efforts to identify predictors of law student and law practice success (other than LSAT score and undergraduate GPA), one might wonder whether law schools should consider students’ grit scores in the admissions process. See, e.g., Shultz & Zedeck, *supra* note 7, at 621-22. However, while it might be useful for students to be aware of their own grit levels and to have an understanding of grit, it is not at all clear that law schools should be taking grit into account in making admissions decisions. Nor, given the declining numbers of students applying to law school, is it necessarily likely that law schools will be adding additional factors to consider in making admissions decisions. Although, on the other hand, perhaps under current circumstances some law schools might be more tempted to weigh factors other than LSAT score and undergraduate GPA into the mix in considering which students will be likely to succeed in law school and law practice and, therefore, be good candidates for law school admission.

125. See MERTZ, *supra* note 75, at 188 (“[T]here are significant aspects of student experience not well mapped by tracking performance alone.”).

126. See, e.g., Krieger, *supra* note 8, at 112-15.

positive experience for law students.¹²⁷ Future research could investigate whether grit is related to individuals' satisfaction with law school or law practice, or law students' or lawyers' well-being.¹²⁸ Grittier law students and lawyers might be better able to weather the demands of law school and law practice.

However, "superficial grit," or perseverance without passion, might result in individuals sticking with experiences that they find unsatisfying (as some law students and lawyers might find law school and law practice to be) rather than switching course to more satisfying pursuits.¹²⁹ Future research might find that grit is related to a sustained career in law but not satisfaction with that career.¹³⁰ Law schools should

127. See, e.g., Sheldon & Krieger, *supra* note 55, at 894-95; Zimmerman, *An Interdisciplinary Framework*, *supra* note 55, at 895-915.

128. See Strayhorn, *supra* note 19, at 9 (discussing grit and college students, and noting "[f]uture studies might explore the relation between grit and . . . engagement, . . . happiness, satisfaction, and self-concept, to name a few"). Researchers have found a statistically significant positive correlation (albeit not a strong one) between grit and "life satisfaction." Duckworth et al., *Positive Predictors*, *supra* note 124, at 544. In research with college students, other researchers reported a statistically significant positive correlation between "purpose commitment" (having purpose and meaning in life) and grit, and between "positive affect" and grit. Hill et al., *supra* note 21, at 5, 8, 10. These researchers also reported a statistically significant positive correlation between purpose commitment and positive affect. *Id.* at 5, 8.

129. See Kohn, *supra* note 27, at 4; cf. Wolters & Hussain, *supra* note 17 (suggesting that the persistence and passion that comprise grit should really be treated as "distinct dimensions" and analyzed separately). Recent research has examined the two facets of grit both separately and combined into a single grit score. Von Culin et al., *supra* note 13, at 308-10.

130. Although grit is defined as including both "perseverance and passion," the items on the grit scale do seem to focus more on perseverance than passion. Saltman, *supra* note 30, at 49. In addition, the second component of grit would seem more accurately described, not as "passion," but as "interest," as this component is also referred to in the grit literature. See, e.g., Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1087-88 ("Grit entails working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress."); Von Culin et al., *supra* note 13, at 306, 309 (identifying the two components of grit as "effort" and "interest" (or "consistent interests")). Von Culin, Tsukayama, and Duckworth state that items on the grit scale that assess effort include, "I am diligent" and "Setbacks don't discourage me" and that items on the grit scale that assess interest include, "I often set a goal but later choose to pursue a different one . . ." and "I have been obsessed with a certain idea or project for a short time but later lost interest . . ." *Id.* at

not focus on persistence at the expense of all other values. There may be some law students who would be better served by not remaining in law school. However, law school and law practice are difficult even for those individuals who want to be studying and practicing law. Thus, law schools should give their students the tools to manage challenge in law school and law practice, as well as provide meaningful guidance for students who may ultimately make the decision not to complete law school (guidance that does not solely focus on the value of persistence at any cost).

Moreover, future research should investigate not only the extent to which law students persist in pursuing goals but also *how* law students pursue their goals. Existing research suggests that there might be a relationship between grit and the type of work engaged in by students, with grittier students

306. The items that assess interest would seem to focus more on persistence of interest rather than with the value or meaning that an individual attaches to the object of that interest (or with how developed or internalized an individual's interest actually is). See Suzanne Hidi & K. Ann Renninger, *The Four-Phase Model of Interest Development*, 41 EDUC. PSYCHOLOGIST 111 (2006); Zimmerman, *An Interdisciplinary Framework*, *supra* note 55, at 858-68.

The grit scale is not activity specific. In other words, the items are not focused on asking an individual about his or her level of grit in a particular context. Cf. Von Culin et al., *supra* note 13, at 306 (“[P]ersonality traits such as grit describe tendencies to act, think, and feel that are relatively stable across time and situation . . .”). However, Duckworth and Gross have suggested that grit “entails having a dominant superordinate goal” and doggedly pursuing that goal. Duckworth & Gross, *supra* note 118, at 3. Future research regarding grit and law students (or lawyers) could investigate individuals’ grit and individuals’ particular interest in law school (or law practice). This research could investigate both the relationship between these variables, and the relationship between these variables and individuals’ satisfaction with law school (or law practice). Cf. *id.* at 5 (identifying “interest” as one of the “diverse psychological antecedents” related to “commitment to a superordinate goal” and, as such, a subject for future study). Based on Hogan’s interviews with nine of the participants in her research study, Hogan concluded that while all of the interviewees “saw a direct connection between how hard they worked and the amount of success they were able to achieve,” “[t]he more senior lawyers . . . were much more likely [than the more junior lawyers] to be openly passionate about the practice of law.” Hogan, *supra* note 41, at 104. Hogan’s reference to “senior lawyers” apparently refers to partners, while her reference to “junior lawyers” apparently refers to attorneys who were not partners. *Id.* at 103, 108. From Hogan’s dissertation, it does not appear that she compared the grit scores of the partners and non-partners who responded to her survey.

being more likely to engage in more effective (although not necessarily more enjoyable) work to achieve a goal.¹³¹ Wightman's research also suggests the importance of examining not only the quantity of time that law students are spending on their work but also the quality of that time.¹³² Specifically, Wightman compared the amount of time spent on a variety of "study-related activities" by women who performed worse than they expected during the first year of law school and women who performed better than they expected during the first year of law school.¹³³ Wightman also performed the same comparison for male law students.¹³⁴ Wightman found that for both female and male law students, with few exceptions, law students who performed worse than they expected "reported spending significantly more time in each of a series of study-related activities" than students who performed better than they expected.¹³⁵ These findings raise the question of not only how law students are spending their time but also whether that time is well spent.

The other aspect of our findings that warrants further attention is the difference in grit scores between female and male participants. Although, in general, prior research has not found a relationship between sex and grit,¹³⁶ we found that women tended to report more grit than men.¹³⁷ Since 1997, the percentage of women enrolled in law school has exceeded 45%, so it would not necessarily be expected that women attending and graduating from law school would be grittier than their male peers.¹³⁸ These findings raise the question of whether

131. Duckworth et al., *Deliberate Practice Spells Success*, *supra* note 22, at 178. Recent research has also investigated the relationship between grit and sources of motivation. Von Culin et al., *supra* note 13.

132. *See* WIGHTMAN, *supra* note 72, at 112-13, 153.

133. *See id.* at 112-13 (summarizing findings).

134. *See id.* at 152-53 (summarizing findings).

135. *Id.* at 112-13, 152-53.

136. *See supra* note 65.

137. *See supra* Part IV. Although the percentage of women in our study (57%) was greater than the percentage of men (43%), it was more equal than in other studies. *See* Wolters & Hussain, *supra* note 17, at 6 (noting that 88% of their participants were female and that "similar research with a more gender-balanced sample would be worthwhile").

138. *First Year and Total J.D. Enrollment by Gender 1947-2011*, *supra*

percentages tell the whole story of women's experiences in law school. The finding that female participants possessed more grit than male participants¹³⁹ may suggest that women still face obstacles to attending and successfully completing law school—obstacles that are not faced (or not faced to the same degree) as men. Thus, despite the relatively comparable proportions of women and men in law school, women who attend and graduate from law school may need to be grittier than their male peers. Under these circumstances, law schools—and society more generally—should not become complacent about the experiences of women and men in law school and assume that because the proportions of women and men in law school are relatively equivalent that they share identical experiences in law school (or, for that matter, share identical experiences either leading up to law school or after law school).¹⁴⁰

Just as we did not find a statistically significant correlation between grit and law school GPA, no significant difference between the law school GPAs of female and male participants emerged.¹⁴¹ On the one hand, this might suggest

note 66.

139. As discussed later in this Discussion, this research project collected self-reported data from the participants. As a result, and as is typical with research regarding grit, grit was determined based on participants' own responses. *See, e.g.*, Eskreis-Winkler et al., *supra* note 13, at 2, 4, 6, 8. *But see* Duckworth & Quinn, *supra* note 61, at 169-70 (describing study that compared self reports and third party reports of grit). The use of self reports of grit raises a question about whether there are any sex-based factors that might influence how women and men respond to the items on the grit scale, apart from an individual's actual self-assessment. For example, would men be less likely to report being "diligent" even if they believe that they are? This could be a topic for future research. On the other hand, in the context of law school and law practice, one might intuitively expect diligence and persistence to be viewed as virtues worthy of acknowledgement. In addition, previous research has, in general, not found differences in grit scores between male and female participants. *See supra* note 65; *cf.* Strayhorn, *supra* note 19, at 5 (reporting a mean grit score, using the Short Grit Scale, of 4.08 for male African-American college students). Moreover, Duckworth and Quinn found statistically significant (although certainly not perfect) positive correlations between grit scores that were based on self reports and grit scores that were based on third party assessments. Duckworth & Quinn, *supra* note 61, at 170.

140. *See* Bashi & Iskander, *supra* note 68, at 399.

141. *See supra* Part IV.

that grit is not related to law school academic performance, as previously discussed. On the other hand, some research has found that women's grades in law school are lower than men's grades¹⁴² and that women underperform in law school based on their past academic performance.¹⁴³ In light of this research, our findings raise the question of whether grit played a role in equalizing the female and male participants' law school GPAs. Our study does not definitively answer this question, although we did not find any statistically significant interaction between level of grit score and sex on law school GPA.¹⁴⁴ Future research should further investigate the role of grit in the academic performance of women and men in law school.

Another avenue that would be worth exploring is the relationship between grit and confidence.¹⁴⁵ Some research suggests that female law students may be less confident than their male peers.¹⁴⁶ This research raises the question of whether there is an inverse or a direct relationship between grit and confidence (or no relationship at all between the two). On the one hand, being gritty may be adaptive for individuals who are less confident because grit may enable the pursuit and accomplishment of challenging tasks, even in the face of a lack of confidence. On the other hand, grit and confidence may be directly related to the extent that grit may facilitate the accomplishment of challenging tasks, which may further promote confidence. To the extent that grit is related to the accomplishment of challenging tasks (even if grit is not related to law school GPA), then exploring whether there are ways to promote grit (even in—or particularly in—the face of a lack of confidence) may benefit women—and men—in law school.¹⁴⁷

142. Díaz et al., *supra* note 35, at 423.

143. WIGHTMAN, *supra* note 72, at 26.

144. *See supra* note 108.

145. *Cf.* Robertson-Kraft & Duckworth, *supra* note 65, at 22 (raising the “possibility . . . that gritty teachers are better able to maintain confidence in their abilities”). On our survey, we did ask the participants how confident they were that they passed the bar exam (or exams) that they took, and we did not find a statistically significant relationship between grit and confidence regarding bar passage. However, we did not ask the participants how confident they were regarding their academic performance in law school.

146. WIGHTMAN, *supra* note 72, at 53-56.

147. Bashi and Iskander describe a previous examination of the discrepancy between the publication rates of female and male authored law

We are now at the beginning stages of the exploration of grit and legal education.¹⁴⁸ Very little empirical research in this area has been done so far. However, our research project points the way to future research regarding grit and legal education, as well as grit and law practice. The following paragraphs will identify both the limitations of our project and avenues for future research that these limitations suggest.

First, this study utilized a small sample from only one law school. Future research regarding grit and law students should ideally utilize a larger participant pool from multiple law schools.¹⁴⁹ It would be valuable to determine whether our findings would be replicated with more participants.¹⁵⁰ In addition, conducting research with students from multiple law schools would increase confidence in the generalizability of the findings, and might, potentially, identify differences between students at different types of schools.¹⁵¹

student notes in the Yale Law Journal in 1994-1995. Bashi & Iskander, *supra* note 68, at 425. This examination revealed that a much lower percentage of female authors than male authors resubmitted their notes after their notes were initially rejected; Bashi and Iskander identify this finding as one reason why there was an eight-percent acceptance rate for notes written by women, in contrast to a thirty-five percent acceptance rate for notes written by men in that year. *Id.* This situation is one possible illustration of the benefits of perseverance in the face of initial rejection for law students and the importance of providing our law students with tools to persevere in the face of disappointment and challenge. There are other examples that might be even more salient for larger numbers of law students (for example, with respect to persevering in the face of disappointing grades or persevering in the face of multiple unsuccessful job applications).

148. *Cf.* Duckworth & Gross, *supra* note 118, at 2 (“Research on grit is still in its infancy, and much remains to be discovered about its underlying psychological mechanisms.”).

149. In addition, we used a modified version of the Short Grit Scale for our study. *See supra* Part III.A. Future research could investigate whether our results would be replicated using other versions of the grit scale (in particular, the Short Grit Scale).

150. *See* MILES & BANYARD, *supra* note 99, at 309 (discussing statistical power, which is “the probability of getting a [statistically] significant result” when a statistically significant relationship does, in fact, exist); HURLBURT, *supra* note 99, at 194 (discussing statistical power); *see also* Sullivan & Feinn, *supra* note 101, at 281 (noting that increasing the number of participants in a study is one way to increase statistical power).

151. Peterson & Peterson, *supra* note 56, at 415 (suggesting the value of conducting research at more than one law school); *see also* Kennon M. Sheldon & Lawrence S. Krieger, *Does Legal Education Have Undermining Effects on Law Students? Evaluating Changes in Motivation, Values, and*

Second, this study assessed participants' grit levels and law school academic performance simultaneously: shortly after the participants graduated from law school. Future research could utilize a prospective design, assessing grit levels when students first enter law school and then assessing performance later on.¹⁵² Utilizing such a prospective design may afford a clearer and more accurate picture of the relationship between law students' grit levels and their academic performance while in law school.¹⁵³ Another option would be to conduct a longitudinal study.¹⁵⁴ Students' grit could be assessed at the beginning of law school and then assessed at various points throughout their law school experience to see whether students' grit levels change over time. Prior research outside of the law school context suggests that law students' grit levels would tend to remain relatively constant during law school,¹⁵⁵ but it would be useful to conduct research with law students over time to see whether this would actually be the case.

Third, our study relied exclusively on self-report data. Although self-report data have been used in previous grit (and other) studies,¹⁵⁶ its use does raise issues regarding the reliability of participants' responses.¹⁵⁷ To address concerns

Well-Being, 22 BEHAV. SCI. & L. 261, 276, 282 (2004) (discussing research conducted at two law schools, comparing the research findings at the law schools, and noting the limitation of conducting research at a single law school).

152. See Wolters & Hussain, *supra* note 17, at 16 (noting the value of a prospective research design).

153. We are grateful to Eli Tsukayama for highlighting this limitation.

154. See Von Culin et al., *supra* note 13, at 310 (noting the value of longitudinal research in the context of grit study).

155. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1091 (“[W]hen education level is controlled for, grit increased monotonically with age; however 25- to 44-year-olds did not differ significantly from 35- to 44-year-olds, and 45- to 54-year-olds did not differ significantly from 55- to 64-year-olds.”). *But see* Hill et al., *supra* note 21, at 8 (noting that, although on average college students' grit scores did not change significantly from the beginning to the end of the semester, “19% of participants changed at least one standard deviation . . . on grit”).

156. See, e.g., Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13; Hogan, *supra* note 41; Wolters & Hussain, *supra* note 17. *But see* Robertson-Kraft & Duckworth, *supra* note 65, at 8 (noting that the authors “used biographical data collected from teachers' resumés to assess grit”).

157. See Hill et al., *supra* note 21, at 11 (noting that “it would be valuable to supplement these findings [based on self-reports of grit] with

regarding participants self-reporting their law school GPAs and other performance measures, future research could use law school records, rather than participants' own reports.¹⁵⁸

Fourth, the substantive scope of this study was relatively narrow. This study did not investigate the relationship between grit and aspects of participants' law school experiences such as satisfaction with law school or happiness in law school. As previously discussed, even if grit is not related to law school GPA, grit could be related to other aspects of students' law school experience, such as satisfaction with or happiness in law school. Regardless of grit's relationship with academic performance, if grit were found to be related to law school satisfaction or happiness, then it would be worth exploring whether grit could be cultivated in law students and, if it could, whether increasing levels of grit would be related to increasing satisfaction or happiness. This study also did not investigate grit and law practice. Future research could examine whether grit is related to maintaining a career in the law over time and whether grit is related to career satisfaction.¹⁵⁹

VI. Conclusion

The present research contributes to both the developing literature regarding grit and academic performance, and the currently underexplored area of grit in legal education. As interest focuses on grit and performance generally, there is much that remains to be investigated regarding grit in the context of legal education and law practice. More research is needed to explore the relationship between grit and performance, and grit and satisfaction, for law students and lawyers. Such research may draw heightened attention to the

more objective markers of grit").

158. Although using law school records, rather than self-report data, has certain advantages, it also raises certain methodological complications. In addition, "[a]lthough not ideal, self-reported grade point average is a widely used measure of academic performance and has shown a high correlation with actual grade point average." Wolters & Hussain, *supra* note 17, at 7, 9 (citations omitted).

159. See Eskreis-Winkler et al., *supra* note 13, at 11 ("Additional research is needed in which grit is studied as a predictor of . . . long-term success and satisfaction.").

need for research regarding whether there are ways that grit can be cultivated among less gritty law students and lawyers.¹⁶⁰

Law school requires sustained effort and perseverance in the face of challenge. At the same time, legal educators want law students to be interested in the work they are doing and value that work. Law school is the beginning of a lawyer's professional career. The few years that law school requires pale in comparison to the decades of law practice that lie ahead of a law school graduate. Law schools prepare students for law practice. One of the facets of preparing students for law practice is preparing students for the sustained effort that will be required of them as lawyers and helping students develop strategies for managing their lives as lawyers. Just as we want law students to be interested in the work they are doing in law school and value that work, we also want law school graduates to be interested in the work they are doing and value that work. Grit's combination of "perseverance and passion"¹⁶¹ would be expected to serve both law students and lawyers well.

As research regarding grit, legal education, and law practice continues, the role of grit as part of a larger picture should be remembered. Grit should be seen as one facet of the factors that might influence law students' experience in law

160. Hogan suggests that "law firms can nurture grit in their high-potential women and thus provide them with a useful tool that would be likely to assist at least some of them in achieving success at the highest levels." Hogan, *supra* note 41, at 131. While this suggestion has intuitive appeal, to the best of our knowledge, there is not yet published research finding that particular interventions can increase grit. *See id.* at 131-32 (noting that "further research is needed in order to identify truly effective ways of nurturing [grit]"); *see also* Maddi et al., *supra* note 20, at 26 (noting that "it is not currently clear how grit might be trained"). Hill, Burrow, and Bronk suggest that "help[ing] [college students] commit to life goals" might be one way to promote grit in light of their research finding that "purpose commitment" at the beginning of the semester predicted grit at the end of the semester. Hill et al., *supra* note 21, at 11; *see also* Duckworth et al., *Positive Predictors*, *supra* note 124, at 546 ("Less is known about increasing grit, but mean level increases in grit across the lifespan suggest that it may be improved by intervention.") (citations omitted); Strayhorn, *supra* note 19, at 8 (suggesting possible ways to promote grit in African-American male college students and noting that "future research might test the efficacy of such interventions on raising grit among racially diverse students").

161. Duckworth et al., *Grit: Perseverance and Passion*, *supra* note 13, at 1087.

school and lawyers' experience in law practice. Grit should certainly not be the sole focus of attention when we consider the performance and satisfaction of law students or lawyers, nor is it ever likely to be, given the myriad of factors that influence performance and satisfaction.

In addition, bearing in mind the critiques that have been made regarding a single-minded focus on grit (largely in the context of younger learners),¹⁶² we should not lose sight of systemic factors that might influence success and satisfaction in law school and law practice. It is all well and good to examine grit. However, we should also examine whether equally gritty law students are equally successful and satisfied in law school,¹⁶³ and, conversely, whether there are external factors that might result in certain populations of law students or lawyers "needing" to be grittier than their peers. Rather than impeding the consideration (and amelioration) of structural inequalities, research regarding grit might, in fact, contribute to a critical examination of legal education and law practice. If certain groups of law students or lawyers are grittier than their peers, then that might suggest the need to examine why this is the case, including the examination of whether systemic factors create hurdles for certain groups that are not faced by others.¹⁶⁴ Thus, studying grit among law

162. See Kohn, *supra* note 27.

163. Similarly, research could also explore whether equally gritty lawyers are equally successful and satisfied in law practice.

164. For example, in addition to encouraging female lawyers to develop grit, the Grit Project of the American Bar Association's Commission on Women in the Profession could also address why it is that women might "need" to be gritty (and, perhaps, grittier than their male peers) and systemic factors that might influence why it is that there are relatively few women at the highest levels of law firm management. Hogan suggested that grit might enable female lawyers to persevere in the face of "biased [performance] reviews." Hogan, *supra* note 41, at 31; *cf. id.* at 127 ("[S]uccess in BigLaw has a lot to do with personal choice."). While this might be the case, a more pressing concern might be how to identify, address, and, ideally, eliminate bias in performance reviews. While there is certainly value in giving individuals insight into factors within their control that might influence their performance, there is also value in acknowledging that factors outside of an individual's control may influence their success and in addressing external factors that may unfairly impede the success of some individuals. *Cf. Task Force on Gender Equity*, ABA, <http://www.americanbar.org/groups/women/>

students and lawyers may contribute both to a greater understanding of individual differences and to a deeper understanding of broader forces that influence performance and satisfaction.

[gender_equity_task_force.html](#) (last visited Nov. 8, 2015) (addressing the issue of pay disparities between male and female lawyers and, in particular, male and female partners at law firms). Moreover, there is not necessarily a dichotomy between “internal” and “external” factors that might influence professional development; in discussing their research exploring differences between women’s and men’s “life goals” and attitudes towards “high-power positions,” researchers noted that one potential (though unexplored) explanation for their results was “learned preferences that have developed in response to cultural norms and gender-based discrimination.” Gino et al., *supra* note 52, at 6.