

Mindsets in Legal Education

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If you teach 1Ls, you may share the following concern. At the start of each year, we meet enthusiastic and successful students who are passionate about law. They arrive on campus invested in learning, ready to work hard, and eager to participate in class. But trouble brews soon thereafter. Students worry whether they have what it takes to do well, whether they will fit in, and whether they belong in law school. Answering questions in class, many sense (rightly or wrongly) that their professors and peers think that they aren't smart and that they will not do well. When they encounter difficulty making friends, finding study groups, and connecting with professors in office hours, they worry that "maybe this means that people like me do not belong or cannot succeed here." Worse yet, discussions in class lead many to lose sight of why they chose to go to law school and the important role that lawyers play in serving the public. These experiences erode confidence in their abilities and their engagement in law school, and they cause distress and undermine well-being. Given the inherent interest of law, our commitment to teaching, and our concern for our students' well-being, we tell ourselves, there is surely some small change that would allow our promising students to thrive. Yet any solution remains paralyzingly elusive.

This article validates the impulse to treat law students' engagement, learning, and well-being as interconnected and improvable. Indeed, on this fifteenth anniversary of the Law School Survey of Student Engagement (LSSSE), we applaud LSSSE's collection of over 350,000 law student responses from 200 law schools forming one of the largest datasets capturing student voices and experiences in law school. We offer a way forward that builds on LSSSE's rich data and the findings and efforts of legal scholars who have studied law students' well-being for the past two decades, and we suggest ways in which

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LSSSE data can be used by researchers who wish to intervene to improve law students' well-being.

The challenges of legal education during the global pandemic have reinforced what we already knew: law students suffer substantial distress during law school. Even during normal times, law students suffer elevated rates of depression, anxiety, and substance abuse, all of which can depress performance. When law schools suddenly shifted to online education in early 2020 in response to COVID-19, faculties confronted the reality that students face large, variable spikes in mental health challenges, among other problems. Recognizing the strong link between well-being and both academic performance and equity, nearly all law schools temporarily abandoned curved grades.¹ However, the challenges to law students' well-being are not temporary, so other solutions are needed. Indeed, the pandemic will continue to bring stress, illness, and economic pain, among other harms, into law students' lives for the foreseeable future. More than ever, lasting solutions are needed.

This article proposes one place to start: targeted, psychologically attuned interventions to address the friction that law students experience when transitioning into law school and when preparing for the bar exam. Such interventions promise to transform the recursive cycles produced by interactions between law schools and law students into virtuous ones. The proposal rests on three contentions: psychological friction plays a role in all aspects of the law school experience; problems in legal education can be defined in part as psychological problems amenable to psychological solutions; and such solutions can (and should) be subjected to rigorous, empirical testing.

We break no new ground in suggesting that law schools could benefit by drawing from social psychological insights. As Part I describes, numerous scholars have made this argument over the past two decades. Recognizing the severity of the distress that law students face, the profession and the academy have shown enthusiasm for change along the proposed lines. Yet law schools have not followed their advice—even when presented with promising, concrete proposals. The cause and consequence of this inaction are few effective, empirically measured interventions in legal education.

Our contribution is to explain why such psychologically attuned interventions are becoming ever more feasible, how to pursue them, and why doing so could transform legal education. As we detail in Part II, social psychology has developed several models that provide promising explanations for why law students' subjective well-being drops so precipitously after matriculation. Part III proffers solutions, with a focus on small-footprint, psychologically attuned interventions that have dramatic results. In passing, we briefly discuss how our own interdisciplinary, multi-institution collaboration used LSSSE data in building a program to mitigate the psychological friction law students experience when preparing for the bar exam. Part IV ends with a call to action.

1. E.g., Kathryn Rubino, *Top Law School Changes Course on Grading Policy, Gets with the Program*, ABOVE THE LAW (Apr. 6, 2020), <https://abovethelaw.com/2020/04/top-law-school-changes-course-on-grading-policy-gets-with-the-program/?rf=1>.

It reviews prior obstacles to improving law students' well-being, but observes that some have already eroded and identifies opportunities to overcome the remainder.

I. The Impact of Legal Education on Well-Being and the Turn to Psychological Thought

A growing literature sits at the intersection of legal education, academic support, and psychological science. This work deploys psychological insights to understand vexing problems in legal education that diminish law student growth, engagement, and well-being.

A. Law Student Distress and the Rise of the Well-Being Movement

Over the past decade, considerable research has revealed that legal education saps law student well-being, elevating depression, anxiety, stress, mental illness, and alcohol abuse. This distress begins upon matriculation into law school, then continues through commencement and into legal careers.

For example, in the past decade, two landmark studies of law students and lawyers have demonstrated that legal education and lawyering are associated with high levels of mental illness and substance abuse and notably low levels of subjective well-being. In 2014, the American Bar Association (ABA) co-funded the Survey of Law Student well-being, which examined substance abuse and mental health among 3300 law students at fifteen law schools.² Five years later, the Hazelden Betty Ford Foundation and the ABA commission on Lawyer Assistance Programs conducted an unprecedented national survey on substance abuse and behavioral health among 12,000 attorneys in nineteen states.³

Together, the studies revealed that law students and lawyers are distressingly likely to suffer from mental health problems. More than a third of law students (37%) screened positive for generalized anxiety, more than twice the rate of other graduate students (15%).⁴ More than a quarter of law students (27%) were classified as having eating disorders, nearly twice the rate of other graduate students (14%).⁵ More law students screened positive for depression (17%) as compared to other graduate students (14%).⁶ These elevated incidences of

2. *Survey of Law Student Well-Being*, Am. B. Ass'n (Mar. 30, 2020), https://www.americanbar.org/groups/lawyer_assistance/research/law_student_survey/; Jerome M. Organ et al., *Suffering in Silence: The Survey of Law Student Well-Being and the Reluctance of Law Students to Seek Help for Substance Use and Mental Health Concerns*, 66 J. LEGAL EDUC. 116 (2016).

3. *Study on Lawyer Impairment*, Am. B. Ass'n (Jan. 18, 2019), https://www.americanbar.org/groups/lawyer_assistance/research/colap_hazelden_lawyer_study/; Abigail Loftus DeBlasis & Elizabeth Adamo Usman, *Unrealized Potential: How Shifting the Focus to Student Learning Outcomes Could Reduce Law Student Distress*, 95 U. DET. MERCY L. REV. 179 (2018).

4. DeBlasis & Usman, *supra* note 3; Organ et al., *supra* note 2.

5. Organ et al., *supra* note 2.

6. DeBlasis & Usman, *supra* note 3; Organ et al., *supra* note 2 ("More than 10% of the respondents

mental health problems continued into practice. Nearly a fifth of attorneys reported symptoms of anxiety (19%), and even more reported struggling with depression (28%).⁷ According to one study, lawyers suffer depression at twice the rate of the general population and at higher rates than other professions.⁸

The story is similar with substance abuse. A quarter of law students (25%) qualified for additional screening for alcoholism, and 10% reported problem behaviors associated with drug use.⁹ More than a fifth of licensed and employed attorneys (21%) appear to be problem drinkers.¹⁰

Moreover, numerous studies have found that law students' subjective well-being declines from matriculation to graduation, with sharp declines evident across the 1L year.¹¹ For example, one study found that nearly half of law students self-reported depression at the end of their 1L year, an approximate doubling of the rate before law school.¹² While less than 1.3% of law students reported severe depression before law school, between 8.9% and 11.4% of law students reported severe depression by the end of their 1L and 3L years.¹³ Other studies found declines in positive affect, self-assurance, joviality, attentiveness, and the belief that one's intelligence can be grown.¹⁴ Stress and hostility, by contrast, rise.¹⁵ Even high-achieving students suffer.¹⁶

Commentators have identified many potential reasons for this decline in subjective well-being endemic among law students.¹⁷ For example, students

indicated that they had experienced three or more of the ten problem behaviors associated with drug use¹⁸

7. DeBlasis & Usman, *supra* note 3.

8. *Id.*

9. *Id.*; Organ et al., *supra* note 2.

10. DeBlasis & Usman, *supra* note 3.

11. *E.g.*, Mary E. Pritchard & Daniel N. McIntosh, *What Predicts Adjustment Among Law Students? A Longitudinal Panel Study*, 143 J. SOC. PSYCHOL. 727 (2003).

12. Alan Reifman et al., *Depression and Affect Among Law Students During Law School: A Longitudinal Study*, 2 J. Emotional Abuse 93 (2001); *see also* Molly Townes O'Brien et al., *Changing Our Thinking: Empirical Research on Law Student Wellbeing, Thinking Styles and the Law Curriculum*, 21 LEGAL EDUC. REV. 149 (2011); Krystia Reed et al., *Problem Signs in Law School: Fostering Attorney Well-Being Early in Professional Training*, 47 INT'L J.L. & PSYCHIATRY 148 (2016).

13. Reifman et al., *supra* note 12; *see also* O'Brien et al., *supra* note 12; Reed et al., *supra* note 12.

14. Susan Shapcott et al., *The Jury Is in: Law Schools Foster Students' Fixed Mindsets*, 42 L. & PSYCHOL. REV. 1 (2018); O'Brien et al., *supra* note 12; Reed et al., *supra* note 12.

15. Reed et al., *supra* note 12.

16. On this suffering, *see infra* note 19 and accompanying text.

17. Similar problems may well pervade other forms of professional education. *See* Wendy Larcombe et al., *Who's Distressed? Not Only Law Students: Psychological Distress Levels in University Students Across Diverse Fields of Study*, 37 SYDNEY L. REV. 243 (2015); Wendy Larcombe et al., *Does an Improved Experience of Law School Protect Students Against Depression, Anxiety and Stress? An Empirical Study of Wellbeing and the Law School Experience of LLB and JD Students*, 35 SYDNEY L. REV. 407 (2013); Pritchard & McIntosh, *supra* note 11; Andrea M. Flynn et al., *Law School Stress: Moving*

report that law school prods them to become more rational, adversarial, competitive, and isolated,¹⁸ often pushing them to turn away from “service” goals and toward more “lucrative” goals.¹⁹ According to commentators, culprits include the mandatory curve, the Socratic method, high-stakes evaluations in the form of comprehensive final exams, competition for jobs coupled with job insecurity, heavy workloads, and a lack of mentoring.²⁰ Commentators observe that law schools encourage conformity, narrow measures of success, and unhealthy competition.²¹

As a result, the legal profession and legal academy have devoted publicity, funds, attention, and prestige to understanding and remedying declines in subjective well-being. The collaboration between the ABA and fifteen law schools to conduct the 2014 Survey of Law Student Well-Being was one example. That same year, the Balance in Legal Education Section of the Association of American Law Schools also held a major symposium at AALS investigating links among well-being and professionalism, legal practice, and law teaching.²² Then, in 2016, the ABA Commission on Lawyer Assistance Programs co-led a national survey on substance use and behavioral-health concerns. A report, ABA resolution, ABA working group, national ABA conference, and ABA task force on well-being all followed.²³

B. Well-Being Work Centers on Psychological Insights

The imperative of improving law students’ well-being is a major research opportunity, as evidenced by the explosion of scholarship at the intersection of legal education, academic support, and psychological science across two decades.²⁴ In the main, this research has sought 1) to identify theoretically informed conditions of student thriving and the causes that sap well-being, 2) to propose solutions, 3) to examine and evaluate the effectiveness of these solutions empirically, and 4) to replicate and scale these solutions to promote

from Narratives to Measurement, 56 WASHBURN L.J. 259 (2017).

18. O’Brien et al., *supra* note 12; *see also* Cathaleen A. Roach, *A River Runs Through It: Tapping into the Informational Stream to Move Students from Isolation to Autonomy*, 36 ARIZ. L. REV. 667 (1994).
19. Kennon M. Sheldon & Lawrence S. Krieger, *Does Legal Education have Undermining Effects on Law Students? Evaluating Changes in Motivation, Values, and Well-Being*, 22 BEHAV. SCI. & LAW 261 (2004) (noting this pattern among high-achieving students).
20. *E.g.*, Susan Sturm & Lani Guinier, *The Law School Matrix: Reforming Legal Education in a Culture of Competition and Conformity*, 60 VAND. L. REV. 515 (2007); Flynn et al., *supra* note 17.
21. *E.g.*, Sturm & Guinier, *supra* note 20; Flynn et al., *supra* note 17.
22. Todd David Peterson, *The Many Connections Between Well-Being and Professionalism in the Practice of Law: Implications for Teaching*, 36 UALR L. REV. 263 (2014).
23. *Working Group to Advance Well-Being in the Legal Profession*, Am. B. Ass’n, https://www.americanbar.org/groups/lawyer_assistance/working-group_to_advance_well-being_in_legal_profession/ (last visited May 22, 2020).
24. DeBlasis & Usman, *supra* note 3; Heather D. Baum, *Inward Bound: An Exploration of Character Development in Law School*, 39 UALR L. REV. 25 (2016).

well-being across legal education. Researchers have made the most progress on the first two aims, which is our focus in this section: identifying and proposing ways to improve law students' well-being. We shall await Part III to discuss promising steps toward testing and implementing such proposals.

1. Locating Student Distress in the Interaction Between Law Students and Law Schools

When identifying causes that sap law students' well-being or promote their thriving, researchers have focused largely on law students or on law schools themselves. While research on law students tends to be empirically rich, it often focuses on the law students' personality characteristics and/or psychological dispositions as drivers for their anxiety, distress, and mental illness. The second approach examines conditions within law schools as additional causes.

Numerous studies now identify law student personalities or dispositions that correlate positively with aspects of well-being. For example, extroversion, optimism, emotional stability, and social connectedness predict higher life satisfaction.²⁵ Hope predicts greater life satisfaction and better law school academic performance.²⁶ Being mastery-oriented and self-efficacy correlates with academic success in law school.²⁷ Moreover, a sense of control, a sense of purpose, and cognitive flexibility have all been found to correlate to stress hardiness.²⁸ Relatedly, law students who perceive stress as a challenge and perceive themselves to have control over stressful events were respectively less likely to contemplate dropping out and more likely to display positive attitudes.²⁹ By contrast, law students who use coping strategies such as venting and self-distraction were more likely to contemplate dropping out.³⁰ Defensive pessimism relates to neuroticism, blame externalization, and lack of stress immunity.³¹

Turning next to research focusing on conditions within law schools, reformers have suggested several aspects of the law school experience as intervention points to improve law students' well-being. The intervention points most commonly proposed are the law school classroom,³² academic support, and

25. Nisha C. Gottfredson et al., *Identifying Predictors of Law Student Life Satisfaction*, 58 J. LEGAL EDUC. 520 (2008).
26. Kevin L. Rand et al., *Hope, but Not Optimism, Predicts Academic Performance of Law Students Beyond Previous Academic Achievement*, 45 J. RES. PERSONALITY 683 (2011).
27. Leah M. Christensen, *Predicting Law School Success: A Study of Goal Orientations, Academic Achievement, and the Declining Self-Efficacy of Our Law Students*, 33 L. & PSYCHOL. REV. 57 (2009).
28. Pamela Bucy Pierson et al., *Stress Hardiness and Lawyers*, 42 J. LEGAL PROF. 1 (2017).
29. Pritchard & McIntosh, *supra* note 11.
30. *Id.*
31. Emily Zimmerman & Casey LaDuke, *Every Silver Lining Has a Cloud: Defensive Pessimism in Legal Education*, 66 CATH. U. L. REV. 823 (2017).
32. Elizabeth M. Bloom, *A Law School Game Changer: (Trans)formative Feedback*, 41 OHIO N.U. L. REV. 227 (2015); Christensen, *supra* note 27; Gretchen Duhaime, *Practicing on Purpose: Promoting Personal Wellness and Professional Values in Legal Education*, 28 TOURO L. REV. 1207 (2012); Allison

counseling.³³ The most ambitious proposals envision transforming the entire law school at the institutional level through a mix of the above with changes to grading,³⁴ course offerings,³⁵ orientation, and activities outside classes.³⁶ To date, however, few studies test these hypotheses empirically.

The relative focus on law students over law schools may partly reflect practical and conceptual constraints. As a practical matter, law professors can more easily study law students than law schools. After all, large numbers of law students are already inside the building. By contrast, developing a sample of law schools (or even of law school contexts within a single law school) can be much more difficult. As a conceptual matter, there may be a bias toward thinking of institutions as less changeable than people. For instance, law schools admit a new crop of students each year, so altering the personality of the class may be as easy as revising the admissions process. Law schools are

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- D. Martin & Kevin L. Rand, *The Future's So Bright, I Gotta Wear Shades: Law School Through the Lens of Hope*, 48 DUQ. L. REV. 203 (2010); Ruth Ann McKinney, *Depression and Anxiety in Law Students: Are We Part of the Problem and Can We Be Part of the Solution?*, 8 J. LEGAL WRITING INST. 229 (2002); Roach, *supra* note 20; Laura P. Graham, *Generation Z Goes to Law School: Teaching and Reaching Law Students in the Post-Millennial Generation*, 41 UA LITTLE ROCK L. REV. 29 (2018); Kaci Bishop, *Framing Failure in the Legal Classroom: Techniques for Encouraging Growth and Resilience*, 70 ARK. L. REV. 959 (2018); Denitsa R. Mavrova Heinrich, *Cultivating Grit in Law Students: Grit, Deliberate Practice, and the First-Year Law School Curriculum*, 47 CAP. U. L. REV. 341 (2019); Paula J. Manning, *Word to the Wise: Feedback Intervention to Moderate the Effects of Stereotype Threat and Attributional Ambiguity on Law Students*, 18 U. MD. L.J. RACE RELIGION GENDER & CLASS 99 (2018) [hereinafter Manning, *Feedback Intervention*]; Paula J. Manning, *Understanding the Impact of Inadequate Feedback: A Means to Reduce Law Student Psychological Distress, Increase Motivation, and Improve Learning Outcomes*, 43 CUMB. L. REV. 225 (2013) [hereinafter Manning, *Inadequate Feedback*]; Carol L. Wallinger, *Autonomy Support 101: How Using Proven Autonomy Support Techniques Can Increase Law Student Autonomy, Engender Hope, and Improve Outcomes*, 48 DUQ. L. REV. 385 (2010).
33. Catherine Martin Christopher, *Eye of the Beholder: How Perception Management Can Counter Stereotype Threat among Struggling Law Students*, 53 DUQ. L. REV. 163 (2015); Elizabeth M. Bloom, *Teaching Law Students to Teach Themselves: Using Lessons from Educational Psychology to Shape Self-Regulated Learners*, 59 WAYNE L. REV. 311 (2013); Louis N. Schulze, Jr., *Alternative Justifications for Law School Academic Support Programs: Self-Determination Theory, Autonomy Support, and Humanizing the Law School*, 5 CHARLESTON L. REV. 269 (2011); 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 (2009).
34. Christensen, *supra* note 27.
35. Douglas A. Blaze, *Law Student Motivation, Satisfaction, and Well-Being: The Value of a Leadership and Professional Development Curriculum*, 58 SANTA CLARA L. REV. 547 (2018).
36. Katelyn Albrecht et al., *Wellness as Practice, Not Product: A Collaborative Approach to Fostering a Healthier, Happier Law School Community*, 59 SANTA CLARA L. REV. 369 (2019); Lawrence S. Krieger, *Human Nature as a New Guiding Philosophy for Legal Education and the Profession*, 47 WASHBURN L.J. 247 (2008) [hereinafter Krieger, *Human Nature*]; 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 (2002) [hereinafter Krieger, *Institutional Denial*]; Sarah J. Adams-Schoen, *Of Old Dogs and New Tricks—Can Law Schools Really Fix Students' Fixed Mindsets?*, 19 J. LEGAL WRITING INST. 3 (2014); DeBlasis & Usman, *supra* note 3; Corie Rosen, *Creating the Optimistic Classroom: What Law Schools Can Learn from Attribution Style Effects*, 42 MCGEORGE L. REV. 319 (2011).

also in the education business, so the notion that law students may be taught to thrive may seem more natural than redesigning the context.

Yet law schools merit study as one side of the (law student x law school context) interaction that decreases law students' well-being. (This topic gains fuller treatment in Parts II-III.) Moreover, such studies are possible, as evidenced by the finding that smaller law schools and more diverse law schools each predict higher life satisfaction among law students.³⁷

2. *Proposals to Improve Law Student Well-Being*

As empirical studies on the causes of law student distress have piled up, researchers have drawn on social psychological research to propose solutions to promote student learning, engagement, and well-being.³⁸ Much of this work falls into two major areas of research: growth mindsets and positive psychology.³⁹

We discuss growth mindsets (i.e., implicit theories of intelligence) in detail in Section II.D. A central insight is that the process of construal can affect feelings, thoughts, subsequent behaviors, and one's self-concept, which can all compound to shape one's effort and learning in a school environment. A growth mindset is an implicit theory that intelligence can expand in response to challenges. Those who endorse such a mindset may persist longer and achieve more.⁴⁰ As we describe in Part III, recent research reveals that such mindsets are not immutable personality characteristics, but rather can themselves be changed and shaped by cultures and social contexts, including law school environments. Unsurprisingly, several law review articles propose inculcating growth mindsets as one way to improve law students' well-being.⁴¹

37. Gottfredson et al., *supra* note 25.

38. Although important, the booming and related mindfulness-and-law literature lies beyond the scope of this article.

39. Other work does not fall strictly into these camps. See Duhaime, *supra* note 32 (synthesizing distinct theories of well-being); McKinney, *supra* note 32 (drawing on self-efficacy theory); Graham, *supra* note 32 (applying generational theory); Bloom, *A Law School Game Changer*, *supra* note 32 (promoting self-regulated learning); Bloom, *Teaching Law Students* *supra* note 33 (same); DeBlasis & Usman, *supra* note 3 (same).

40. Relatedly researchers have called for improving students' *meta-cognitive abilities*, which involve an awareness of one's learning and the ability to regulate one's learning. See Jessica Santangelo & Jennifer A. Gundlach, *Teaching and Assessing Metacognition in Law School*, 69 J. OF LEG. EDUC. 156 (2019).

41. Adams-Schoen, *supra* note 36; Bishop, *supra* note 32; Rosen, *supra* note 36; Manning, *Inadequate Feedback*, *supra* note 32; Santangelo & Gundlach, *supra* note 40; *see also* Heinrich, *supra* note 32 (recommending the inculcation of grit in law students). *But see* Emily Zimmerman & Leah Brogan, *Grit and Legal Education*, 36 PACE L. REV. 114 (2015) (finding no relationship between grit and law school GPA).

Legal educators have also turned to positive psychology for insights into how to improve law students' well-being. Positive psychology centers on the conditions for human thriving and includes the finding that hope and optimism promote well-being. Moreover, an important theory within positive psychology is self-determination theory, which demonstrates the benefits of connectedness and belonging with others, autonomy, and the building of competence and use of signature strengths.⁴² Like mindsets, these psychological processes are not fixed. Institutions and individuals can frustrate or facilitate them. This malleability has inspired numerous proposals. For example, one set of recommendations focuses on inculcating hope and optimism among law students.⁴³ Another recommends providing autonomy support. In perhaps the most expansive set of proposals to date, Lawrence Krieger has made repeated calls to promote law students' experiences of autonomy, connectedness, belonging, and competence.⁴⁴

II. New Directions in the Psychological Study of the Student Experience

In this section, we introduce social psychological research that helps identify how legal education affects law student learning, growth, engagement, and well-being. We focus on psychological insights: the relationship between stress and anxiety, the cues hypothesis, and mindsets. Research on stress and anxiety reveals how worries about the stress of challenging evaluative situations can undermine performance.⁴⁵ The cues hypothesis⁴⁶ explains how threatening cues in social contexts can lead to experiences of nonbelonging⁴⁷ and stereotype threat.⁴⁸ Mindsets include lay theories of intelligence held at

42. See Richard M. Ryan & Edward L. Deci, *Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being*, 55 AM. PSYCHOL. 68 (2000); RICHARD M. RYAN & EDWARD L. DECI, *SELF-DETERMINATION THEORY: BASIC PSYCHOLOGICAL NEEDS IN MOTIVATION, DEVELOPMENT, AND WELLNESS* (2018).
43. DeBlasis & Usman, *supra* note 3; Rosen, *supra* note 36; Manning, *Inadequate Feedback*, *supra* note 32; Martin & Rand, *supra* note 32. Compare Rand et al., *supra* note 26, which finds that hope and optimism predict greater life satisfaction among law students, but that only hope predicted better academic performance.
44. Krieger, *Human Nature*, *supra* note 36; Krieger, *Institutional Denial*, *supra* note 36; Sheldon & Krieger, *supra* note 19; see also Manning, *Inadequate Feedback*, *supra* note 32; compare Peterson & Peterson, *supra* note 33, who urge law schools to make use of students' signature strengths part of law school curricula.
45. See Alia J. Crum, Peter Salovey, & Shawn Achor, *Rethinking Stress: The Role of Mindsets in Determining the Stress Response*, 104 J. PERSONALITY & SOC. PSYCHOL. 716 (2003).
46. See Mary C. Murphy, Claude M. Steele, & J.J. Gross, *Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings*, 18 PSYCHOL. SCI. 879 (2007).
47. See Gregory M. Walton & Geoffrey L. Cohen, *A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students*, 331 SCI. 1447 (2011) [hereinafter Walton & Cohen, *A Brief Social-Belonging*]; Gregory M. Walton & Shannon T. Brady, *The Many Questions of Belonging*, in *HANDBOOK OF COMPETENCE AND MOTIVATION (2ND EDITION): THEORY AND APPLICATION* 272 (Andrew J. Elliot et al., eds., 2017).
48. See Claude M. Steele & Joshua Aronson, *Stereotype Threat and the Intellectual Test Performance of*

the levels of students and faculty members and within schoolwide cultures. This research reveals, for example, that faculty mindsets can shape students' views about whether brilliance is a quality that they either have or do not have and whether this brilliance is something that can be nurtured and developed.⁴⁹

All three psychological phenomena may result in vicious or virtuous cycles, which psychologists term *recursive processes*.⁵⁰ For example, people make meaning of their experiences and of the cues in their environments. Those construals may lead them to think, feel, behave, and interact with others and the surrounding context in ways that sustain and amplify these meanings. In that way, the original construal becomes self-fulfilling across time.⁵¹ We conclude our review by proposing a model of how these recursive processes relate to the experiences of law students specifically.

A. Stress, Anxiety, and Challenge-Threat

Stress is endemic in law school. Just consider final exams and being called on in a large lecture class, where students must solve complex problems under time pressure while facing the scrutiny of oneself and others. Anyone who has been through this can recall experiencing what social psychologists call emotionality: feelings of heightened physiological arousal, including embodied arousal, such as increased heart rate and adrenaline.⁵² This physiological arousal differs from worry, which refers to cognitive concerns and rumination about the evaluative situation. Research shows that these evaluative situations and the emotionality and worry that accompany them can lead students to avoid the situations altogether, forgoing those opportunities to learn and grow.⁵³

Research on the *bio-psycho-social model of challenge and threat* untangles this interaction between arousal and worry.⁵⁴ Under this challenge-threat model,

African Americans, 69 J. PERS. SOC. PSYCHOL. 797 (1995).

49. See Elizabeth A. Canning et al., *STEM Faculty Who Believe Ability Is Fixed Have Larger Racial Achievement Gaps and Inspire Less Student Motivation in Their Classes*, 5 SCI. ADVANCES 1 (Feb. 1, 2019).
50. Gregory Walton & Timothy Wilson, *Wise Interventions: Psychological Remedies for Social and Personal Problems*, 125 AM. PSYCHOL. ASS'N 617 (2018); Jason A. Okonofua et al., *A Vicious Cycle: A Social-Psychological Account of Extreme Racial Disparities in School Discipline*, 11 PERSP. ON PSYCHOL. SCI. 381 (2016).
51. Walton & Wilson, *supra* note 50.
52. See Shannon T. Brady et al., *Reappraising Test Anxiety Increases Academic Performance of First-Year College Students*, 110 J. EDUC. PSYCHOL. 395 (2017).
53. See Jeremy Jamieson et al., *Reappraising Stress Arousal Improves Performance and Reduces Evaluation Anxiety in Classroom Exam Situations*, 7 J. PSYCHOL. PERSONALITY SCI. 579 (2016); Ian Lyons & Sian Beilock, *When Math Hurts: Math Anxiety Predicts Pain Network Activation in Anticipation of Doing Math*, 7 PLOS ONE 1 (Oct. 2012).
54. See Jim Blascovich & Wendy Berry Mendes, *Social Psychophysiology and Embodiment*, in HANDBOOK OF SOCIAL PSYCHOLOGY 194–227 (Susan T. Fiske et al., eds., 2010); Jeremy Jamieson, *Challenge and Threat Appraisals*, in HANDBOOK OF COMPETENCE AND MOTIVATION 175–91 (Andrew J. Elliot et al., eds., 2d ed. 2017).

construals about the demands of a situation and construals about one's resources to meet the demands of that situation elicit challenge or threat responses in evaluative contexts. For example, when law students perceive that the demands of a situation exceed their resources to meet these demands, they will experience a psycho-physiological state of threat. In contrast, when law students perceive their resources as exceeding the demands of a situation, they will experience a psycho-physiological state of challenge.

Stress need not always impede performance. It can actually help, by activating the sympathetic nervous system.⁵⁵ Under the bio-psycho-social model of challenge and threat, people may rise to a challenge when they perceive themselves as having resources at their disposal in excess of what is required to meet the demands of a situation. People who recognize stress-induced, embodied arousal as the body mobilizing resources to meet the demands of a situation (e.g., enhanced heart rate pumps more oxygen to the brain) may view this emotionality as a resource. Hence, this construal of embodied arousal has been shown to lead to an approach orientation and a challenge response associated with enhanced cognitive performance in games and decision-making tasks.⁵⁶

Problems arise when emotionality prompts worries (i.e., cognitive concerns and rumination) about the evaluative situation. For example, many students construe embodied arousal or nervous energy as performance-hindering anxiety.⁵⁷ According to the bio-psycho-social model of challenge and threat, people may feel threatened and overwhelmed when they perceive the demands of a situation to exceed their available resources. Such worries, in turn, sap executive function, reduce working memory, create distractions, and undermine performance.

In this way, these worries become self-fulfilling prophecies. As poor performance raises stress and reinforces the interpretation that stress and emotionality are hindering phenomena, problems compound,⁵⁸ forming a recursive, vicious cycle.

55. See Mark D. Seery, *Challenge or Threat? Cardiovascular Indexes of Resilience and Vulnerability to Potential Stress in Humans*, 35 *NEUROSCIENCE & BIOBEHAVIORAL REV.* 1603 (2011).
56. See Jeremy P. Jamieson et al., *Turning the Knots in Your Stomach into Bows: Reappraising Arousal Improves Performance on the GRE*, 46 *J. EXPERIMENTAL SOC. PSYCHOL.* 208 (2010).
57. See Brady et al., *supra* note 52.
58. As a corollary, advising stressed-out students to calm down may be counterproductive as well as impractical. Seeking to calm down likely reinforces stress-related worries; and even if successful, calming down may dampen the arousal needed to excel in situations. *See id.*

B. The Cues Hypothesis, Stereotype Threat, and Belonging

When law students first arrive at law school, they often worry about whether they will fit in and belong.⁵⁹ Moreover, students who are members of stigmatized groups (e.g., law students who are older, underrepresented persons of color, gay, or first-generation college students) often worry about being judged in terms of stereotypes⁶⁰ and having their social-group memberships be devalued or disrespected. Research shows that these worries about belonging and identity threat, if reinforced by interactions with the social environment, interfere with learning⁶¹ and generate a vicious cycle of anxiety, nonbelonging, and stereotype threat. The result can be lower academic performance and avoidance of the very practices that could break this recursive process.⁶²

Recent research on the cues hypothesis suggests that threatening situational cues lead underrepresented minority students to worry about being judged in terms of stereotypes and about whether they belong, which may, in turn, undermine their executive functioning and the focus necessary for learning, ultimately leading to underperformance.⁶³ Underrepresented students enter new contexts vigilant to the possibility that they may be devalued,⁶⁴ viewed through the lens of negative stereotypes,⁶⁵ and rejected on the basis of their group identity,⁶⁶ and that they may otherwise not belong.⁶⁷ Threatening situational cues reinforce these worries.

59. See Dorainne J. Green et al., *Group-Based Inequalities in Relationships in Law School Predict Disparities in Belonging, Satisfaction, and Achievement in Law School* (forthcoming 2020).
60. See Steele & Aronson, *supra* note 48.
61. See Sian Beilock et al., *Stereotype Threat and Working Memory: Mechanisms, Alleviation, and Spillover*, 136 J. EXPERIMENTAL PSYCHOL. 256 (2007); Toni Schmader et al., *An Integrated Process Model of Stereotype Threat Effects on Performance*, 115 PSYCHOL. REV. 336 (2008).
62. See Walton & Cohen, *A Brief Social-Belonging*, *supra* note 47.
63. See Mary C. Murphy et al., *Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings*, 18 PSYCHOL. SCI. 879 (2007); Mary C. Murphy & Valerie J. Taylor, *The Role of Situational Cues in Signaling and Maintaining Stereotype Threat*, in STEREOTYPE THREAT: THEORY, PROCESS, AND APPLICATION 16 (Michael Inzlicht & Toni Schmader eds., 2011); Denise Sekaquaptewa & Mischa Thompson, *The Differential Effects of Solo Status on Members of High- and Low-Status Groups*, 28 PERS. SOC. PSYCHOL. 694 (2002).
64. See Sarah Johnson et al., *Middle Class and Marginal? Socioeconomic Status, Stigma, and Self-Regulation at an Elite University*, 100 J. PERSONALITY & SOC. PSYCHOL. 838 (2011); Murphy, *Signaling Threat*, *supra* note 63.
65. See Steele & Aronson, *supra* note 48; Murphy & Taylor, *supra* note 63; Steven J. Spencer et al., *Stereotype Threat*, 67 ANN. REV. PSYCHOL. 415 (2016).
66. See Rodolfo Mendoza-Denton et al., *Sensitivity to Status-Based Rejection: Implications for African American Students' College Experience*, 83 J. PERSONALITY & SOC. PSYCHOL. 896 (2002).
67. See Gregory M. Walton & Geoffrey L. Cohen, *A Question of Belonging: Race, Social Fit, and Achievement*, 92 J. PERSONALITY & SOC. PSYCHOL. 82 (2007); Tierra Freeman et al., *Sense of Belonging in College Freshmen at the Classroom and Campus Levels*, 75 J. EXPERIMENTAL EDUC. 203 (2007); Karen F. Osterman, *Students' Need for Belonging in the School Community*, 70 REV. EDUC. RES. 323 (2000).

Thus, underrepresented students who interpret critical feedback as biased or disrespectful may disengage with the course. Similarly, members of disadvantaged groups may be sensitive to how many surrounding faculty and students share their group identity,⁶⁸ to ambient signals concerning who belongs (or not),⁶⁹ to ideologies about diversity that institutions endorse,⁷⁰ and to faculty beliefs that some people “just can’t cut it,” among other factors.⁷¹ When stereotype threat and feelings of nonbelonging arise, they can cause distraction and rumination, provoke anxiety, diminish academic performance, impede development of relationships with peers and faculty, and diminish motivation and engagement. Such negative outcomes, in turn, reinforce feelings of nonbelonging and stereotype threat.

One important situational cue is relationships in school settings. Researchers have found, for example, that the quality of interracial roommate relationships in college predicts students’ sense of belonging, and that students of color report greater anticipated belonging in majors where members of their social group are perceived to be well represented.⁷² The results suggest the importance of promoting stronger relationships to improve belonging in professional learning contexts.⁷³

In this regard, across three studies—two using LSSSE’s impressive dataset of diverse, national samples of law students in the United States (total $N=18,075$)—we found that law students from disadvantaged backgrounds (e.g., racial/minority students of color and first-generation college students) report having weaker interpersonal relationships with peers and faculty in law school than white, continuing-generation students (Studies 1–3).⁷⁴ These weaker relationships predicted a lower sense of belonging (Studies 2 and 3), which predicted less satisfaction and worse self-reported grades (Study 3).⁷⁵

Importantly, self-reinforcing downward cycles are not inevitable. Interactions between students and their social environment can also result in feelings of belonging. In those cases, students may develop more frequent

68. See Murphy, *Signaling Threat*, *supra* note 63.

69. Sapna Cheryan et al., *Ambient Belonging: How Stereotypical Cues Impact Gender Participation in Computer Science*, 97 J. PERSONALITY & SOC. PSYCHOL. 1045 (2009).

70. See Valerie Purdie-Vaughns et al., *Social Identity Contingencies: How Diversity Cues Signal Threat or Safety for African Americans in Mainstream Institutions*, 94 J. PERSONALITY & SOC. PSYCHOL. 615 (2008).

71. See Canning et al., *STEM Faculty*, *supra* note 49; see also Aneeta Rattan et al., “It’s OK – Not Everyone Can Be Good at Math”: Instructors With an Entity Theory Comfort (and Demotivate) Students, 48 J. EXPERIMENTAL SOC. PSYCHOL. 731 (2012).

72. See Natalie J. Shook & Russ Clay, *Interracial Roommate Relationships: A Mechanism for Promoting Sense of Belonging at University and Academic Performance*, 48 J. EXPERIMENTAL SOC. PSYCHOL. 1168 (2012).

73. See Okonofua et al., note 50.

74. See Green et al., *supra* note 59.

75. See *id.*

social interactions with peers and faculty, form better relationships on campus, increase their social integration, benefit their well-being, and improve their engagement and success in law school. Early successes may serve as a cue to assure students that they, in fact, belong, which in turn improves their performance, creating a virtuous cycle.

C. Growth Mindsets, Faculty Mindsets, and Organizational Mindsets

Many students worry about their potential and whether they have what it takes to do well in law school. These worries can be particularly salient for members of disadvantaged and underrepresented groups. Interactions within law schools may mitigate or exacerbate these concerns, depending on which *lay* (or *implicit*) theory of intelligence those interactions emphasize—a growth or fixed mindset.⁷⁶ To endorse a growth mindset is to treat intelligence and ability as malleable, capable of development through persistence, learning, strategies, and mentoring. To endorse a fixed mindset is to treat intelligence and ability as fixed, inherent qualities incapable of much change or development. These implicit theories of intelligence can be self-reinforcing, encouraging the effort (or lack of effort) likely to produce growth (or not).

Past research characterized people's mindsets as an individual difference: that is, people were either "fixed theorists" or "growth theorists."⁷⁷ This research revealed that people tend to endorse either a fixed or a growth mindset about the nature of intelligence and that personally subscribing to an implicit theory of intelligence has important downstream psychological effects on perception, judgment, motivation, and ultimately behavior.⁷⁸ For example, people who endorse a fixed theory of intelligence often orient toward performance goals—seeking to demonstrate their innate ability—yet when they encounter difficulties, they may question their ability, exert less effort in that domain, or become defensive. In contrast, people who endorse a growth theory of intelligence often orient toward learning goals—seeking to learn, grow, and develop their malleable abilities. Later research demonstrated that these mindsets are not inherent personality traits; rather, these mindsets can be experimentally induced by providing science that supports either a fixed or a growth mindset of intelligence.⁷⁹ Thus, even people who personally endorse one theory somewhat more than the other tend to find both lay

76. See Carol Dweck, *Implicit Theories as Organizers of Goals and Behavior*, in *THE PSYCHOLOGY OF ACTION: THE RELATION OF COGNITION AND MOTIVATION TO BEHAVIOR* 69 (P. Gollwitzer & J. A. Bargh eds., 1996); Carol S. Dweck & Ellen L. Leggett, *A Social-Cognitive Approach to Motivation and Personality*, 95 *PSYCHOL. REV.* 256 (1988).

77. See CAROL S. DWECK, *SELF-THEORIES: THEIR ROLE IN MOTIVATION, PERSONALITY AND DEVELOPMENT* (1999).

78. Carol S. Dweck, Chi-yue Chiu & Ying-yi Hong, *Implicit Theories and Their Role in Judgments and Reactions: A World from Two Perspectives*, 6 *PSYCHOL. INQUIRY* 267 (1995).

79. See Carol S. Dweck & David S. Yeager, *Mindsets: A View from Two Eras*, 14 *PERSPECT. PSYCHOL. SCI.* 481 (2019); CAROL S. DWECK, *MINDSET: THE NEW PSYCHOLOGY OF SUCCESS* (2006).

theories plausible and are capable of applying either mindset of intelligence, depending on the context and culture within an environment.

Recent research has examined how organizational cultures—mindset cultures within organizations—communicate implicit theories of intelligence.⁸⁰ For example, law school cultures may convey the belief that brilliance and intelligence are either inherent personality traits or malleable, expandable qualities that can be developed with learning, practice, and growth. These organizational theories of intelligence shape people’s thoughts, feelings, perceptions, and behaviors within these social contexts in important ways. People within these law school cultures may self-present and treat others differently based upon the theories and values that the culture endorses.⁸¹

This research has shown that the mindsets prevalent at these different levels matter; indeed, the mindsets operating at the level of the institution and faculty members may overshadow a student’s personal mindset. In the context of legal education, for example, law school cultures and faculty may endorse fixed versus growth theories of intelligence, which may, in turn, affect law students’ beliefs. Separate and apart from whether law students themselves personally endorse a growth mindset in general, the mindset culture within a law school as communicated by faculty may shape important intrapersonal, interpersonal, and institutional outcomes.⁸² Law school faculty who endorse a fixed mindset may influence a student’s views about his or her abilities to succeed in a course regardless of the mindsets the student generally endorses. These faculty are more likely to classify students as low ability after a single classroom interaction or test performance. They are also more likely to turn to “smarter” students during class discussions and to discourage enrollment in challenging courses. Such judgments and behaviors can impede achievement. Troublingly, research on the Pygmalion effect demonstrates that when faculty hold lower expectations for some students, those students become less motivated and perform worse.⁸³

Indeed recent research on faculty mindsets shows that professors’ beliefs about the fixedness of ability may be an overlooked barrier for stigmatized students.⁸⁴ Results from a longitudinal, university-wide sample (150 STEM professors and more than 15,000 students) revealed that the racial achievement gaps in courses taught by more fixed-mindset faculty were twice as large as

80. See Mary C. Murphy & Carol S. Dweck, *A Culture of Genius: How an Organization’s Lay Theory Shapes People’s Cognition, Affect, and Behavior*, 36 J. PERSONALITY & SOC. PSYCHOL. 283 (2010); Elizabeth A. Canning et al., *Cultures of Genius at Work: Organizational Mindsets Predict Cultural Norms, Trust, and Commitment*, 46 PERSONALITY & SOC. PSYCHOL. BULL. 626 (2020).

81. See Canning et al., *Cultures of Genius*, *supra* note 80.

82. See *id.*

83. See ROBERT ROSENTHAL & LENORE JACOBSON, *PYGMALION IN THE CLASSROOM: TEACHER EXPECTATION AND PUPILS’ INTELLECTUAL DEVELOPMENT* (1968); see also Okonofua, Walton, & Eberhardt, *supra* note 50.

84. Canning et al., *Cultures of Genius*, *supra* note 80.

the achievement gaps in courses taught by more growth-mindset faculty. Course evaluations underscored that students were demotivated and had more negative experiences in classes taught by fixed- (versus growth-) mindset faculty. These faculty mindset beliefs predicted student achievement and motivation above and beyond other faculty characteristics, including their gender, race/ethnicity, age, teaching experience, or tenure status.⁸⁵ These findings suggest that faculty mindset beliefs have important implications for the classroom experience and achievement of law students who belong to underrepresented groups as well.

Rather than putting the burden on students and rigid structural factors, this work underscores that law school faculty have an important role to play; in addition, their own mindsets and theories of intelligence may lead to the underperformance of underrepresented students in their classes.

D. Vicious Cycles of Psychological Friction in Legal Education

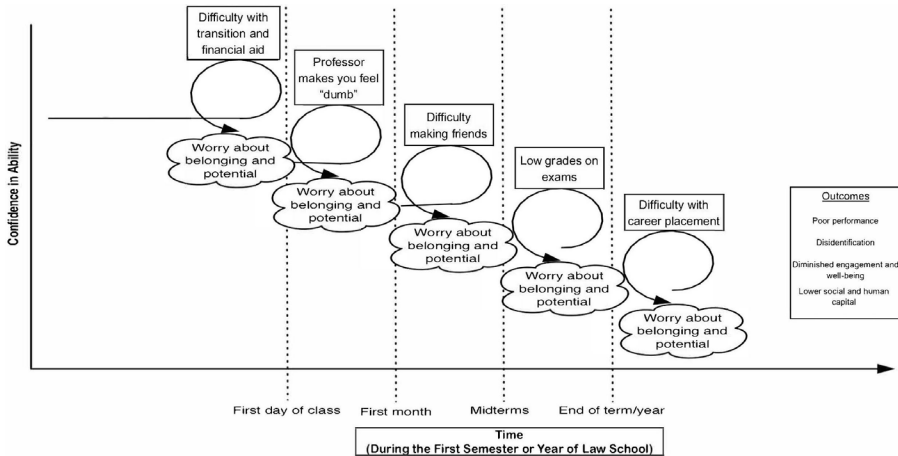
The meaning that law students make about their experiences within law school and about cues in their law school environments can lead to vicious or virtuous cycles that can be self-sustaining and unfold over long periods of time, as a recursive process.⁸⁶ When law students ascribe detrimental meanings to their experiences and cues, these meanings will in turn lead them to think, feel, and behave in ways that become self-fulfilling.⁸⁷ For example, when law students interpret critical feedback in class as biased or disrespectful, this may change how they think about the professor in that class and their engagement with the course. Moreover, when law students worry that they may not belong in law school, these concerns about nonbelonging may dampen that law student's motivation to develop relationships with peers and mentors, which can, in turn, lead them to further experiences of nonbelonging. Yet these recursive processes have the potential to change from vicious to virtuous cycles when the meanings ascribed lead students to think, feel, and behave in ways that foster their learning, growth, and success in their law school environment.

85. *Id.*

86. *See* Walton & Wilson, *supra* note 50.

87. *See id.*

To better understand how the above psychological processes may unfold in the legal education context, our research team developed the following theoretical model:



Belonging. When law students first arrive at law school, they often worry about whether they will fit in and belong. While all students worry about belonging in this new environment, these concerns are particularly salient for law students from disadvantaged and underrepresented groups. These worries may be exacerbated in the first year when law students interact with professors and peers. For example, law students from underrepresented groups and those who are the first in their family to earn a college degree encounter negative stereotypes about their intellectual ability, numeric underrepresentation, and other group-based threats on campus. Moreover, the presence of a competitive classroom culture and the absence of a collaborative culture with communal affordances and opportunities may especially impact women and members of disadvantaged and underrepresented groups.⁸⁸ These experiences may lead them to believe that “maybe this means that people like me do not belong or cannot succeed here.” These kinds of inferences sap motivation and behavior that fosters achievement through a vicious cycle that gains strength through its repetition.⁸⁹ Over time, this recursive process unfolds whereby these feelings of nonbelonging interact with difficulties in making friends with peers and forming mentoring relationships with faculty. Law students who experience

88. Amanda B. Diekmann & Mia Steinberg, *Navigating Social Roles in Pursuit of Important Goals: A Communal Goal Congruity Account of STEM Pursuits*, 7 *SOCIAL & PERSONALITY PSYCHOL. COMPASS* 487 (2013); Judith M. Harackiewicz et al., *Closing Achievement Gaps With a Utility-Value Intervention: Disentangling Race and Social Class*, 111 *J. PERSONALITY & SOC. PSYCHOL.* 745 (2016); Mary C. Murphy et al., *Open Science, Communal Culture, and Women's Participation in the Movement to Improve Science*, 117 *PNAS* 24154 (2020).

89. See Walton & Cohen, *A Question of Belonging*, *supra* note 67.

this nonbelonging and uncertainty are less likely to engage in the effort needed to form these relationships. For example, these meanings and experiences may decrease the likelihood that they will instigate a study group or visit with professors in office hours.

In contrast, law students who feel more assured of their belonging may develop more frequent social interactions with peers and faculty, forming better relationships on campus, facilitating their social integration and further benefiting their well-being, engagement, and success in law school. Early successes in law school may serve as a cue that assures students that they, in fact, belong there, which in turn improves their performance and leads to a self-fulfilling cycle and prophecy. In contrast, when students experience friction in the transition to law school or in law school classes they may feel that they do not belong and withdraw from the very practices that may be beneficial for their well-being and success—withdrawal that itself fuels further experiences of nonbelonging across their path in law school.

Growth Mindsets. Similarly, many students worry about their potential and whether they have what it takes to do well in law school. Again, these worries can be particularly salient for members of disadvantaged and underrepresented groups.⁹⁰ For example, law professors who communicate a fixed mindset—that some law students have what it takes and others do not—can lead law students to endorse this fixed mindset when thinking about their own abilities in law school. Law students who are members of underrepresented groups may also experience threat. When law students answer questions on call and infer that a professor thinks that they are dumb, this can exacerbate these worries about their potential. Moreover, when law students have difficulty connecting with students in study groups or experience negative interactions with faculty members in office hours, this may lead to worries about their ability and potential to succeed. Students with these worries—and who believe that perhaps they really do not have what it takes to earn high marks in a course—may exert less effort when studying and perhaps less effective strategies than those who really do believe that they have what it takes to earn an A. This may, in turn, lead to skewed differences in law school grades, which in turn feeds back on skewed differences in accumulating important markers of success in law school (e.g., journal and internships) and perhaps career opportunities while in law school and beyond.

Stress and Anxiety. Similarly, the meaning that law students make about their stress and arousal before an exam (or while taking the exam) may lead to a self-fulfilling prophecy. When a law student interprets the stress and arousal as harmful, this may lead them to worry about that anxiety. This worry itself may sap executive functioning as it forces the law student to deal with this psychological friction when taking the exam. These worries may increase the amount of stress that a law student experiences, which further erodes their

90. See David S. Yeager et al., *Teaching a Lay Theory Before College Narrows Achievement Gaps at Scale*, 113 *PROC. NAT'L ACAD. SCI. U.S.* 6575 (2016).

confidence and performance on the exam. When this worry interferes with their performance, they will earn a lower grade than they otherwise would have. On the next exam, they may experience even greater or equal stress and arousal (as they feel the need to earn a higher grade to offset the lower grade).⁹¹ Moreover, recalling the worries on their last exam may lead them to believe that they are simply not “a good test taker.” This meaning may further interfere with their performance. While these processes are subtle, social psychologists (and our own research team) have revealed the extent to which altering these meanings can lead to virtuous cycles that nourish performance.

III. The Science of Psychologically Attuned Interventions

One of the chief insights of social psychology is the power of construal.⁹² As we live and navigate our day-to-day lives, we constantly make meaning and sense about ourselves, others, surrounding events, and our own experiences.⁹³ This process of construal shapes our perceptions, feelings, motivation, thoughts, actions, and thereby our lived experiences, life trajectories, and the environments we inhabit. Several terms have been used to describe this central insight: mindsets, lay theories, subjective construal, causal attributions, social construction, and stories.⁹⁴ Recently, Carol Dweck has used the term “BEATs” to describe the underlying beliefs and the mental representations about emotions and action tendencies that shape motivation and construals.⁹⁵ In this article, we will describe this as meaning-making and the process of construal.

Importantly, this process of meaning-making is changeable, albeit variably so. Construals act much like hypotheses.⁹⁶ During times of minimal friction, this meaning-making goes unexamined and is treated as presumptively confirmed, a self-fulfilling dynamic like those described in Part II. However, at critical moments of change, transition, friction, or problems, construals become more open to revision—including in precise ways by targeted psychologically attuned interventions, known as wise psychological interventions.⁹⁷ Because

91. See Brady et al., *supra* note 52.

92. See Lee Ross et al., *A History of Social Psychology: Insights, Challenges, and Contributions to Theory and Application*, in VOLUME 1 HANDBOOK OF SOCIAL PSYCHOLOGY (Susan Fiske, Daniel Gilbert, & Gardner Lindzey eds., 5th ed. 2010); LEE ROSS & RICHARD E. NISBETT, *THE PERSON AND THE SITUATION: PERSPECTIVE OF SOCIAL PSYCHOLOGY* (1991).

93. See Walton & Wilson, *supra* note 50; cf. PETER L. BERGER & THOMAS LUCKMANN, *THE SOCIAL CONSTRUCTION OF REALITY, A TREATISE IN THE SOCIOLOGY OF KNOWLEDGE* (1967).

94. These terms can be found, for example, in ROSS & NISBETT, *supra* note 92; DWECK, *supra* note 79; Harold H. Kelley, *Attribution theory*, 15 NEBRASKA SYMPOSIUM ON MOTIVATION 192 (1967); TIMOTHY D. WILSON, *REDIRECT: THE SURPRISING NEW SCIENCE OF PSYCHOLOGICAL CHANGE* (2011).

95. See Carol S. Dweck, *From Needs to Goals and Representations: Foundations for a Unified Theory of Motivation, Personality, and Development*, 124 PSYCHOL. REV. 689 (2017).

96. Cf. JOHN DEWEY, *HOW WE THINK* 70-83 (1997).

97. See Gregory M. Walton, *The New Science of Wise Interventions, Current Directions in Psychological Science*, 23 ASS'N PSYCHOL. SCI. 73 (2014).

these new construals may themselves be subject to recursive reinforcement, the result is that even brief, targeted exercises can turn negative self-fulfilling cycles into positive self-fulfilling cycles, thereby leading to lasting change.

Gregory Walton and Timothy Wilson chose the term “wise” to describe these psychologically attuned interventions because they alter meaning-making using precise, theory- and research-based techniques.⁹⁸ Like other educational reforms, wise interventions may seek to improve students’ outcomes, but unlike person-based reforms, they do not primarily target a student’s deficit or lack of capacity (e.g., tutoring). Nor do they primarily target a situation, as in the case of situation-based reforms, such as providing law students additional study resources (e.g., flash cards), incentives (e.g., performance awards), behavioral nudges (e.g., making opportunities opt-out rather than opt-in), or transaction costs (e.g., convenient office hours).

Rather, psychologically attuned interventions emphasize a person-by-situation approach that is neither fully person-centric nor fully context-centric. In this approach, personal factors (e.g., law student social identities, such as race, gender, or social class) interact with societal stereotypes and environmental cues to shape thoughts, feelings, and behavior.⁹⁹ Hence, the aim of these psychologically attuned interventions is to alter specific construals to change the recursive interactions between people and contexts over time. These psychologically attuned interventions can be powerfully combined with traditional person-based and situation-based educational reforms. For example, a law school applying a context-focused intervention might alter threatening cues in an environment, such as by replacing racially and gender-homogeneous representations of lawyers with more diverse representations of alumni and lawyers in its hallways and by attending to the new meanings and new social environment that emerges. Moreover, a law school might apply a person-focused intervention, for example, when designing a study session to improve skills by attending to the meaning-making, thereby ensuring that these sessions are not construed as remedial, but rather as important avenues to enhance learning. In short, these wise interventions should not replace traditional bases of educational reform, but can be woven within existing reforms to make them more effective.

We stress that this process of construal is not “merely in people’s heads.” Meaning-making does not operate in a vacuum; instead it is part of a dynamic system of interactions between people and contexts¹⁰⁰ and is influenced by narrow social environments and wider historical, societal, economic, and ideological structures and currents in society.¹⁰¹ As such, altering construals

98. Walton & Wilson, *supra* note 50.

99. Kathryn M. Kroeper & Mary C. Murphy, *Supporting College and Career Readiness Through Social Psychological Interventions*, in *PREPARING STUDENTS FOR COLLEGE AND CAREERS: THEORY, MEASUREMENT, AND EDUCATIONAL PRACTICE* (Katie Larsen McClarty et al., eds., 2018).

100. Walton & Wilson, *supra* note 50.

101. See Hazel Rose Markus & Shinobu Kitayama, *Cultures and Selves: A Cycle of Mutual Constitution*,

can lead to lasting improvements when other aspects of this complex dynamic system have affordances—provide fertile soil—allowing these construals to take root and to continue. The inverse is also true in that changing a situation will not lead to lasting change if problematic construals go unremedied in that setting. In short, these psychologically attuned interventions involve a theory about how meanings contribute to outcomes among other forces in a system and provide accounts of what will work with whom and when.

Wise psychological interventions are also distinguished by the rigorous methodology that produces and validates them.¹⁰² Often, laboratory research first identifies a construal and determines its effects and changeability. Deep qualitative research concerning the phenomena in the real world then provides the basis for small-scale experiments with an eye toward replication and scalability. This approach permits the effectiveness of the intervention to be confirmed by randomized-controlled trials (RCTs) while limiting costs and negative consequences. Next, researchers contribute to larger social change by delivering the intervention at scale. At this stage, researchers can specify the contexts and populations for which the intervention is most effective. That information can contribute to adapting the intervention to adjacent contexts.

Psychologically attuned interventions come in many forms, including some that seek to reverse the vicious cycles described in Part II.¹⁰³ We now turn to stress-reappraisal interventions, belonging interventions, growth-mindset interventions, and a productive-mindset intervention that we developed to improve passage rates on the State Bar of California's July bar exam.

A. Stress-Reappraisal Interventions

Stress-reappraisal interventions rely on the psychological concept of reappraisal, an emotion-regulation strategy in which one reinterprets the meaning of an emotion-eliciting situation or physiological sensation.¹⁰⁴ Such reappraisals have great potential in a law school environment replete with high-stakes evaluations that trigger stress responses. As Part II discussed, the ensuing embodied stress and arousal can improve performance, but worries about these physiological responses can undermine achievement.¹⁰⁵ Stress-reappraisal interventions target the latter dynamic by providing

5 PERSP. PSYCHOL. SCI. 420 (2010); Paula M.L. Moya & Hazel Rose Markus, *An Introduction*, in *DOING RACE: 21 ESSAYS FOR THE 21ST CENTURY* (Paula M.L. Moya & Hazel Rose Markus eds., 2010); BERGER & LOCKMANN, *supra* note 93, at 173–83; GEORGE HERBERT MEAD, *MIND, SELF & SOCIETY FROM THE STANDPOINT OF A SOCIAL BEHAVIORIST* 135–226 (Charles W. Morris ed., 1963).

102. See David S. Yeager & Gregory M. Walton, *Social-Psychological Interventions in Education: They're Not Magic*, 81 REV. EDUC. RES. 267 (2011).

103. *HANDBOOK OF WISE INTERVENTIONS* (Gregory M. Walton & Alia J. Crum eds., 2020).

104. Jeremy P. Jamieson & Emily J. Hangen, *Stress Reappraisal Interventions: Improving Acute Stress Responses*, in *HANDBOOK OF WISE INTERVENTIONS*, *supra* note 103.

105. See *supra* Part II.

students with research on the benefits of psychological arousal to reach their peak performance. Doing so may help law students reinterpret embodied experiences of arousal as adaptive, functional responses to challenges. For example, they might come to see a rapid pulse as providing the body and mind with energy. If the context provides fertile soil for the intervention, students may no longer see stress responses as debilitating and instead see them as enhancing. Helping law students shift from this stress-is-debilitating mindset to a stress-is-enhancing mindset can improve their performance in evaluative situations.¹⁰⁶

Two studies suggest that stress-reappraisal interventions may be particularly helpful for law students confronting high-stakes final exams. Professor Jamie Jamieson and colleagues conducted an RCT of ninety-three students in a community college math course.¹⁰⁷ In the stress-reappraisal condition, students learned adaptive benefits of stress arousal (e.g., increased heart rate delivers more oxygen to your brain). The control condition instructed students to ignore stress. Treated students reported less math-evaluation anxiety and improved math-exam performance. The intervention improved performance by helping students reinterpret arousal and other signs of stress as tools and resources that increased their ability to cope with exam stress.¹⁰⁸

Professor Shannon Brady and colleagues studied the impact on students in an introductory college course of receiving—the night before the first exam—an e-mail from the instructor that either did or did not include a paragraph framing exam anxiety as helpful or nonharmful.¹⁰⁹ First-year students, who experience greater test anxiety and less certainty about how to perform well, benefited from the reappraisal message. They showed decreased worry and increased performance, both on the exam and in the course overall.¹¹⁰ These effects were due in part to students' decreased worries and enhanced performance on the first exam.

In short, stress-reappraisal interventions have attenuated debilitating interpretations about stress and anxiety by leading students to reinterpret embodied arousal as a vital resource that will help them reach their peak performance.

B. Social-Belonging Interventions

Social-belonging interventions facilitate beliefs that may help sustain students' sense of belonging and psychological safety in the face of challenges.¹¹¹

106. See Alia J. Crum et al., *Rethinking Stress: The Role of Mindsets in Determining the Stress Response*, 104 J. PERSONALITY & SOC. PSYCHOL. 716 (2013); see also Jamieson et al., *supra* note 53.

107. See Jamieson et al., *Turning the Knots*, *supra* note 56.

108. *Id.*

109. See Brady et al., *supra* note 52.

110. *Id.*

111. Walton & Cohen, *A Question of Belonging*, *supra* note 67; Walton & Cohen, *A Brief Social-Belonging*,

They thus hold promise for law schools, where there is reason to think that feelings of nonbelonging and stereotype threat may impede learning and performance among law students, especially those from underrepresented and negatively stereotyped groups. Indeed, research reveals that even among students not attending law school, feelings of nonbelonging affect are the norm, particularly among racial-ethnic minority and first-generation students. Social-belonging interventions often work by helping matriculating students understand common worries about fitting in and belonging as normal and temporary. They may also address beliefs about social connectedness and relationships. The aim is to flip self-fulfilling expectations of nonbelonging and stereotype threat into ones of safety and belonging. Of course, these new construals will take root only where they are plausible descriptions of students' contexts.

Research suggests that social-belonging interventions can have dramatic results. In one of the first belonging interventions conducted, Professors Walton and Cohen found that a one-hour session with first-year African American students at a selective university increased the students' GPA over the next three years, halving the Black-white achievement gap.¹¹² The intervention sought to initiate a recursive process that would decrease psychological perceptions of threat on campus by framing adversity during the transition to school as common and transitory. For Black students, who face considerable challenges and adversity when matriculating to colleges and universities, the intervention led to academic and health-related benefits while they were in school and for many years afterward.¹¹³

In a recently reported study, Professor Mary Murphy and colleagues asked whether belonging is relevant to the persistence and performance of these students—even when they comprise the numerical majority of the student body, as at many broad-access institutions—and if so, whether a social-belonging intervention would be effective in less selective post-secondary contexts where most students—and most students from disadvantaged backgrounds—attend college.¹¹⁴

To test these questions, Professor Murphy and colleagues adapted the social-belonging intervention and integrated it into a university-wide undergraduate first-year writing course in a way that colleges and universities can scale to reach

supra note 47; Gregory M. Walton et al., *Two Brief Interventions to Mitigate a "Chilly Climate" Transform Women's Experience, Relationships, and Achievement in Engineering*, 107 J. EDUC. PSYCHOL. 468 (2015); Gregory M. Walton & Shannon T. Brady, *The Social-Belonging Intervention*, in HANDBOOK OF WISE INTERVENTIONS, *supra* note 103, at 36-62.

112. Walton & Cohen, *A Question of Belonging*, *supra* note 67; Walton & Cohen, *A Brief Social-Belonging*, *supra* note 47.

113. Walton & Cohen, *A Question of Belonging*, *supra* note 67; Walton & Cohen, *A Brief Social-Belonging*, *supra* note 47.

114. Mary C. Murphy et al., *A Customized Belonging Intervention Improves Retention of Socially Disadvantaged Students at a Broad-Access University*, SCI. (forthcoming 2020).

entire cohorts.¹¹⁵ The RCT (N=1,063) revealed that the intervention increased the likelihood that racial-ethnic minority and first-generation college students would maintain continuous enrollment over the next two academic years relative to control groups.¹¹⁶ The belonging message resonated with students' experiences and was effective because it improved feelings of academic and social fit. They concluded that efforts to address belonging concerns at broad-access majority-minority institutions can improve important academic outcomes for historically disadvantaged students.¹¹⁷

Social-belonging interventions have likewise addressed the unique belonging concerns of first-generation college students¹¹⁸ and women in engineering environments.¹¹⁹

C. Growth-Mindset Interventions

Growth-mindset interventions change construals about one's own and others' abilities and potential to grow.¹²⁰ They may, therefore, fill an important need in legal education. After all, intellectual challenges are everywhere in law school, and as Part II discussed, students' well-being may suffer when their interactions within law school environments emphasize a fixed mindset. These interventions combine science on neuronal plasticity and brain malleability with the idea that neural networks improve as one learns new, challenging material. To help this construal take root, participants are asked to reflect on how to apply this mindset in their own encounters with new, challenging material. Where opportunities to learn and grow exist, a virtuous cycle can result—especially in contexts that are supportive of a growth mindset.¹²¹

Because individuals, instructors, and institutions endorse theories about intelligence, mindset interventions may succeed by targeting each of these different levels: individuals, instructors, and institutions. Indeed, given the

115. *Id.*

116. *Id.*

117. *Id.*

118. See Nicole M. Stephens et al., *Closing the Social-Class Achievement Gap: A Difference-Education Intervention Improves First-Generation Students' Academic Performance and all Students' College Transition*, 25 *PSYCHOL. SCI.* 943 (2014).

119. See Walton et al., *Two Brief Interventions*, *supra* note 111.

120. Joshua Aronson et al., *Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence*, 38 *J. EXPERIMENTAL SOC. PSYCHOL.* 113 (2002).; Lisa S. Blackwell et al., *Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention*, 78 *CHILD DEV.* 246 (2007); Catherine Good et al., *Improving Adolescents' Standardized Test Performance: An Intervention to Reduce the Effects of Stereotype Threat*, 24 *APPLIED DEV. PSYCHOL.* 645 (2003).

121. Yeager 2019 and colleagues report that a growth mindset intervention had a greater effect on grades when peer norms aligned with the messages of the intervention.

influence that faculty and cultures have, it may be more valuable to affect the mindset held by faculty or an organization culture than, say, merely the mindset that students endorse. Certainly, the burden for achieving a growth mindset should not fall solely or primarily on students. Law schools and faculty are in the better position to intervene, and their choice to endorse a growth mindset versus a fixed mindset is likely to have a far-reaching impact.

That said, research demonstrates that interventions with students can succeed at a variety of education levels, including by helping higher-risk or lower-achieving students. Professor Blackwell and colleagues provided elementary school students several types of praise.¹²² Students who received neutral praise saw no adverse effect on learning. Children praised as intelligent (fixed-mindset praise) saw diminished performance, motivation, and learning. Children praised for their effort (growth-mindset praise) improved their performance and sought to do more challenging problems in the future.¹²³ A second study in this program of research presented middle school students with an eight-session workshop covering study skills and science showing that the brain grows connections and “gets smarter” during challenging tasks. Participants earned higher math grades over the course of the year.¹²⁴

Professors Yeager, Dweck, and colleagues have scaled these psychological insights into online RCTs with thousands of high school and college students.¹²⁵ These interventions are particularly effective for high-risk students: high school students with low prior grades, especially when enrolled in medium- to low-achieving schools;¹²⁶ and college students who are members of underrepresented or stereotyped groups.¹²⁷ One recent intervention with a nationally representative sample of U.S. secondary education students improved grades among lower-achieving students and increased overall enrollment in advanced math courses.¹²⁸

122. Blackwell et al., *supra* note 120.

123. *Id.*

124. *Id.*

125. See David Paunesku et al., *Mind-Set Interventions are a Scalable Treatment for Academic Underachievement*, 26 *ASS'N PSYCHOL. SCI.* 784 (2015); David S. Yeager et al., *Using Design Thinking to Improve Psychological Interventions: The Case of the Growth Mindset During the Transition to High School*, 108 *J. EDUC. PSYCHOL.* 374 (2016).

126. Eric Bettinger et al., *Increasing Perseverance in Math: Evidence from a Field Experiment in Norway*, 146 *J. ECON. BEHAV. & ORG.* 1 (2018); Paunesku et al., *supra* note 127; David S. Yeager, et al., *A National Experiment Reveals Where a Growth Mindset Improves Achievement*, 573 *NATURE* 364 (2019); Yeager et al., *Using Design Thinking*, *supra* note 125.

127. Michael Broda et al., *Reducing Inequality in Academic Success for Incoming College Students: A Randomized Trial of Growth Mindset and Belonging Interventions*, 11 *J. RES. ED. EFFECTIVENESS* 317 (2018); Yeager et al., *Using Design Thinking*, *supra* note 125.

128. Yeager, et al., *A National Experiment*, *supra* note 126.

Research also discusses the potential for interventions with instructors.¹²⁹ Law teachers and administrators are influential and can use their positions to transform law schools from a culture focused on proving oneself into a growth-mindset culture focused on learning and developing. For example, growth-mindset interventions are most effective in classrooms in which teachers themselves communicate growth-mindset messages.¹³⁰ Relatedly, Professor Murphy and colleagues find that faculty mindsets predict classroom practices and the achievement of their students, particularly of students from underserved or stigmatized groups.¹³¹ Thus, STEM classes taught by teachers who endorse a fixed mindset (versus a growth mindset) display significantly larger racial achievement gaps. By contrast, professors whom students perceive to endorse a growth mindset (versus a fixed mindset) more often (a) engage in student-centered teaching (e.g., monitoring student progress and adapting instruction to it); (b) signal positive views about perseverance (e.g., emphasizing the importance of effort rather than focusing on mistakes); and (c) give process praise (e.g., complimenting learning, development, and problem-solving strategies).¹³²

D. A Productive-Mindset Intervention on the California Bar Exam

To confirm and model the effectiveness of these interventions in legal education and thereby to secure some of their benefits for aspiring lawyers, we designed, delivered, and evaluated the California Bar Exam Strategies and Stories Program. Below, we recount the process and results.

As with other psychologically attuned interventions, we proceeded from the ground up to target recursive interactions between people (registrants for the California Bar Exam) and contexts (the process of preparing for the exam).¹³³ First, we immersed ourselves in the relevant research; built a multidisciplinary team (social psychology, law, education, sociology, and statistics); and secured knowledgeable institutional partners: the State Bar of California, AccessLex, and LSSSE.

Next came focus groups and surveys to gain a deeper understanding of how general psychological phenomena applied to the specific domain of the California Bar Exam. Here we learned that those studying for the bar exam experienced considerable stress and anxiety. They worried about being among the majority of students who fail the California Bar Exam, about having too much to memorize and too little time to do it, about lacking focus, and about

129. Kroeper & Murphy, *supra* note 99, at 149.

130. Yeager, et al., *A National Experiment*, *supra* note 126.

131. Canning et al., *Cultures of Genius*, *supra* note 80.

132. *Id.*

133. See Yeager et al., *Using Design Thinking*, *supra* note 125 (growth mindset for high school).

tackling subjects not studied in law school. The demands of studying also strained their relationships, reduced their self-care, and impinged on the hours they needed to work to make ends meet. Participants reported poor sleep, anxiety attacks, consumption of junk food and alcohol, reduced time with loved ones, and lack of exercise. Their interpersonal relationships suffered, which reduced their well-being and made stress and anxiety harder to handle.

In short, worries about ability, potential, belonging, and performance are ubiquitous and occur for all students during the matriculation into law school, within law school classes, and while preparing for final exams, including the bar exam. These worries create psychological friction that prevents students from achieving their potential, and they drain students' executive functioning and cognitive resources, which lowers persistence and performance on standardized exams, among other harms.¹³⁴

With this local knowledge in hand, we developed a scalable online productive-mindset intervention to help bar exam takers interpret challenges, obstacles, and negative psychological experiences as common, surmountable, and even useful. The program emphasizes three messages: (1) a stress-is-debilitating mindset can cause worries about being stressed that then undermine performance, whereas a stress-is-enhancing mindset can improve outcomes such as learning and growth; (2) mistakes made when studying for the bar exam spotlight areas for learning (not failure); and (3) reminding oneself about why one is becoming a lawyer can help one power through challenges that take place over the summer.¹³⁵ It conveys and reinforces its

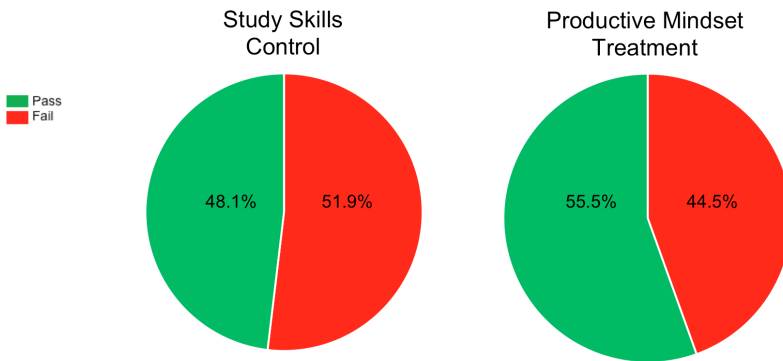
134. Walton & Cohen, *A Question of Belonging*, *supra* note 67; Walton & Cohen, *A Brief Social-Belonging*, *supra* note 47.

135. See Chris S. Hulleman & Judith M. Harackiewicz, *Promoting Interest and Performance in High School Science Classes*, 326 *SCI.* 1410 (2009) (utility value); Chris S. Hulleman et al., *Enhancing Interest and Performance with a Utility Value Intervention*, 102 *J. EDUC. PSYCHOL.* 880 (2010) (utility-value intervention); David S. Yeager & Matthew J. Bundick, *The Role of Purposeful Work Goals in Promoting Meaning in Life and in Schoolwork During Adolescence*, 24 *J. ADOLESCENT RES.* 423 (2009)

content through introductory film, audio and written stories from prior test-takers, as well as via a module in which participants write letters telling future test-takers how to use the program's insights and strategies.

The program began in mid-March 2018 by permitting registrants for the July California Bar Exam to opt in. Participants consented to the program and to analysis of their bar exam results. To create an RCT, enrollees were divided to ensure random dispersal among conditions of student traits, such as GPA and demographic details. In May, participants gained access to their online program.

Intent-to-Treat Analysis (ITT)



ITT: Productive Mindset Intervention (vs. Control) Increased Pass Rate by 7.4%

Initial results are promising. An intent-to-treat analysis conducted with $n = 1638$ bar test-takers revealed that the estimated probability of passing the bar exam was 7.4% percent, or higher, in the treatment than in the control condition, depending upon the test of efficacy used. Because the sample size in the average-treatment effect analysis was modest, we replicated the program with a larger sample for the July 2019 California bar exam. We are completing an article that reports the effects of this program across both cohorts of test-takers.

IV. Conditions Ripening for a New Field of Empirical Study on Law Student Thriving

This is an exciting moment for research at the intersection of legal education, academic support, and psychological science. Over the past two decades research has powerfully shown that, for far too many law students, legal

(self-transcendent purpose); David S. Yeager et al., *Boring but Important: A Self-Transcendent Purpose for Learning Fosters Academic Self-Regulation*, 107 J. PERSONALITY & SOC. PSYCHOL. 559 (2014) (self-transcendent purpose intervention).

education produces anxiety, distress, depression, and substance abuse, and it enervates well-being. As a result, the legal profession and the legal academy recognize both the gravity of the problem and the need for a major response. In formulating such a response, scholars and reformers have increasingly looked to social psychology and related work on students' well-being.

Even so, neither systemic change nor effective, evidence-based psychological interventions have become common in legal education. This was the disappointing lesson of the past decade. In 2007, the Carnegie Foundation's landmark study of legal education criticized law schools for inadequately attending to social aspects of the profession.¹³⁶ Contemporaneously, the Clinical Legal Education Association's Best Practices Project culminated in a major report with similar insights.¹³⁷

Professor Lawrence Krieger harnessed self-determination theory as the basis of a reform program "harmonizing legal training with the natural needs and tendencies of law students and lawyers." Krieger's work inspired major symposiums (including at AALS) on balance in legal education and humanizing legal education. AALS also created the Section on Balance in Legal Education,¹³⁸ and Krieger was elected its first chair. Yet legal education stayed mostly the same. Compelling as Krieger's vision was, it did not result in precise, empirically tested interventions that were implemented, refined, replicated, and scaled.

In a review of the well-being crisis in legal education and potential solutions, Professors DeBlasis and Usman concluded that catalyzing change within the legal academy requires more than understanding that legal education saps well-being, being passionate about solving these problems, and proposing promising solutions rooted in research. One reason for this centers on law schools' conservative institutional culture, which values grading on the curve, the Socratic method, and the belief that law school classes are rigorous, and which presumes that experienced law school professors are effective educators. Relatedly, Sturm and Guinier (2007) argue that reformers' tendency to focus on the curriculum rather than the institution is self-defeating. The problem is not what topics are studied, but how law schools measure success, envision legal education, and set goals and norms. According to DeBlasis and Usman, a second reason is institutional incentives, which do not encourage (and may well discourage) investment by law professors in teaching and students' well-being. A third reason is the lack of empirical evidence demonstrating the effectiveness of proposed reforms. A final reason is lag. Years may pass

136. WILLIAM M. SULLIVAN ET AL., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* (2007).

137. ROY STUCKEY ET AL., *BEST PRACTICES FOR LEGAL EDUCATION* (2007).

138. Krieger, *Human Nature*, *supra* note 36.

before cutting-edge social psychology insights permeate scholarship at the intersection of legal education and social psychology.

Yet there is reason to be optimistic. Some of these barriers are now eroding, and new approaches provide potential ways to surmount others.

A. Institutional Barriers Eroding

Institutional inertia, institutional incentives, and barriers to designing and empirically testing interventions may be shifting in favor of reform. There are reasons to think that institutional inertia is eroding, and the impetus for change is mounting: (1) fresh data demonstrating law students' declines in well-being and accumulating research on potential solutions make doing something easier to defend than doing nothing; and (2) the 2014 revisions to the ABA accreditation standards deemphasize Socratic, appellate-doctrine-crunching pedagogy by focusing on formative feedback, experiential learning, cultural competency, and self-evaluation.¹³⁹

Institutional incentives now favor empirical research, including that on legal education. The Association of American Law Schools (AALS) recently established the Section of the Empirical Study of Legal Education and the Legal Profession, which for the past three years has held some of the most widely attended programs at the AALS annual meeting. The Law & Society Association also recently established a Collaborative Research Network on Legal Education and Law, Society & Psychological Science. Foundations such as the AccessLex Center for Legal Education Excellence have chosen to fund a wide variety of empirically validated, scalable efforts to increase access and achievement throughout the legal education pipeline. The National Science Foundation and private entities interested in education and access are also promising funders. Schools have internal funding for similar work.

Empirical research on legal education and well-being of the sort upon which effective interventions might be built has grown more available. Survey studies, such as those summarized in Part I, continue to pile up. Crucial additional data comes from large-scale surveys, the most prominent of which is the annual Law School Survey of Student Engagement, which invites all students at dozens of registered law schools to participate. In 2019, more than 18,000 law students responded to the survey, which includes questions on students' psychosocial experiences, mental health, and perceptions of their law school environment.¹⁴⁰ Our Mindsets In Legal Education (MILE) program annually offers all registrants for the California Bar Exam a separate survey concerning their experiences with such social psychological constructs as stress, anxiety, belonging, connectedness, fixed and growth mindsets, and

139. DeBlasis & Usman, *supra* note 3 (citing Standards 302(d), 303, 314).

140. See Green et al., *supra* note 59.

stereotype threat. We are in the process of scaling and making the program available in additional states this year.¹⁴¹

To facilitate research into thriving and distress among law students, large-scale surveys can expand and sharpen their questions on stress, anxiety, individual and institutional mindsets, belonging, stereotype threat, and other social psychological constructs. Here LSSSE is a particularly promising vehicle. It has broad reach, examines law students' experiences, and fields new modules in response to research findings and demand. In the future, LSSSE may wish to include new modules with validated items measuring psychological friction and law student well-being as this field of empirical inquiry continues to ripen.

B. Opportunities Emerging

With incentives, changed conditions, and the availability of data all potentially favoring reform, there is reason to be optimistic that theoretically sophisticated interventions can be created and experimentally validated. Several studies already achieve varying subsets of these ambitions. Santa Clara Law School created a Wellness Taskforce to foment a long-term culture shift. Taking a see-what-works approach (rather than a theory-driven one) and forgoing empirical testing (at least initially), the task force achieved a series of interventions: a 1L imposter-syndrome survey and related mask-making fair, "stone soup" community-based problem-solving, "hard times" rubber ducks placed around the building, and community-wide celebrations involving student groups.¹⁴² Ayres et al. (2017) describe implementing—but not (yet) rigorously testing—a psychologically informed program teaching law students to mitigate their anxiety through brief instruction in cognitive behavioral insights and techniques.¹⁴³ Curcio et al. (2008) implemented and experimentally tested a program that, while not designed on the basis of psychological theory, reported raising final exam scores in civil procedure albeit not in other courses.¹⁴⁴

141. For additional information about this research, see *Mindsets in Legal Education*, www.mindsetsinlegaleducation.com. We are grateful for funding from the AccessLex Institute, which supported the design and evaluation of this program.

142. Albrecht et al., *supra* note 36. Ann L. Iijima, *The Collaborative Legal Studies Program: A Work in Progress*, 12 KAN. J.L. & PUB. POL'Y 143 (2002), describes another intervention that prioritized implementation above theoretically informed project design and rigorous testing. Here, a collaborative legal-studies program encouraged first-year law students to learn collaboratively, build relationships with one another, and integrate their family and community lives into their law school experience.

143. Ian Ayres et al., *Anxiety Psychoeducation for Law Students: A Pilot Program*, 67 J. LEGAL EDUC. 118 (2017).

144. Andrea A. Curcio et al., *Does Practice Make Perfect - An Empirical Examination of the Impact of Practice Essays on Essay Exam Performance*, 35 FLA. ST. U. L. REV. 271 (2008).

Although still rare, experimentally validated interventions informed by social psychology have produced promising results. In one, Stress Inoculation Training reduced stress, anxiety, and irrationality while raising academic performance among students with the lowest LSAT scores.¹⁴⁵ In another, a mindfulness intervention improved first-year law students' stress levels, well-being, and mindfulness.¹⁴⁶ As already discussed, our MILE program has had similar success with an intervention for students studying for the California Bar Exam.¹⁴⁷

Moreover, researchers have begun harnessing LSSSE's data to evaluate the impact of programs and interventions, using pretest/post-test designs and interrupted time series designs.¹⁴⁸ In the future, LSSSE may wish to help build this field of inquiry and broaden the use of its data by working closely with researchers who are unable to randomly assign law students into conditions (RCTs), but who nonetheless wish to match LSSSE survey results to groups within law schools who receive a particular treatment, thereby allowing program evaluation using a quasi-experimental design.

Finally, interdisciplinary collaboration is key to creating and rigorously testing additional effective interventions. Psychologists are necessary but not sufficient to solving problems of legal education. Their psychological sophistication and methodological rigor make them necessary to the extent that the ills of legal education include psychological problems, that these problems will be responsive to novel psychological treatments, and that such treatments can be rigorously and empirically tested. Nonetheless, psychologists are insufficient. They often lack a deep understanding of the law school environment, which legal academics, sociologists, cultural psychologists, and education researchers can often provide. Drawing together interdisciplinary teams has three potential benefits: (1) These collaborations can build relational trust, a critical component of educational change.¹⁴⁹ (2)

145. Richard Sheehy & John J. Horan, *Effects of Stress Inoculation Training for 1st-Year Law Students*, 11 INT'L J. STRESS MGMT. 41 (2004).

146. Richard C. Reuben & Kennon M. Sheldon, *Can Mindfulness Help Law Students with Stress, Focus, and Well-Being? An Empirical Study of 1Ls at a Midwestern Law School*, 48 SW. L. REV. 241 (2019).

147. Victor D. Quintanilla & Sam Erman, *Productive Mindset Interventions Mitigate Psychological Friction and Improve Well-Being for Bar Exam Takers*, Raising Bar (AccessLex Inst., Wash. D.C.), Winter 2020, at 7, https://www.accesslex.org/sites/default/files/2020-01/Raising%20the%20Bar_Jan%202020_print.pdf.

148. See David I. C. Thomson & Stephen Daniels, *If You Build It, They Will Come: What Students Say About Experiential Learning*, 13 FLA. A & M U. L. REV. 203 (2018) (using LSSSE data to investigate whether law students taking part in Denver law's experiential offerings would be likely to attend Denver law again); Victor D. Quintanilla et al., *Experiential Education and Access-to-Justice within U.S. Law Schools: Designing and Evaluating an Access-to-Justice-Service Learning Program within the First-Year Curriculum*, 7 IND. J.L. & SOC. EQU. 88 (2019) (examining impact of access-to-justice service learning program on student experience using LSSSE data).

149. ANTHONY S. BRYK & BARBARA SCHNEIDER, TRUST IN SCHOOLS: A CORE RESOURCE FOR IMPROVEMENT (2002); ANTHONY S. BRYK ET AL., ORGANIZING SCHOOLS FOR IMPROVEMENT: LESSONS FROM CHICAGO (2010).

They increase the likelihood that materials and procedures will be appropriate in local contexts. (3) They bring researchers with the skills to build scalable psychological interventions together with collaborators who have the deep ties to law schools to facilitate mass administration.

The field is now on the verge of multiplying its successes. A growing body of work demonstrates that diverse interventions, each psychologically attuned to its context, produce large improvements across a wide variety of real-world settings. Psychological processes thus show great promise as powerful means of promoting law students' well-being and reducing their distress. This makes sense. Complex and multiply caused as the ills of legal education are, they are at base harms to people who experience and engage the world through psychological processes. These psychological processes are shaped by and, in turn themselves shape, interactions within law school environments and institutional structures. Interdisciplinary teams with strengths in psychology and legal education are well positioned to capitalize. They have the knowledge and expertise to identify and intervene upon the psychological processes by which law school-law student interactions produce striving and distress. Successes will produce distinctly psychological theories of legal education and its improvement. And with the right partners, opportunities will follow to "scale up," thereby contributing to large-scale social change.

We close with the aspiration with which we began: While solutions to improve law student well-being have been proposed, few well-tailored interventions have been designed, empirically tested, and adopted. As a result, the problems remain. This situation highlights the need for additional empirical research of effectiveness, without which institutions may be reluctant to adopt solutions. It also provides a promising path forward for those dedicated to promoting law student learning, engagement, and well-being.