# Student Learning and Incentives:
# A Study of the MPRE

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## Abstract

To become licensed attorneys, law students must past the bar exam in their chosen jurisdiction. This exam includes a Multistate Professional Responsibility Exam (MPRE), which tests their understanding of legal ethics. This article examines students' performance on the MPRE, looking at the universe of test-takers for the period 2014-2021. Specifically, this article explores two aspects of student performance: 1) how test-takers fare when select states raise their minimum passing score; and 2) the extent to which test-takers satisfice or optimize their performance. We find that raising minimum passing scores has no appreciable effect on test-takers' MPRE scores but lowers their pass rates. We also observe greater heterogeneity by law school in test-takers' performance on the MPRE compared to their entering academic credentials.

# I. Introduction

How well do lawyers understand their ethical obligations as lawyers? In the United States, this question is difficult to answer. In one sense, the legal profession signals a strong commitment to the subject: the American Bar Association requires all U.S. law students to take a stand-alone class on professional responsibility while in law school and also pass a national exam on the subject as a condition of receiving their license to practice. At the same time, professional responsibility, as both an academic discipline and area of regulation, has been historically underemphasized and underfunded.

Scholars have written extensively on the challenges lawyers face meeting their professional ethical obligations. Some criticize how law schools teach professional responsibility (Simon 1991) and call for greater prioritization of the subject (Pearce 2002, 1998). Some criticize the decentralized approach to regulating attorneys, which diffuses responsibility and enforcement (Zacharias 1994). Others find fault with the rules themselves, which practicing lawyers find vague and therefore either ignore (Schiltz 2005) or are silently complicit in their violations (Abel 1981). Others contend that these ethical rules have failed to evolve as the profession has (Chambliss & Wilkins 2003; Hazard 1991).

This article examines law students' performance on the Multistate Professional Responsibility Exam (MPRE). This exam tests their understanding of professional responsibility, and students must achieve a minimum passing score to be allowed to practice. At the same time, this minimum passing score is not particularly onerous, and stories abound amongst law students as to the minimal preparation needed to pass the MPRE. Nevertheless, roughly 20 percent of first-time test-takers fail the MPRE. Coupled with recent media coverage on the alleged ethical transgressions of lawyers (Fuerer et al 2023) and judges (Becker and Tate 2023), the legal profession's commitment to ethical conduct (or lack thereof) remains a salient topic.

In this article we draw upon individual-level data, provided by the National Conference of Bar Examiners (NCBEX), on the universe of law students and graduates who took the MPRE for the period 2014 through 2021. Specifically, we explore two aspects of student performance related to the MPRE. First, we examine the effect of select states – Kentucky and Tennessee – recently raising the minimum passing score on the MPRE on student performance. Second, as the MPRE – and the bar exam in general – is a pass-fail exam with arguably modest minimum passing scores, we investigate the extent to which students seek to satisfice or optimize their performance on the test.

We find that states raising their minimum passing score on the MPRE had a negligible effect on student scores but corresponded with a significantly lower pass rate of the exam. We also find that viewed collectively, law schools experienced greater heterogeneity in their students' performance on the MPRE relative to their entering academic credentials (LSAT and undergraduate GPA).

The article proceeds as follows. Part II provides a brief background on the instruction of legal ethics at U.S. law schools, focusing on the MPRE. Part III provides the empirical strategy of the article and describes the data from which we observe law students' understanding of professional responsibility. We report our findings in Part IV. Part V discusses implications and next steps.

## II. Relevant Background of the MPRE

The National Conference of Bar Examiners (NCBEX) is a non-profit corporation in the United States that administers nationwide exams used by every state (save Wisconsin) to determine bar membership for aspiring lawyers. The rationale for these tests was create a uniform performance measure that could help state bar examiners reduce their grading burden (The Bar Examiner 2021).

Specifically, the NCBEX administers two exams. The first is the Multistate Bar Exam (MBE), a six-hour, exam comprised of 200 multiple choice question testing based in large part on first year curriculum at most law schools.[1] The second is the Multistate Professional Responsibility Exam (MPRE), a two-hour exam containing 50 multiple choice questions, "measur[ing] the examinee's knowledge and understanding of established standards related to a lawyer's professional conduct." (NCBEX, Information Booklet 2003). Given our interest in legal ethics, our analysis focuses on the MPRE. The MPRE launched in 1980 in the aftermath of Watergate (Rhode 1992), viewed as a means to bolster the public's confidence in the legal profession (Ayer 1995). Scores on the MPRE are scaled, which range from 50 to 150. The test has been described as "virtually a national admission test for lawyers." (Levin 1998), which drew criticism for masking differences among states' professional responsibility statutes (Logan 1999).

While the NCBEX is responsible for administering the MPRE, each state determines the minimum passing score for lawyers within its jurisdiction. Figure 1 displays the required scores for individual states for 2021. On one end are California and Utah, who set their passing scores at 86. Nearly all remaining states set their scores at either 85, 80, or 75. Twenty-one states set their passing scores at 85, including Massachusetts, New York, and Texas. Eighteen other states – including Florida, Illinois, and North Carolina – require a passing score of 80. Seven jurisdictions – including Pennsylvania, Georgia, and the District of Columbia – require a passing score of 75. Wisconsin is the one state that does not require the MPRE of its licensed lawyers.

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[1] The UBE tests the following seven subject areas: civil procedure, constitutional law, contracts, criminal law and procedure, evidence, real property, and torts.

**Figure 1**
**MPRE Passing Score**
**United States (2021)**
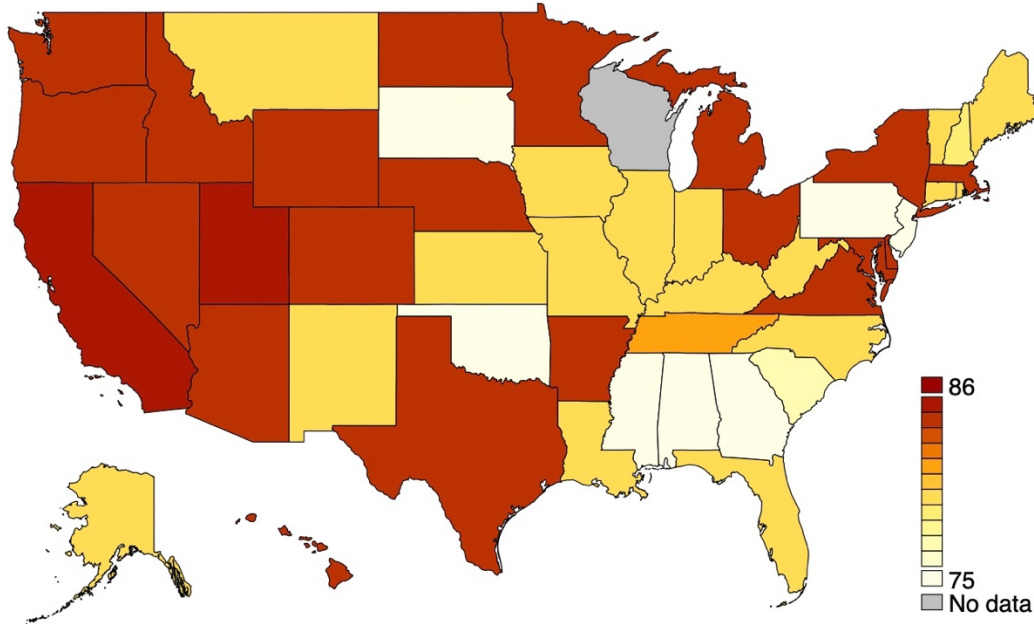


Concurrent with states' testing of law graduates' understanding of professional responsibility, law schools offer instruction in professional responsibility. The American Bar Association has long required its member law schools to offer instruction in professional responsibility (Standards 302 and 303) but afforded considerable discretion as to the exact mode of instruction: e.g., instructors, credit hours, mode of instruction. Starting with the law students graduating in 2019, however, the ABA amended their rules to require all students to take a stand-along course of at least two credits on professional responsibility. The practical effect of this rule change was modest, as nearly all law schools already imposed this requirement.[2]

## III. Research Design and Data

*Research Design:* We observe individual-level performance on the MPRE for the period 2014 to 2021. Below we describe our research design for our research questions.

*Effect of Raising Minimum Passing Score on the MPRE*: As noted above, the MPRE is a nationally administered exam for which each state sets the required passing score. These scores have remained largely constant over time. Recently, however, two states have changed their passing scores: Kentucky and Tennessee. Previously requiring a minimum passing score 75 on the MPRE exam, Kentucky raised it to 80, effective Fall of 2017; Tennessee raised their

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[2] Based on our survey of Associate Deans of ABA law schools, Yale and Stanford law schools were the only law schools that did *not* impose Professional Responsibility as a graduation requirement.

minimum passing score, previously at 75, to 82, effective Summer of 2018. Figure 2 shows the timeline of the two states' changes.

**Figure 2**
**Periods of Interest**
**Recent Changes in MPRE Passing Score**
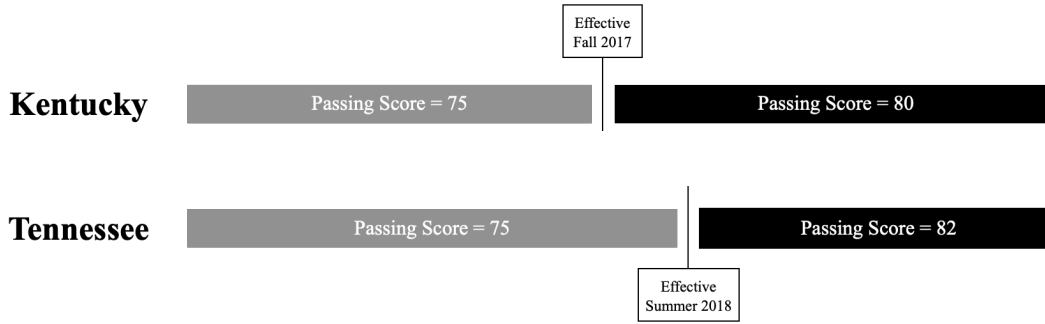


We assume that these policy changes, determined by these states' respective bar associations, are exogenous to which state law graduates decide to sit for their state bar (and ultimately practice). Accordingly, we posit that the change in these states' minimum passing score did not generate a selection effect of test-takers within and outside of these states.

To test the effect of these changes on student performance, we use both difference-in-differences (DID) (e.g., Angrist and Krueger 1999; Card 1990; Card and Krueger 1994) as well as a synthetic difference-in-differences estimation (SDID) (Arkhangelsky et al 2021). Both approaches measure the effect of a policy change when affects certain groups and not others.

For both approaches we look at two outcome measures of the MPRE test: one, the scaled MPRE score of each test-taker and two, whether their score met the minimum passing score of their jurisdiction. Although one would expect these outcome measures to correlate with one another – i.e., test-takers who receive a higher score on the MPRE are more likely to pass within their respective jurisdiction –they may diverge, given the differences in state standards.

The central assumption of the DID approach is that, in the absence of the policy change, the earlier observed trends would have remained the same for both the treatment and control group. This assumption is strong, given that in quasi-experimental research it is impossible to prove the counterfactual of what would have happened absent the policy change. In this study, we check that the treatment and control groups are similar along other dimensions, and control for other observables.

We chose our control states for our DID based on geographic proximity to the treatment states as well as for their MPRE passing scores. Indiana, Ohio, and West Virginia serve as control states for Kentucky. These states are contiguous to one another and to Kentucky. They also all have a minimum passing score of 75, identical to Kentucky's minimum passing score prior to its increase to 80. For Tennessee, we chose Alabama, Georgia, and North Carolina. Alabama and Georgia have a minimum passing score of 75 – identical to Alabama's previous minimum passing score requirement; test-takers in North Carolina must score at least 80.

For the raw DID, we calculate the amount by which the MPRE outcome changes before and after a change in treatment states of Kentucky or Tennessee, minus the amount by which the MPRE outcome changes in the control states. If $O_g^p$ is the outcome for test-takers in group $g$ (Kentucky or Tennessee; neighboring control states) and period $p$ (pre- and post-policy change), then the raw difference-in-difference estimator is given by $(O_{treatment}^{post} - O_{treatment}^{pre}) - (O_{control}^{post} - O_{control}^{pre})$. Because Kentucky and Tennessee changed their minimum MPRE passing scores in different years, we calculate the estimator separately for each state, and exclude from the control group.

For the regression-adjusted DID, we examine the same two outcome measures, but control for individual, educational, and state-level factors.

$$O_{ist} = \alpha + \gamma T + \theta Period\Omega + \Phi(T)(Period\Omega) + \beta X_{ist} + \varepsilon$$

Where $O_{ist}$ is the test-taker's outcome. $T$ is an indicator variable for whether the test-taker is in the treatment state (Kentucky; Tennessee). $Period\Omega$ indicates the period following an increase in the minimum MPRE passing score in the treatment state. The main variable of interest - $(T)(Period\Omega)$ – is interacts whether the test-taker took the MPRE in the treatment state after it raised its minimum MPRE passing score. $X_{ist}$ is a series of controls for the test-taker's gender, ethnicity, and where they attended law school. The coefficient on this interaction term is the regression-adjusted difference-in-difference estimator.

SDID combines the synthetic control method with DID. This approach constructs the control group through a synthetic control method, i.e., creating a control group is similar to the treatment group in observable characteristics. It estimates the treatment effect through the traditional DID, i.e., comparing the change in outcomes between the treated unit and the synthetic control group before and after introducing the treatment. SDID allows for a more robust estimation of the treatment effect by accounting for pre-existing differences between the treatment and control groups.

Drawing from Arkhangelsky et al 2021, the basic model takes the following form:

$$(\hat{\tau}^{sdid}, \hat{\mu}\hat{\alpha}\hat{\beta}) = \underset{\tau, \mu, \alpha, \beta}{\arg\min} \left\{ \sum_{i=1}^{N} \sum_{t=1}^{T} (Y_{it} - \mu - \alpha_i - \beta_t - W_{it}\tau)^2 \hat{\omega}_i^{sdid} \hat{\lambda}_t^{sdid} \right\}$$

reflecting a balanced panel with *N* units and *T* time periods, where $Y_{it}$ captures the outcome for unit *i* in period *t* and $W_{it} \in \{0,1\}$. The control units never receive the treatment, while the treatment units are exposed after time $T_{pre}$. Consistent with synthetic control methods, SDID finds weights $\hat{\omega}^{sdid}$ that align the treatment and control groups in the pre-treatment period. The time weights $\hat{\lambda}_t^{sdid}$ that balance the pre-treatment period with the post-treatment period. These weights localize the effect of the two-way fixed effect regression by placing greater weight on units that on average are similar in the pre-treatment period to the treatment group (before the treatment), as well as on periods that are on average similar to the post-treatment period. The intuition underlying the advantage of the SDID is that, by using only similar units and periods increases the robustness of the estimator.

*The MPRE's Effect on Test-Takers' Effort*: Because the MPRE (and the Uniform Bar Exam and all other components of the bar exam) is pass-fail, test-taker outcomes are binary. Test-takers do not receive an acknowledgement for exemplary performance on the MPRE, nor any consolation for nearly passing. It is worth understanding, however, the connection between minimum passing scores and actual performance on the test. A score of 85 corresponds to answering 60 percent of the questions correctly. Answering 58 percent of the questions correctly generates a score of 80, and 56 percent, a score of 75 (Case 2011). Moreover, the test does not penalize for incorrect responses (in contrast to other standardized tests, e.g., SATs).

These modest cut-offs invite the question: do students seek to satisfice or optimize their effort? Rational test-takers should satisfice: i.e., invest enough effort to receive a passing score, but not to receive a superlative score. At the same time, rational test-takers are likely risk-averse. Failing the MPRE imposes a non-trivial cost: students retaking the test must invest additional time and resources, often while preparing for other parts of the bar exam or finding post-graduation employment. Accordingly, test-takers may prefer to invest effort to *secure* a passing score, even if it means scoring above the minimum passing score.

Under these assumptions of rationality, we might expect to see a flatter distribution across law schools based on students' performance on the MPRE. In other words, the incentives are such that test-takers may engage in satisficing (passing the test), but with a sufficient margin to avoid failing the test.

*Data*: The primary source of our data comes from NCBEX, which provided individual-level information of every test-taker of the MPRE. We examine the years 2014 to 2021, which allows us to observe a symmetric period before and after the changes in MPRE scores in Kentucky and Tennessee, respectively. Our unit of analysis is test-taker-test-year. The NEBEX provide individual-level information for each test-taker: gender (self-reported), ethnicity (self-reported), the law school where they currently or have attended, the home state of residence, the state where MPRE scores will be sent to the respective bar association, and educational attainment at the time they took the MPRE. NCBEX also provides information relating to the timing of MPRE exam: what time of the year (winter, summer, fall) each test-taker took the MPRE. Because passing scores vary on jurisdiction, we calculate passage based on the score required at the time for the state that test-takers registered for when signing up for the MPRE.

One note limitation of the data: to protect the anonymity of its test-takers, NCBEX does not provide unique identifiers for each test-taker. The rationale: it is possible to determine a test-taker's identify in jurisdictions or law schools with relatively few test-takers of given gender and/or ethnicity. Thus, we do not observe how those who are re-taking the MPRE performed on earlier iterations. NCBEX did, however, report for each test-taker how many times – if at all – he or she had taken the MPRE previously.

Figure 3 shows the MPRE scores and pass rates nationally for our period of interest. As stated above, these outcome measures are correlated, and tend to move in tandem. These measures also vary from one test period to the next, which can be explained in part by selection. On average, fall test-takers perform two points higher than their winter or summer counterparts, explained in large part by differences in the percentage repeat test-takers. In the fall, 76% of those registered for the MPRE were taking the test for the first time, compared with 72% in the summer and 71% in the winter. It also bears repeating that test-takers with a given MPRE score

may pass in their jurisdiction, while another test-takers with the same score may fail if their jurisdiction has a higher required minimum score.

**Figure 3**
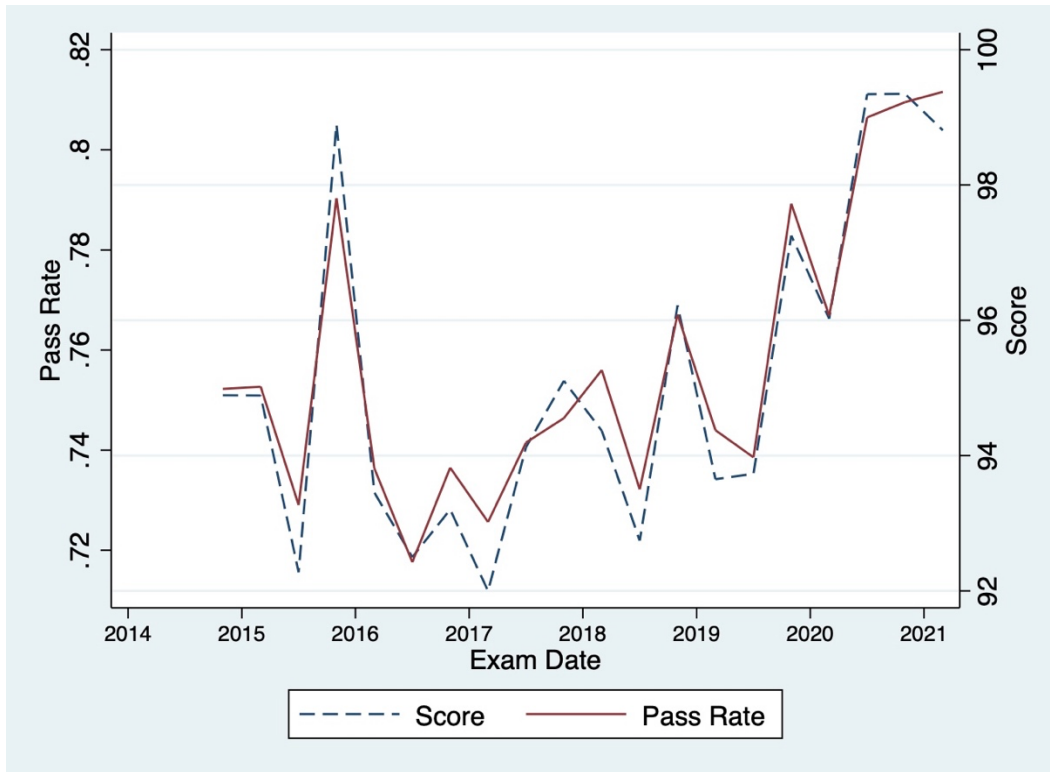**MPRE Raw Scores and Pass/Fail Rate**
**(2014-2021)**



Table 1 provides the summary statistics for test-takers' MPRE performance for the period 2015-2021. During this time, the NCBEX administered nearly 350,000 tests. Slightly more test-takers identified as female (45.5%) as male (42.4%), with the remaining electing to not report their gender. Nearly a majority (49.6%) same number of test-takers identified as being white, and roughly a quarter identified as being Asian (8.4%), Black (8.2%), or Hispanic (7.5%). The remaining quarter did not report their ethnicity.

**Table 1**
**Summary Statistics**
**MPRE Examinees (2014-2021)**

| | | | | |
|---|---|---|---|---|
| **Observations** | 344,264 | **When Took MPRE** | | |
| | | Winter | 36.6% | |
| **Gender Identification** | | Summer | 25.9% | |
| Female | 45.5% | Fall | 37.4% | |
| Male | 42.4% | | | |
| Unreported | 12.1% | **Educational Attainment at time of MPRE** | | |
| | | 1L | 1.5% | |
| **Ethnic Identification** | | 2L | 22.8% | |
| White | 49.6% | 3L | 46.4% | |
| Asian | 8.4% | Post-Graduation | 9.0% | |
| Black | 8.2% | As Licensed Attorney | 6.0% | |
| Hispanic | 7.5% | Other | 14.3% | |
| Other/NA | 26.4% | | | |
| | | **MPRE Outcome** | | |
| **Geography** | | Average Score | 95.35 | |
| Home residence same | 71.0% | SD | 17.67 | |
| state where taking bar | | Received Passing Score | 75.4% | |

Nearly half (46.4%) of test-takers took the MPRE during their final year of law school (3L), and approximately another quarter (22.8%) during the second year of law school (2L). A small number (1.5%) reported taking the test during their first year (1L) or after graduation (15%). A sizeable number did not report their educational attainment. Test-takers received an average score of 95, and three-quarters of test-takers achieved the minimum passing score within their jurisdiction.

## IV. Results

*The Effect of Raising Minimum Passing Scores on the MPRE*: In this section we examine the effect of higher minimum passing scores on test-takers' performance by exploiting recent changes in required MPRE in Kentucky and Tennessee. For each of the states, we compare test outcomes before and after the change in minimum required score and compare them with neighboring states. We examine nine test (equivalent to three years) in the pre- and post- period.

Figure 4 illustrates outcomes for Kentucky test-takers compared with its neighboring states of Indiana, Ohio, and West Virginia. The vertical line in each graph represents when Kentucky raised its minimum passing score from 75 to 80 points. The left panel shows the scores for Kentucky and the neighboring states. Test-takers in the neighboring states (solid line) score higher, on average, then test-takers in Kentucky (dotted line), both before and after Kentucky raised its minimum score.

The right panel shows how test-takers scores map onto passage rates. Prior to the change in minimum sore, Kentucky's pass rate was above those of its neighboring states. This ordering stands in the differences in scores, reflecting that the neighboring states all required a passing score of 80, whereas Kentucky required a 75. When Kentucky raised its minimum passing score

to those of its neighboring states, their the difference in pass rate with the control strates grew smaller, and for some test dates the neighboring states' pass rate exceeded those of Kentucky.

**Figure 4**
**Raw Differences-in-Difference – MPRE Performance**
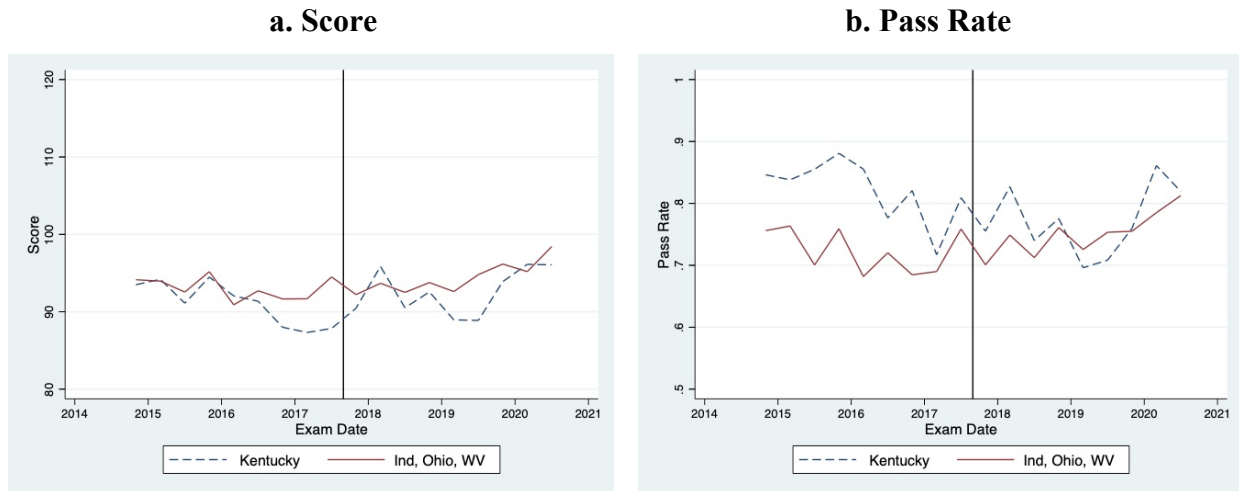**Kentucky vs. Regional Control States**

**a. Score**　　　　　　　　　　**b. Pass Rate**



Figure 5 shows that, prior to Tennessee's change in minimum MPRE passing score, its test-takers consistently averaged higher scores than its neighboring states. Following the change, the differences between the two groups converged. Scores in Tennessee experienced considerable fluctuation, whereas scores in the neighboring states followed a steadier upward trajectory. The effect of the increased required passing score on pass rates is more dramatic. Prior to the change, the pass rate in Tennessee was consistent and considerably higher than the control states, exceeding ten percentage points for most test session dates. Following the change, the Tennessee pass rate fell below those of the neighboring states for six of the nine test session dates.

**Figure 5**
**Raw Differences-in-Difference – MPRE Performance**
**Tennessee vs. Regional Control States**

**a. Score**                                    **b. Pass Rate**
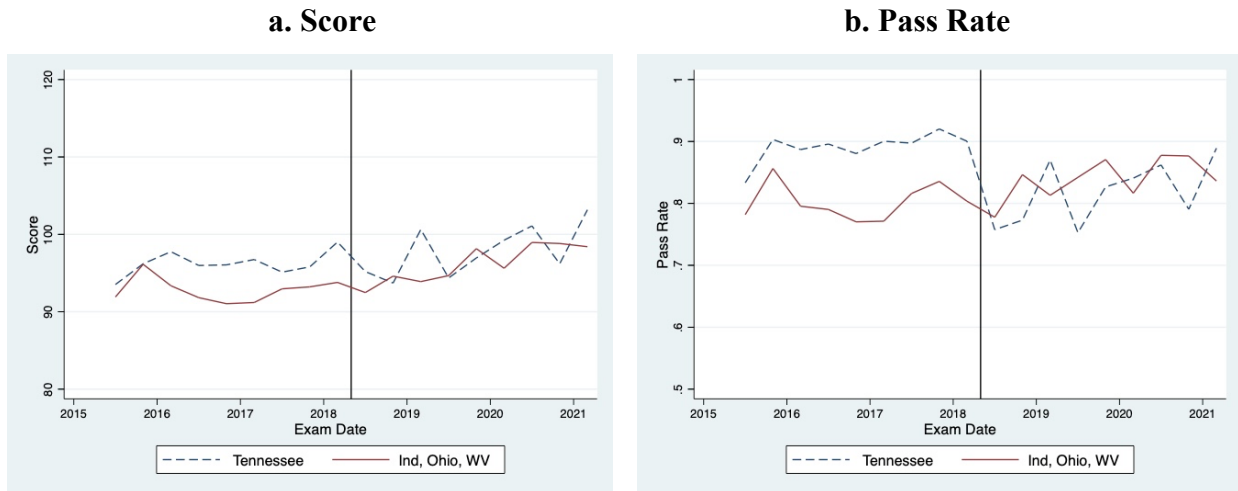


The effect of increasing the minimum passing scores in Kentucky and Tennessee comport with some of our intuitions but run counter to others. We expected that increasing the minimum passing scores would result in test-takers in these states achieving higher scaled scores on average, but with a higher percentage of them failing to meet the minimum cutoff. We observe clearer evidence on the latter than the former. In each treatment state, test scores fluctuate considerably after the change in passing score, with some test dates producing lower average scores than before the rule change. Notably, scores and pass rates appear more stable in the control states than Kentucky or Tennessee in the aftermath of the rule changes. This stability can be explained in part because the control states include many more test-takers, thereby smoothing out the averages.

*Regression-Adjusted Difference-in-Difference*: The raw differences, while informative in observing trends over time, are limited because they do not account for institutional, state, and individual characteristics among the test-takers. To account for these factors, we run regression-adjusted difference-in-differences. For each of the models, we examine separately the effect of increasing the minimum required score on test-takers scaled score and whether they passed the MPRE within their state. For each regression, we control for the test-takers gender, ethnicity, and law school rank, while also clustering for law school attended, the test-taker's resident state, and the state where they are reporting the MPRE.

As a robustness check regarding the control group, we run two sets of specifications. The first are the regional control states discussed above for each of the treatment states. For the second specification, our construct a national control group, comprised of all other states whose minimum passing scores remained constant during the period of interest (i.e., this excludes Kentucky and Tennessee).

We also account for the potential effect of COVID on MPRE performance. The effect of this pandemic took effect in the United States in the Winter of 2020, resulting in law schools shifting from in-person to remote instruction. NCBEX reported 25% fewer test-takers of the MPRE in

2020 compared to 2019. This drop suggests likely selection issues for 2020 test-takers. For this reason, examine two time periods. The first is the nine session of the MPRE, pre- and post-change in either Kentucky or Tennessee. The second is a shorter period, consisting of a symmetric period before and after the rule change in the treatment state, but ending in 2019. For Kentucky, this shortened period comprises of seven periods pre- and post-. For Tennessee, the truncated pre- and post-period is five months.

As shown in Table 2, we find that in the aftermath of Kentucky raising its minimum MPRE score from 75 to 80, its test-takers relative performance compared to test-takers whose states held constant their minimum MPRE score held mostly flat. This held true across all four of our specifications. Kentucky test-takers score lower, on average, than test-takers from other states. Test scores, following Kentucky's rule change in 2017, resulting in higher MPRE scores. But this improvement post-rule change occurred outside Kentucky. Examining nine test sessions, pre- and post-, the diff-in-diff estimator is modestly negative but statistically non-significant. When we limit our examination prior to COVID, the coefficients are positive, but again statistically not significant.

**Table 2**
**Regression-Adjusted Difference-in-Difference: MPRE Score**
**Kentucky vs. Control States**

| | Score | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| | 9 Tests Pre-Post, National Comparison | 9 Tests Pre-Post, Regional Comparison | 7 Tests Pre-Post, National Comparison | 7 Tests Pre-Post, Regional Comparison |
| **Kentucky** | -3.6585*** | -2.4478* | -4.3859*** | -3.0119*** |
| | (1.016) | (1.032) | (0.822) | (0.893) |
| **Post-MPRE Change (KY)** | 1.2546*** | 1.1078** | 1.0037*** | 0.7512 |
| | (0.120) | (0.347) | (0.126) | (0.443) |
| **KY x Post-MPRE Change (KY)** | -0.3825 | -0.2658 | 0.2834 | 0.4408 |
| | (0.830) | (0.896) | (0.833) | (0.944) |
| | | | | |
| **N** | 295888 | 15411 | 231148 | 12046 |

Note: Outcome variable is the test-taker's score on the MPRE. Regional comparison states comprised of Indiana, Ohio, and West Virginia. Specifications include controls of test-taker demographics (gender, ethnicity, law school rank). Specifications are clustered at test-takers' law school attended, state of residence, and state where reporting MPRE score. Asterisks reflect statistical signicance where *= $p<0.05$, **=$p< 0.01$, and ***=$p<0.001$ levels.

Table 3 shows that Kentucky test-takers were less likely to pass the MPRE after the minimum passing score increased from 75 to 80, relative to test-takers from other states. The point estimates across the different specifications tell a similar story. Kentucky enjoyed a higher pass rate than other states. Pass rates increased in the aftermath of the Kentucky rule change. But most of this improvement occurred in the control group states. Kentucky test-takers experienced a relative drop of 9% to 10% in pass rates, all of which were statistically significant at the p<0.001 level. These differences held, even when comparing Kentucky to all other states, and excluding examination periods during COVID.

**Table 3**
**Regression-Adjusted Difference-in-Difference: MPRE Pass Rate**
**Kentucky vs. Control States**

| | Pass Rate | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| | 9 Tests Pre-Post, National Comparison | 9 Tests Pre-Post, Regional Comparison | 7 Tests Pre-Post, National Comparison | 7 Tests Pre-Post, Regional Comparison |
| **Kentucky** | 0.0677** | 0.0989*** | 0.0659*** | 0.1072*** |
| | (0.022) | (0.023) | (0.018) | (0.019) |
| **Post-MPRE Change (KY)** | 0.0201*** | 0.0221** | 0.0178*** | 0.0199* |
| | (0.003) | (0.008) | (0.003) | (0.010) |
| **KY x Post-MPRE Change (KY)** | -0.0897*** | -0.0953*** | -0.0916*** | -0.1004*** |
| | (0.024) | (0.027) | (0.025) | (0.028) |
| | | | | |
| **N** | 295888 | 15411 | 231148 | 12046 |

Note: Outcome variable is whether the test-taker passed the MPRE. Coefficients are probit specification reporting marginal effects at the mean. Specification is a probit, reporting marginal effects at the mean.. Regional comparison states comprised of Indiana, Ohio, and West Virginia. Specifications include controls of test-taker demographics (gender, ethnicity, law school rank). Specifications are clustered at test-takers' law school attended, state of residence, and state where reporting MPRE score. Asterisks reflect statistical signicance where *= $p<0.05$, **=$p< 0.01$, and ***=$p<0.001$ levels.

Tennessee's experience, by comparison, is more muted. Table 4 shows that Tennessee test-takers averaged four to five points higher on the MPRE than test-takers in the control group, even though its minimum passing score of 75 was the same as two (Alabama, Georgia) of the regional control states, and lower than three-quarters of the national control group. Following the Tennessee rule change, average scores went up for the full set of states. Test-takers in Tennessee following the rule change reported a relative increase in score, but in three of the four specifications, this increase was statistically not significant. These findings on the difference-in-difference estimator is perhaps unsurprising, given Tennessee test-takers' relatively strong performance even prior to the rule change.

**Table 4**
**Regression-Adjusted Difference-in-Difference: MPRE Score**
**Tennessee vs. Control States**

| | Score | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| | 9 Tests Pre-Post, National Comparison | 9 Tests Pre-Post, Regional Comparison | 5 Tests Pre-Post, National Comparison | 5 Tests Pre-Post, Regional Comparison |
| **Tennessee** | 4.5828 | 4.2110* | 5.0263 | 4.8630** |
| | (3.062) | (1.778) | (3.064) | (1.838) |
| **Post-MPRE Change (TN)** | 2.5051*** | 3.4191*** | 1.2718*** | 2.7151*** |
| | (0.118) | (0.497) | (0.118) | (0.407) |
| **TN x Post-MPRE Change (TN)** | 2.5388 | 0.8717 | 1.6119** | -0.2444 |
| | (1.375) | (1.038) | (0.582) | (0.740) |
| **N** | 290888 | 20800 | 167622 | 11653 |

Note: Outcome variable is the test-taker's score on the MPRE. Regional comparison states comprised of Alabama, Georgie, and North Carolina. Specifications include controls of test-taker demographics (gender, ethnicity, law school rank). Specifications are clustered at test-takers' law school attended, state of residence, and state where reporting MPRE score. Asterisks reflect statistical signicance where *= $p<0.05$, **=$p< 0.01$, and ***=$p<0.001$ levels.

The effect of Tennessee's rule change on pass rates on the MPRE are more pronounced. Consistent with figures (Tables 2 and 3) showing outcomes over time, Tennessee test-takers are more likely to pass the MPRE than their counterparts in other states. The advantage in pass rate is greater for the national sample, and smaller for the regional sample. The greater difference for the national sample is likely attributable to nearly half of the states requiring higher minimum passing scores than Tennessee, even after it increased its minimum to 80. Pass rates increased following Tennessee's rule change, but test-takers' in Tennessee experienced a relative decline, ranging from 4% to 6%. These drops, however, was either non statistically significant or weakly significant for three of the four specifications, although statistically significant at the $p<0.001$ level for the regional comparison excluding the COVID-19 time period.

**Table 5**
**Regression-Adjusted Difference-in-Difference: MPRE Pass Rate**
**Tennessee vs. Control States**

| | Pass Rate | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| | 9 Tests Pre-Post, National Comparison | 9 Tests Pre-Post, Regional Comparison | 5 Tests Pre-Post, National Comparison | 5 Tests Pre-Post, Regional Comparison |
| **Tennessee** | 0.1964*** | 0.0884** | 0.2036** | 0.0913** |
| | (0.057) | (0.028) | (0.065) | (0.034) |
| **Post-MPRE Change (TN)** | 0.0339*** | 0.0350*** | 0.0180*** | 0.0356*** |
| | (0.003) | (0.007) | (0.003) | (0.006) |
| **TN x Post-MPRE Change (TN)** | -0.0389 | -0.0460* | -0.0438* | -0.0598*** |
| | (0.028) | (0.021) | (0.019) | (0.016) |
| | | | | |
| **N** | 290888 | 20800 | 167622 | 11653 |

Note: Outcome variable is whether the test-taker passed the MPRE. Coefficients are probit specification reporting marginal effects at the mean. Specification is a probit, reporting marginal effects at the mean.. Regional comparison states comprised of Alabama, Georgia, and North Carolina.. Specifications include controls of test-taker demographics (gender, ethnicity, law school rank). Specifications are clustered at test-takers' law school attended, state of residence, and state where reporting MPRE score. Asterisks reflect statistical signicance where *= $p<0.05$, **=$p< 0.01$, and ***=$p<0.001$ levels.

Taken together, the regression-adjusted difference-in-difference reveal that, by raising their minimum passing score on the MPRE, Kentucky and Tennessee made it more difficult for test-takers within their jurisdiction to pass. The impact of the rule change was stronger in Kentucky than in Tennessee, in large part because Kentucky's test scores on average were lower that of Tennessee's. A greater percentage of test-takers in Kentucky fell below the cut-off for passing than in Tennessee. In latter periods following their respective rule changes, performance – scores and pass rates – in these treatment states improved, suggesting that eventually, pass rates may return to what they were prior to the rule changes.

Analyzing the effect of the changes in Kentucky using synthetic difference-in-differences (SDID), shown in Table 6, tells a similar story. After Kentucky raised its minimum passing scores, test-takers in the state scores remained the same but their pass rates were 5.3 percentage points lower, a stastistically significant ($p<0.05$) drop.

**Table 6**
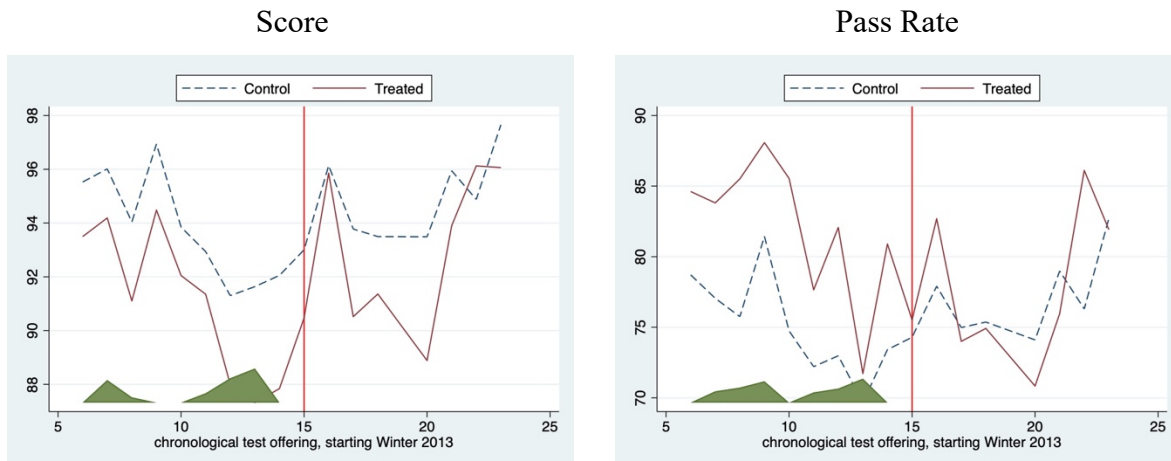**SDID: MPRE Score and Pass Rate**
**Kentucky vs Control States**

| Score on MPRE | ATT | SE | t | P>\|t\| | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| **KY x Post-MPRE Change (KY)** | 1.227 | 1.33 | 0.92 | 0.356 | -1.379 | 3.833 |

| Pass-Fail on MPRE | ATT | SE | t | P>\|t\| | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| **KY x Post-MPRE Change (KY)** | -5.312 | 2.519 | -2.11 | 0.035 | -10.249 | -0.376 |

The graphical comparison of SDID, shown in Figure 6, shows the variation over time, comparable to the DID representation in Figure 4, confirming the greater impact on Kentucky test-takers' pass rates than scores on the MPRE.

**Figure 6**
**SDID: MPRE Score and Pass Rate**
**Kentucky vs Control States**

Score                                          Pass Rate



The SDID estimate in Tennessee is similar to its DID estimate, where the increased minimum passage score had a negligible effect on test scores, but led to a large and statistically significant 9.1 percent drop in pass rates on the test.

**Table 7**
**SDID: MPRE Score and Pass Rate**
**Tennessee vs Control States**

| Score on MPRE | ATT | SE | t | P>\|t\| | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| **TN x Post-MPRE Change (TN)** | 0.809 | 2.149 | -0.38 | 0.707 | -5.0203 | 3.403 |

| Pass-Fail on MPRE | ATT | SE | t | P>\|t\| | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| **TN x Post-MPRE Change (TN)** | -9.103 | 3.612 | -2.52 | 0.012 | -16.183 | -2.024 |

The graphical comparison of SDID, shown in Figure 7, shows the variation over time, comparable to the DID representation in Figure 5.

**Figure 7**
**SDID: MPRE Score and Pass Rate**
**Tennessee vs Control States**
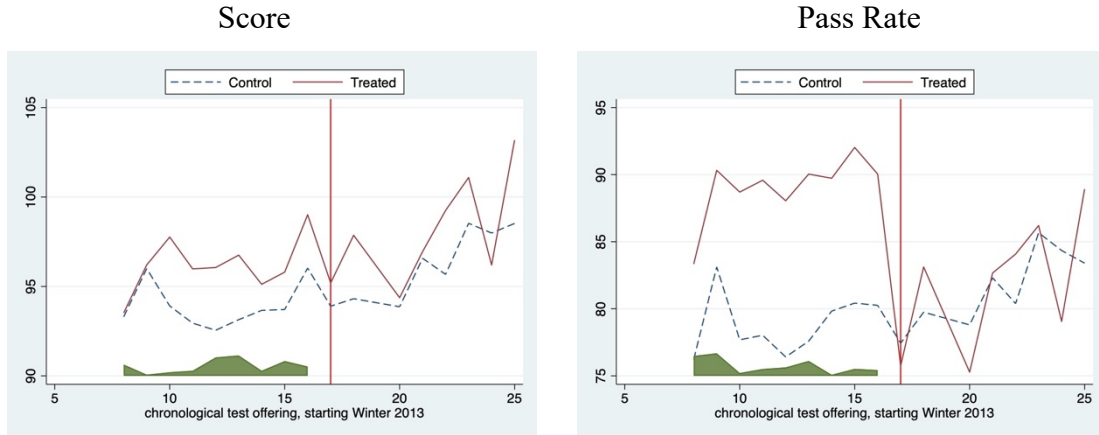


*The MPRE's Effect on Test-Takers' Effort*: In Part III we hypothesized that the structure of the MPRE – pass-fail evaluation with arguably low thresholds for passing – would incentivize test-takers to satisfice rather than optimize their performance on the test. In other words, test-takers would be motivated to pass rather than excel. While it is impossible to directly test this hypothesis, we examine more closely the distribution of test-takers' performance on the MPRE.

Figure 8 reports the probability distribution function (PDF) of test-takers by their raw scores as well as score relative to their respective passing cutoffs in their jurisdiction. Both measures follow a normal distribution. Test-takers on average received a score of 95, well above the cut-off in even the most competitive jurisdictions. On average, they scored 13 points above the cut-off in their chosen jurisdiction.

**Figure 8**
**Distribution of MPRE Raw and Relative Scores**
**All Test-Takers**
**2014-2021**

a) Score
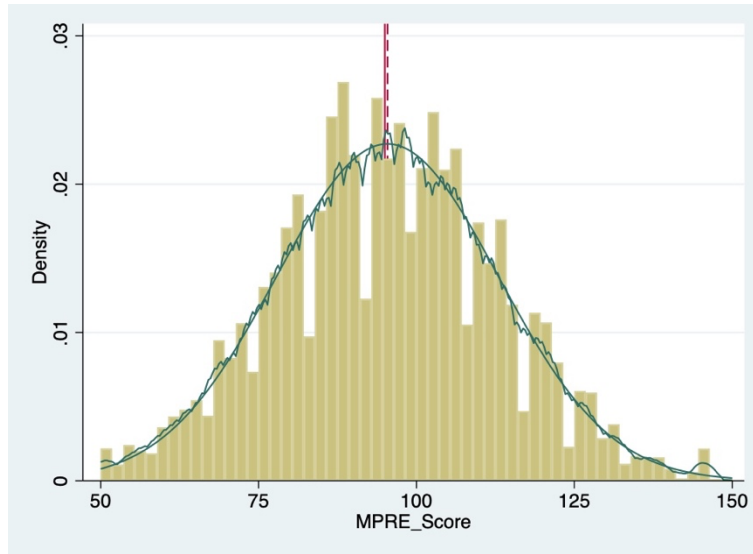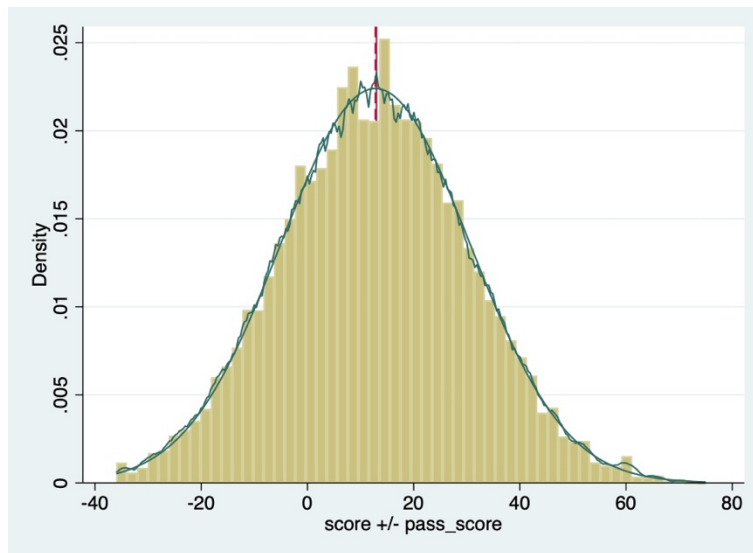


b) Relative (+/-) Score



Table 8 provides a school-by-school performance on the MPRE amongst the top 25 law schools (based on the 2016 U.S. News Law School Rankings). While test-takers perform better on average at higher-ranked law schools, the pattern is not monotonic. For example, Columbia and Chicago students receive lower MPRE scores on average than most of their counterparts in the top 10. At the same time, the table illustrates that pass rates correlate with scores, but

imperfectly. For example, NYU students (ranked #5) earn an average score of 107.5, but their score above passing is only 22.9. This outcome is likely a reflection that a large fraction of its students take the New York State bar, which sets its cut-off at 85. By contrast, students from the U. of Pennsylvania (ranked #6) score 6 points lower on average, but their average score above passing is 19.5, perhaps reflective that the Pennsylvania and New Jersey bar – where a number of Penn students may choose to practice following graduation – requires only a 75 on the MPRE.

**Table 8**
**Performance by Top 25 Law School on MPRE**
**2014-2021**

| Rank | School | Mean | | | 50th percentile | |
| | | Score | Score Above Passing | Pass Rate | Score | Score Above Passing |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Yale | 111.8 | 28.5 | 93.3% | 112 | 29 |
| 2 | Harvard | 110.8 | 27.0 | 93.7% | 111 | 27 |
| 3 | Stanford | 109.7 | 25.1 | 92.7% | 110 | 25 |
| 4 | Columbia | 103.0 | 19.4 | 85.7% | 104 | 20 |
| 5 | Chicago | 102.0 | 20.3 | 87.6% | 102 | 20 |
| 6 | New York University | 107.5 | 22.9 | 90.8% | 108 | 24 |
| 7 | Pennsylvania | 101.3 | 19.5 | 84.4% | 102 | 20 |
| 8 | Duke | 105.6 | 22.6 | 89.0% | 106 | 23 |
| 9 | Berkeley | 103.2 | 18.0 | 85.8% | 104 | 18 |
| 10 | Virginia | 107.5 | 25.3 | 91.2% | 108 | 26 |
| 11 | Michigan | 105.0 | 21.8 | 88.9% | 105 | 22 |
| 12 | Northwestern | 101.1 | 18.7 | 83.2% | 102 | 19 |
| 13 | Cornell | 102.2 | 17.7 | 84.5% | 102 | 18 |
| 14 | Georgetown | 103.8 | 22.0 | 87.8% | 104 | 22 |
| 15 | Texas | 102.1 | 17.4 | 84.9% | 102 | 18 |
| 16 | Vanderbilt | 103.9 | 22.5 | 86.7% | 105 | 24 |
| 17 | Emory | 98.5 | 18.9 | 83.7% | 99 | 20 |
| 18 | Minnesota | 100.1 | 15.6 | 80.1% | 100 | 16 |
| 19 | Alabama | 103.1 | 23.0 | 90.0% | 103.5 | 23 |
| 20 | Iowa | 102.0 | 20.5 | 85.4% | 103 | 21 |
| 21 | Notre Dame | 103.6 | 21.4 | 88.2% | 104 | 22 |
| 22 | Boston University | 100.5 | 16.1 | 79.1% | 102 | 18 |
| 23 | Washington | 100.7 | 18.9 | 83.3% | 101 | 19 |
| 24 | William and Mary | 101.1 | 19.9 | 85.9% | 102 | 20 |
| 25 | California-Irvine | 98.3 | 12.5 | 78.2% | 99 | 14 |

Figure 9 provides a graphical representation of a more complete set of law schools – those ranked 1 through 150 by U.S. News. Both graphs show considerable fluctuation on both score and score relative to the cut-off in their respective jurisdictions. This trend across the distribution of law schools is consistent with Table 8, indicative that schools' U.S. News ranking does not necessarily match performance on the MPRE. Notably, the fluctuation is smallest when looking at score, greater when looking at relative (+/-) score, and greatest for the pass rate. The volatility of the relative score and pass rate are a direct consequence of the test-takers chosen jurisdiction. An MPRE score of 78 would suffice in Georgia (75 cutoff) but not Florida (80 cutoff).

**Figure 9**
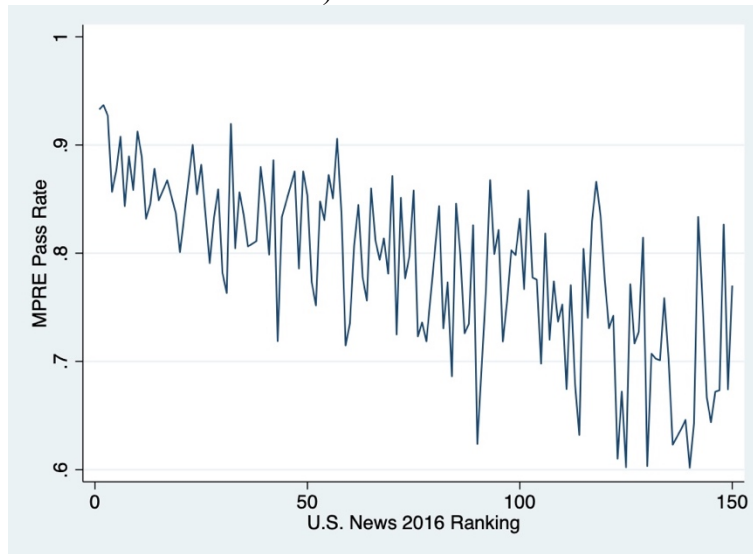**Performance on the MPRE by Law School**
**2014-2021**

a) Score
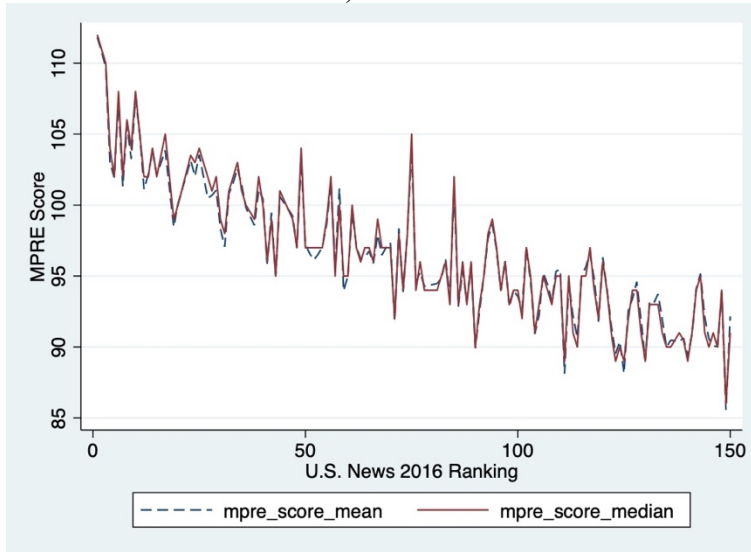


b) Relative (+/-) Score
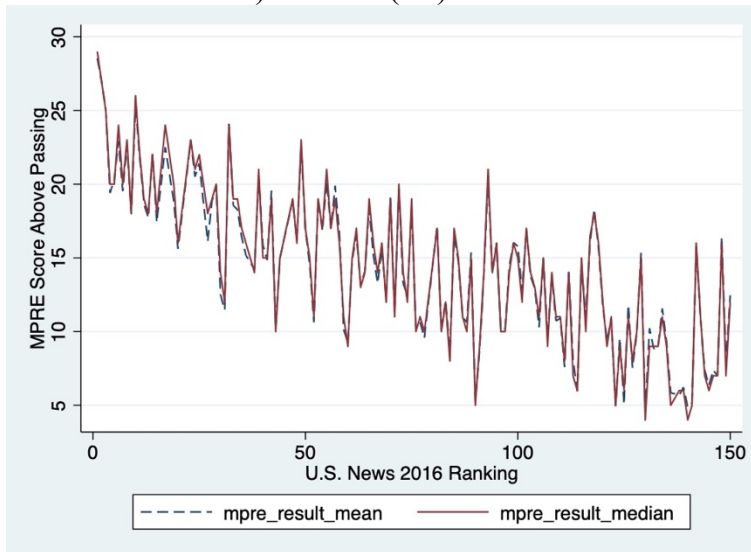
b) Pass Rate



To provide a broader context for test-takers outcomes on the MPRE, we compare law school outcomes on the test with performance measures of their entering classes. Figure 10 provides the mean and median LSAT and undergraduate GPA for each law school for the same time period, again listed by their U.S. News law school rankings in 2016. This data comes not from NCBEX, but the Law School Admissions Council (LSAC), which reports annually academic information of each law school's matriculating class. Law school rank and their students' LSAT scores are – with some exceptions – more closely correlated. Students at higher ranked law schools systematically have higher mean and median LSAT scores. Law school rank and students' undergraduate GPA is less closely correlated, reflecting in part the heterogeneity in grades both within school (i.e., different majors may have different grading practices) and across school (i.e., schools may differ from one another in their grading practices). At the same time, these are more closely correlated than law school's MPRE outcomes.

**Figure 10**
**Students' Entering Credentials by Law School**
**2014-2021**

a) LSATs
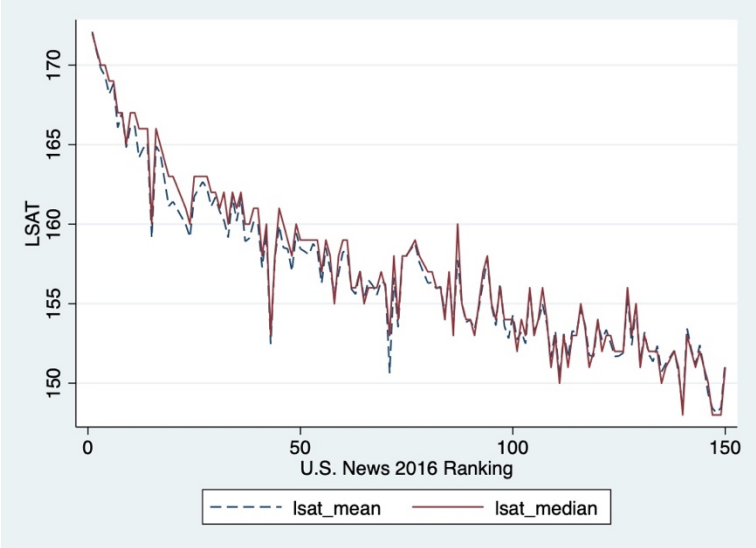


b) Undergraduate GPA
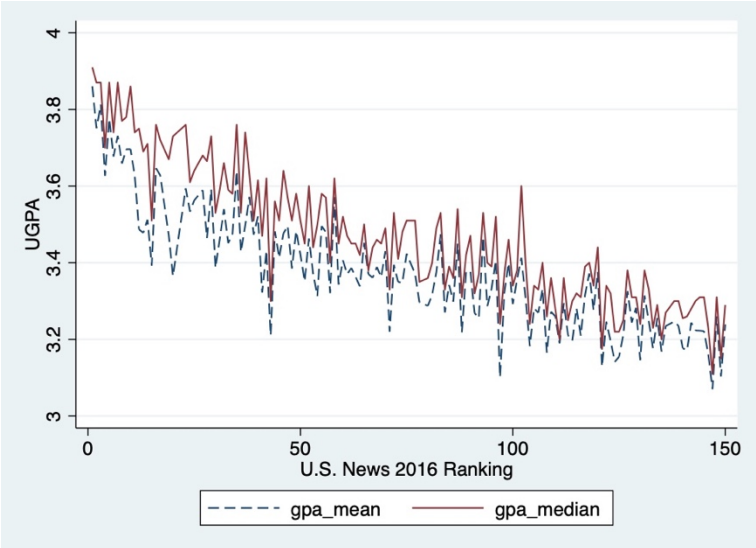
## V. Discussion

In this article, we examine how law graduates perform on the MPRE exam, a national test on professional responsibility that serves as a required component in every jurisdiction in the United States (with the exception of Wisconsin). We analyze MPRE test outcomes for the period 2014 through 2021, both descriptively and the differential effect of individual states raising their minimum passing scores during this period.

We find evidence that in states that raised their cut-offs on the MPRE, test-takers' scores did not appreciably improve, but led to significantly lower pass rates. We found this effect holds across different specifications (DID, SDID). The magnitude of this effect depends in part on the baseline performance of test-takers prior to the rule change. The change in cut-off affected test-takers in Kentucky more than their counterparts in Tennessee, but much of this divergence is attributable to the fact that Tennessee test-takers averaged considerably higher scores than those in Kentucky over this period. Indeed, averages on the MPRE in both treatment states were well above the minimum scores for either state – both before and after the rule change – but test-takers in Tennessee had a larger margin than Kentucky.

On our second question concerning test-taker's incentives on a pass-fail examination with arguably modest cut-offs, we find evidence suggestive that law students engage in satisficing rather than optimizing their performance on the MPRE. Students at the most selective law schools score well above 170 on the LSATs, reflecting near-perfection on the test. Yet their scores on the MPRE reflect that, on average, students at these schools answer at least a third of the questions incorrectly.

At the same time, we observe that students at select schools perform appreciably above or below their U.S. News ranking. For example, Alabama and Minnesota peer schools, based on their students' entering credentials (and the U.S. News law rankings). Over this period, however, Minnesota's pass rate was 80 percent while Alabama's was 90 percent. Some of this difference may be attributable to differences in the minimum passing score set by their two states: Minnesota requiring a score of 85; Alabama a score of 75. At the same time, Alabama students score higher on the MPRE on average (103.1) than Minnesota students (101.1). The explanation for this difference falls outside the data and warrants closer examination. One possibility is that these schools generate different norms and expectations around the MPRE. Differences in performance by these schools on the overall state bar support this institutional explanation (Caron 2023).

Our findings, which we believe is the first to empirically examine student's understanding of the rules of professional responsibility, invites further exploration, some relating to the pedagogy of the subject, and others relating to the regulating of the profession once law graduates join the profession. We raise what we think are the most important points below.

A sanguine interpretation of our findings takes comfort that the average score exceeds the minimum passing standard in every state. This pattern holds equally across the distribution of law schools. While some test-takers fail the MPRE, nearly three-quarters of them pass, and over 60% score above 90 points.

A more sobering interpretation emerges when viewing these scores on an absolute, not merely relative, scale. According to the NCBEX, a score of 100, while well above any state minimum, indicates a test-taker who correctly answered only 68 percent of the questions. A

score of 85 corresponds to 60% correct; a score of 80 is approximately 58% correct; 75 maps onto 56% correct (Case 2011). Viewed through this lens, test-takers pass their professional responsibility requirement on the bar exam by answering 56% to 60% questions correctly.

While determining the appropriate standard for professional responsibility competence is inherently a subjective exercise, we note how the MPRE standard differs from what state bars require of test-takers competence in substantive areas of law, as measured by the Uniform Bar Exam (UBE). With a few exceptions, most states require a minimum score on the UBE, ranging from 280 (Alaska) to 260 (Alabama, Minnesota, Missouri, New Mexico, North Dakota), with the largest plurality of states (21) require a passing score of 270. A perfect score on the UBE is 400, meaning that regardless of jurisdiction, test-takers must answer a minimum of 65% of the questions correctly to pass. While loath to assert a specific level of competence on professional responsibility, we contend that the cut-off for the MPRE should be set equal to, if not higher, than the levels for the UBE.

Our argument for a higher cut-off: practicing lawyers generally have an incentive to achieve – and maintain – competence in their understanding of substantive law. A strong understanding of substantive law enables lawyers to achieve the best possible outcome for their clients. Failure to do so (e.g., misunderstanding of a procedural rule) could harm clients if opposing counsel exploits this shortcoming, and open their lawyers to claims of malpractice.

By contrast, professional responsibility operates under a different paradigm. Legal ethical issues that arise often are observable only by one side or the other. Accordingly, in many instances, lawyers may be motivated less by whether opposing counsel will expose – or even be aware of – the ethical issue, but more on what they believe to be the appropriate course of action. Their understanding of – competency in – professional responsibility will inform their course of action. The greater their understanding, the more informed their course of action.

Whether a greater competence in professional responsibility will result in lawyers having a greater commitment to ethical practice is difficult, if not impossible, to measure. Legal ethical issues are rare litigated, and those that do are reserved for the most egregious transgressions (e.g., lawyers stealing from their clients). At the same time, studies show the import of training on how professionals subsequently practice (Aurora 2011[3], in the context of medical training). With respect to professional responsibility, this question has yet to be explored, as far as we know. Ultimately, the relationship between lawyers' understanding of professional responsibility and their commitment to their ethical obligations is an empirical question. One could observe, for example, the extent to which reported ethical violations decrease in the aftermath of Kentucky and Tennessee raising their MPRE required scores, at least among lawyers subject to this rule change.

We recognize that society may never reach the first-best world, where lawyers have both a high level of competence and commitment to the rules of professional responsibility. But we posit that we currently live in a third-best world, where lawyers are neither required to develop a high level of competence in nor display a strong commitment to the rules of professional responsibility. Demanding higher expectations on either dimension could elevate us to a second-best world.

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[3] https://data.dartmouthatlas.org/downloads/reports/Residency_report_103012.pdf