Impact of the Increase in the Passing Score on the New York Bar Examination

Report Prepared for the New York Board of Law Examiners

by

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Executive Summary

Total scores on the New York Bar Examination are computed by combining three separate "scaled" and weighted scores from three separate components: the New York Essay Examination, which consists of five essay questions and an extended performance task and has a weight of 50%, the Multistate Bar Examination (MBE), which includes 200 multiple-choice questions and has a weight of 40%, and the New York Multiple-Choice Test, which includes 50 multiple-choice questions and has a weight of 10%. Scores on each of the three components and on the New York Bar Examination as a whole are reported on a scale with a range from 0 to 1,000.

On September 24, 2004, the New York State Board of Law Examiners (NYBLE) announced that the passing score on the New York Bar Examination would increase from 660 to 675 over a three-year period. The score was to increase five points a year from July 2005 to July 2007. The first of the three increases was implemented in July 2005. The second and third increases are currently on hold, pending an evaluation of the consequences of the first increase.

At the request of the NYBLE and with the cooperation of the Law School Admission Council (LSAC) and many law schools from which the candidates had graduated, we have assessed the impact of the recently implemented change in the passing score from 660 to 665 and the expected impact of the planned increases from 665 to 675. The NYBLE supplied the bulk of the data, which was collected from respondents who took the July 2005 New York Bar Examination.[1] Other supporting data were provided through the cooperation of LSAC and the law schools. Using these data, this report examines the likely impact of current and planned changes in the New York passing score on candidate pass rates.

Section 1 describes the data collection process and analyzes the representativeness of the data. In Section 2, the report describes the candidate population in terms of each candidate's education (domestic or foreign), the number of times the candidate has taken the bar examination, and the age, gender and race/ethnicity of the candidate. Sections 3 and 4 present summaries of score distributions and pass rates for the candidate population as a whole and for various subgroups within the population.

Section 5 explores the relationships among bar examination scores, undergraduate grade-point averages, Law School Admission Test (LSAT) scores, and law school grade-point averages for a subset of respondents for whom these data were available. These analyses indicate how the performances are related over time (from entry to law school, to graduation from law school, to the bar examination) for the respondents overall and for various groups of respondents.

Characteristics of the Candidates

Section 2 describes the candidates who participated in the study, and by extension, the candidate population as a whole, in terms of a number of candidate characteristics, including the country in which each candidate graduated from law school, age at law school graduation, age when taking the July 2005 bar examination, the number of times the candidate had taken the bar examination in New York, and the candidate's gender and race/ethnicity. To distinguish these characteristics from the performance measures (bar examination scores and pass rates), they are referred to as *demographic variables*.

Foreign-educated candidates make up about 21% of the respondents, and as a group, they differ from the domestic-educated candidates in several respects. They have a much lower percentage of candidates who classified themselves as Caucasian/White and a much higher percentage who classified themselves as Asian/Pacific Islander. They have a higher percentage of males than the domestic-educated group, and they are slightly older than the domestic-educated candidates.

As discussed more fully later, the performance of the domestic-educated group, both in terms of scores on the bar examination and in terms of pass rates, is much better than that of the foreign-educated group. The foreign-educated group is much more likely to be repeating the bar examination (about 30%) than the domestic-educated group (about 10%).

Because of the substantial differences between the domestic-educated group and the foreign-educated group, most of the analyses of candidate performance are reported separately for these two groups.

Characteristics of Domestic-Educated Candidates

Of the candidates who completed law school in the United States, just under 50% are female, and just over 50% are male. The great majority (over 70%) of the domestic-educated group are Caucasian/White, 11.7% are Asian/Pacific Islander, 8.1% are Black/African American, 3.5% are Hispanic/Latino, 1.2% are Puerto Rican, 0.4% are Chicano/Mexican American, 0.2% are American Indian/Alaskan Native, and 4.1% listed their race/ethnicity as "Other."

Among the domestic-educated candidates, the males were, on average, about half a year older than the females when they graduated from law school (27.9 vs. 27.4), and they were a little more than half a year older when they took the bar examination (28.6 vs. 27.9) in July 2005. Over 90% of the domestic-educated candidates taking the New York Bar Examination in July 2005 were taking it for the first time, with the males a bit more likely to be repeating the examination than the females. As of July 2005, the domestic-educated females had taken the bar examination an average of 1.25 times,

while the domestic-educated males had taken it an average of 1.34 times.

As a whole, the domestic-educated, first-time takers were evenly split between females and males but the female/male ratios varied considerably across racial/ethnic groups. Of the domestic-educated, first-time takers, just over 73% were Caucasian/White, but over 77% of the males and only 69% of the females were Caucasian/White. Among the domestic-educated, first-time takers, the females outnumbered the males in all of the other racial/ethnic groups, and they outnumbered the males almost two to one in the Black/African American group.

The domestic-educated repeat takers included more males than females (about 54% to 46%). About 45% of the repeat takers were Caucasian/White, about 23% were Black/African American, and about 17% were Asian/Pacific Islander.

Characteristics of Foreign-Educated Candidates

Among the foreign-educated first-time takers, the race/ethnic category with the highest percentage of candidates was the Asian/Pacific Islander category (about 43%), followed by the Caucasian/White category (about 40%), the Black/African American category (just under 5%), the "Other" category (about 7%), and the Hispanic/Latino category (just over 5%).

In this same group, the foreign-educated first-time takers, males outnumbered females (54% to 46%). But again, the female/male ratios varied across ethnic groups. About 46% of the males and 39% of the females were Asian/Pacific Islander, while about 38% of males and 43% of females were Caucasian/White.

The foreign-educated candidates were generally a bit older than the domestic-educated candidates when they took the New York Bar Examination. Among the foreign-educated candidates, the females have an average age of 29.6 years when taking the bar examination (compared to 27.9 for the domestic-educated females), and the males have an average age of 32.7 years when taking the bar examination (compared to 28.6 for the domestic-educated males).

The foreign-educated first-time takers tend to have relatively low scores on the bar examination and therefore relatively high failure rates, and as a result, foreign-educated candidates were much more likely than domestic-educated candidates to be repeating the bar examination. Just under 10% of the domestic-educated candidates were repeating the bar examination, but almost 30% of the foreign-educated candidates were repeating the examination.

Performance on the New York Bar Examination

The performance of various groups on the New York Bar Examination is reported in Sections 3 and 4. Section 3 describes score distributions for various groups of

candidates on the bar examination. Section 4 reports expected pass rates as a function of passing score (from 660 to 675) for various groups.

Score Distributions

Section 3 of the report analyzes performance on the bar examination and on the three components of the examination (the essay, MBE, and NYMC) separately for the domestic-educated candidates and the foreign-educated candidates, and within each of these groups provides breakdowns in terms of number of previous bar examination attempts, and of gender, race/ethnicity, and age at bar attempt. It also reports average scores as a function of age at law school graduation for domestic-educated candidates.

The variability in performance across groups (foreign-educated and domestic-educated, first-time takers and repeat takers, and the various racial/ethnic groups) is generally much larger than the differences across components of the examination within any particular group. That is, groups that do relatively well on one component (e.g., the essay portion) also tend to do well on the other two components (e.g., the MBE and the NYMC), and groups that don't do well on one component also don't do well on the other components.

The one noteworthy exception to this generalization is a consistent tendency for females to do better on the essay component and for males to do better on the MBE; this effect is not very large on average, but it is observed consistently across racial/ethnic groups, for the foreign and domestic-educated groups, and for first-time takers and repeat takers. These two tendencies (females doing better on the essay component and males doing better on the MBE) go in opposite directions, and thus tend to cancel out. As a result, in most analyses, females and males do about equally well in terms of their total scores on the bar examination and their pass rates.

The domestic-educated candidates do much better on the examination than the foreign-educated candidates, and, within both of these groups, the first-time takers do better than the repeat takers. Candidates who have already taken the examination a number of times tend to have very low pass rates. The average total score for domestic-educated first-time takers was about 727, and the average total score for domestic-educated repeat takers was about 624, a difference of over one hundred points on the 1,000-point scale used in New York.

The average total score for domestic-educated repeat takers decreases systematically as the number of previous attempts increases. As noted above, domestic-educated first-time takers have an average total score of about 727. Domestic-educated second-time takers have an average of about 635, third-time takers have an average of about 627, and fourth-time takers have an average total score of about 620.

The average total score for foreign-educated first-time takers is about 647, which

is almost 80 points lower than the average total score for domestic-educated first-time takers. The average total score for foreign-educated repeat takers is about 599, which is almost fifty points lower than that for foreign-educated first-time takers, and is almost 130 points lower than that for the domestic-educated first-time takers.

The average total score for foreign-educated repeat takers also tends to decrease as the number of previous attempts increases, but the pattern is less consistent than it is for the domestic-educated candidates. As noted above, the foreign-educated first-time takers have an average total score of about 647. Foreign-educated second-time takers have an average of about 601, third-time takers have an average of about 609, and fourth-time takers have an average of about 593.

The racial/ethnic groups exhibit large differences in their average bar examination scores within the domestic-educated first-time takers. The Caucasian/White group has an average total score of about 736, the Asian/Pacific Islander group has an average total score of about 716, the Hispanic/Latino group has an average total score of about 703, and the Black/African American group has an average total score of about 676. Note that the average total score of the Black/African American group is just above the highest of the four potential passing scores considered in this report (i.e., 675). The differences between racial/ethnic groups are much less pronounced among the domestic-educated repeat takers, where the averages range from about 631 to about 613, than they are for the domestic-educated first-time takers.

As noted earlier, the difference in average total bar score between males and females is relatively small. For domestic-educated first-time takers, the average total bar examination score is about 731 for males and about 724 for females. The gender differences are small compared to the range of differences for the racial/ethnic groups (or the differences between the domestic- and foreign-educated groups), and they do not hold up across the racial/ethnic groups; in the Asian/Pacific Islander, Black/African American, and Puerto Rican groups, the females have higher average total bar scores than the males.

The foreign-educated first-time takers exhibit a pattern of average scores as a function of race/ethnicity that is similar to that for domestic-educated first-time takers, with a range from about 675 to about 588.

The average total score of domestic-educated first-time takers declines systematically as age at graduation from law school increases, from about 735 for candidates who are younger than 27 at graduation to less than 700 for candidates who are over 40 at graduation.

Expected Pass Rates at Various Passing Scores

Section 4 presents analyses of the relationships between passing scores and

pass rates for four possible passing scores (660, 665, 670, and 675) as functions of a number of variables. As noted above, before July 2005, the passing score in New York was 660 (out of 1,000); the passing score is now 665, and increases to 670 or 675 are planned. The *passing score* is the total score on the New York Bar Examination (e.g., 665) that a candidate must achieve in order to pass. The *pass rate* associated with a passing score for a group of candidates is the percentage of candidates in that particular group that would pass if the passing score had the specified value. Because these analyses employ a fixed data set (i.e., data from the candidates who took the July 2005 New York Bar Examination), the pass rates of all groups will necessarily decrease (or remain the same) as the passing score increases. In practice, the pass rates could go up as the passing score increases (e.g., if the population of candidates changes or the candidates prepare more thoroughly).

As is true for several parts of this study, the analyses of pass rates were conducted separately for domestic-educated and foreign-educated candidates, and within each of these groups, analyses were conducted separately for first-time takers and repeat takers.

The analyses suggest two general conclusions about pass rates for domestic-educated first-time takers. First, the differences in pass rates between males and females are, at most, quite small. Second, the differences in pass rates among the different racial/ethnic groups are quite large, with the Caucasian/White group having the highest pass rates (about 88% for a passing score of 660 and about 85% for a passing score of 675), and the Black/African American group having the lowest passing rates (about 58% for a passing score of 660 and about 50% for a passing score of 675).

Among the domestic-educated candidates, the repeat takers, as a whole, have much lower pass rates (about 23% for a passing score of 660 and about 16% for a passing score of 675), than the first-time takers. The repeat takers' pass rates tend to get lower as the number of previous attempts increases. Those who are repeating for the first time have higher pass rates (about 32% for a passing score of 660 to about 24% for a passing score of 675) than those repeating for the second time (about 26% for a passing score of 660 to about 19% for a passing score of 675), who in turn have higher pass rates than those who are repeating for the third or more times.

The pass rates for the foreign-educated first-time takers are about half of those of the domestic-educated first-time takers. The pass rates for the foreign-educated first-time takers go from just over 46% for a passing score of 660 to just over 40% for a passing score of 675.

The foreign-educated repeat takers have low pass rates for all four passing scores (just over 15% for a passing score of 660 to just about 11% for a passing score of 675). The pass rates for the foreign-educated repeat takers are much lower than the pass rates for the foreign-educated first-time takers and lower than the pass rates for domestic-educated repeat takers.

Performance Before Law School, in Law School and on the Bar Examination

The analyses in Section 5 examine the relationships among variables describing academic achievement before law school (undergraduate GPA and LSAT scores), performance in law school (law school GPAs), and performance on the New York Bar Examination (total scores on the bar examination). For a large sub-sample of the candidates, information on all of these variables was available, and the results for these candidates were used to develop and evaluate hypotheses about relationships among readiness for law school (as measured by undergraduate GPA and LSAT score), subsequent performance in law school (as measured by law school GPA), and later performance on the bar examination.

In general, performance in law school, as measured by law school GPA, is the best predictor of performance on the bar examination. Law school GPA was found to have the largest impact on New York Bar Examination scores, accounting for about 40% to 47% of the variance (or variability) in bar examination scores (depending on how the law school GPAs were scaled). Adding information about undergraduate GPA and LSAT scores to the prediction equations (in addition to law school GPAs) improved the accuracy of the prediction to cover about 56% of the variance in bar examination scores.

In general, performance in law school is the best predictor of performance on the NY bar exam. The measures of readiness for law school (undergraduate GPA and LSAT scores) are indirectly related to performance on the bar examination through their relationships to performance in law school but also seem to have some direct relationship to performance on the bar examination.

Candidates and groups with high undergraduate GPAs and LSAT scores generally do well in law school and then tend to do well on the bar examination. Candidates and groups with lower undergraduate GPAs and LSAT scores tend to do less well in law school and less well on the bar examination, but almost half the variability in bar examination scores is not accounted for by the simple models examined in this report.

Notes:

1. Because most of the demographic data included in this report could only be collected for those candidates who responded to the survey questions, it seems correct to refer to the groups as *respondents*; however, because generalizations can be made about the candidates based on the responses received, this report uses both *respondents* and *candidates* when discussing the data.

Introduction

This study was designed primarily to investigate the impact of proposed changes to the passing score on the New York Bar Examination (NY bar exam) on candidate pass rates. In September of 2004, the New York State Board of Law Examiners (NYBLE) announced its plan to raise the passing score on the NY bar exam from 660 to 675 over a three-year period. The score was to increase five points each year from July 2005 to July 2007.[1] The first of the three proposed increases was implemented in July 2005. The second and third increases are currently on hold, pending an evaluation of the consequences of the first increase.

The analyses described in this report are based on the results for candidates who took the NY bar exam in July 2005. As described in more detail in Section 1, demographic data were supplied by candidates who completed an optional demographic survey when they applied to take the NY bar exam. Bar examination results were obtained from the NYBLE. Law School Admission Test (LSAT) scores, undergraduate grade-point averages (GPAs) and some demographic data were obtained from the Law School Admission Council (LSAC) for candidates who authorized release of these data (see Appendix A). Law-school GPAs were obtained from law schools with the permission of the candidates (see Appendix B). All of these data were combined into a single database for the candidates taking the July 2005 NY bar exam.

In this study, the relationship between passing score and pass rates was examined by analyzing the data from the July 2005 candidates, assuming passing scores of 660, 665, 670, and 675 to reflect the proposed incremental changes to the passing score. The relationship between potential passing scores and pass rates was examined for the candidate population as a whole and for various subgroups within the population (defined in terms of foreign or domestic legal education, gender, race/ethnicity, age at graduation from law school, and age when taking the bar examination).

Before examining the relationship between passing scores and pass rates, we analyzed the distributions of the available demographic variables (origin of legal education, repeat status, gender, race/ethnicity, age) and the relationships among these demographic variables. We also examined the relationships among the different components of the NY bar exam and the relationships between the demographic variables and performance on the bar exam.

In order to put the relationship between passing score and pass rates into context and to make optimal use of this large and unique data set, the relationships among performance on the NY bar exam, performance in law school (as indicated by law-school GPA), prior educational achievement (as indicated by undergraduate GPA), and scores on the LSAT were also studied.

Questions

The analyses in this study were designed to answer four main questions, plus a number of ancillary questions:

1. What impact will the current and proposed changes in the passing score have on overall pass rates?

2. What impact will the current and proposed changes in passing score have on pass rates for subgroups defined in terms of gender, race/ethnicity, and age?

3. To what extent does performance in law school predict performance on the New York Bar Examination?

4. To what extent do undergraduate GPA and LSAT scores predict performance in law school and performance on the New York Bar Examination?

In the remainder of this section, these questions are described in more detail, and in the following sections, the analyses implemented to answer them and the results of these analyses are presented.

This report includes a glossary that provides definitions of various technical terms included in the text. These terms are generally defined when first used, but the glossary may provide a useful reference.

Impact of Changes in the Passing Score on Pass Rates

The first two questions to be addressed by this study examine the extent to which the changes in the passing score would lead to decreases in the pass rate for the candidate population as a whole and for various subgroups in the population (defined by origin of legal education, gender, race/ethnicity, and age). A simple way to address this question would involve a determination of the pass rates for the population as a whole and for various subgroups on the July 2005 bar examination administration, assuming different passing scores.[2] The differences between the pass rates under the different passing scores provide an indication of the impact of the change in the passing score on pass rates, assuming that the change in passing score itself had no impact on the distribution of scores. This is a reasonable working assumption given that the three proposed changes in passing score are relatively small (5 points on a 1,000-point score scale).

The results of these analyses constitute the bulk of this report. Section 1 provides an account of how the data were collected, checked, and combined into a single database. Section 2 describes the sample in terms of various demographic variables (origin of legal education, repeat status, gender, race/ethnicity, and age) and

combinations of these variables. Section 3 describes the performance of the total sample and of the subgroups defined by various combinations of these demographic variables in terms of their average scores on the bar examination and the three components included in NY bar scores. In Section 4, the pass rates for various subgroups are analyzed. Section 4 provides the most direct answers to the central questions of this study, but to fully understand the results in Section 4, it is necessary to understand the results in Sections 1, 2, and 3.

An analysis of pass rates using different passing scores within a single bar examination administration has advantages and disadvantages in evaluating the impact of the increases in passing score (which were announced well in advance) on the candidate population.[3] On the positive side, studying a single bar examination administration is straightforward and focuses exclusively on effects of the increase in passing score. Since the analysis makes use of data on the performance of a fixed group of candidates who took the bar examination on a particular occasion, the many factors (e.g., changes in the composition of the group, changes in patterns of law school curricula or test preparation) that can influence pass rates and produce variability in pass rates from one year to the next are controlled. By applying the different passing scores to the existing score distributions for various groups, the analysis focuses on the direct impact of changes in the passing scores, assuming that everything else is held constant.

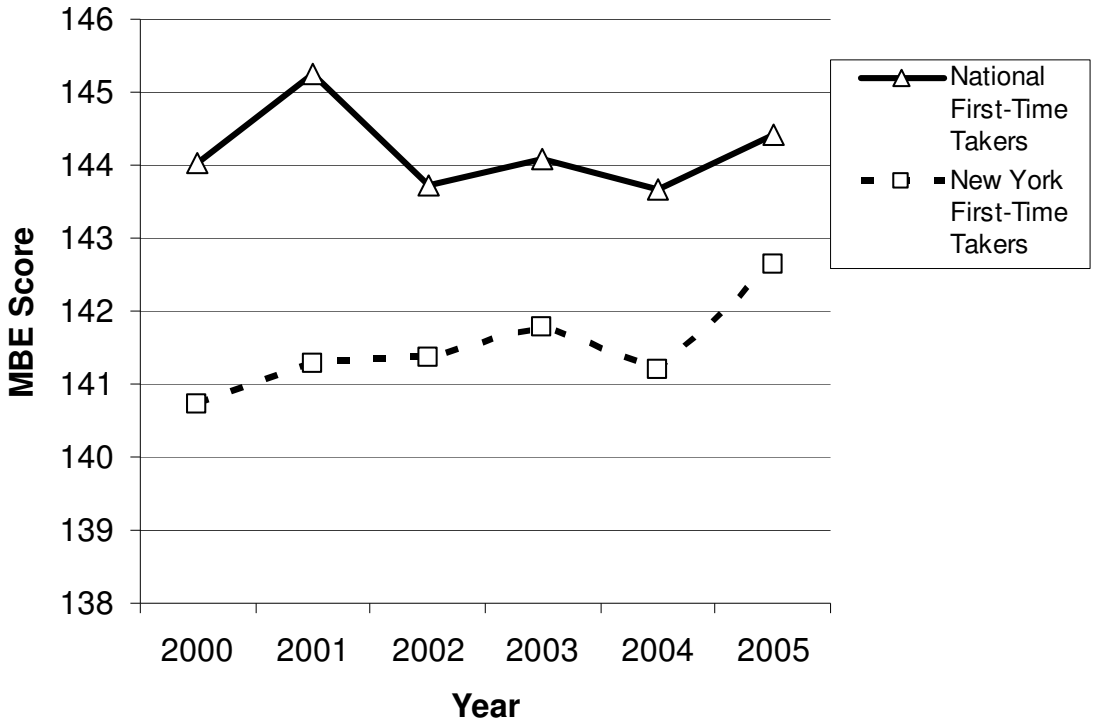
However, it is important to keep in mind that legal education, test preparation activities, and the composition of the candidate population are likely to change over time (as everything changes), and as a result, the projections of what the pass rates would have been in July 2005 for different passing scores may not provide very accurate predictions of what would actually happen if the passing score were increased to 675 over the next two or three years. In particular, changes in the passing score may contribute to changes in how candidates prepare to take the bar exam, in the courses they take in law school, in how law schools operate, and in the composition of the population of individuals who choose to take the NY bar exam. The results should be interpreted with caution, but they do provide a clear indication of the immediate impact of a change in passing score, and a reasonable projection of what would be likely to happen in the future as the passing score is changed.

To check on the possible impact of an increase in the passing score on the level of candidate preparation and thereby on candidate performance, we compared score trends of first-time New York candidates on the July MBE over the last six years to score trends for first-time candidates nationally on the July MBE over the last six years. If the New York pattern were similar to the national pattern through July 2005, it would suggest that the announced change in passing score in New York did not have any significant impact on performance of the New York candidates in July 2005. If the New York pattern was similar to the national pattern up to July 2004 but changed relative to the national data between July 2004 and July 2005, we would have an indication that

something (e.g., the change in passing score) might have caused the change in New York candidates' performance between July 2004 and July 2005.

To examine this issue, we conducted two comparisons using MBE databases at the National Conference of Bar Examiners (NCBE). First, we computed the national averages and the New York averages for all first-time candidates taking the MBE in July of each year between 2000 and 2005.[4] The results of this comparison are presented in Figure 0.1.[5] The national average for the first-time candidates was fairly flat (at about 144) between 2000 and 2005, with a slight bump in 2001. The New York averages for first-time candidates in July show a gradual increasing trend from 2000 to 2005, with a slight dip in 2004. The 2005 average is consistent with the trend from 2000 to 2003. The New York trend for first-time candidates differs from the national pattern mainly in the indication of an upward trend in New York, but there is no indication of a particularly sharp increase or decrease in the New York average in July 2005.

Figure 0.1
National and New York Average MBE Scores for All First-time Takers for the Six July Administrations between 2000 and 2005

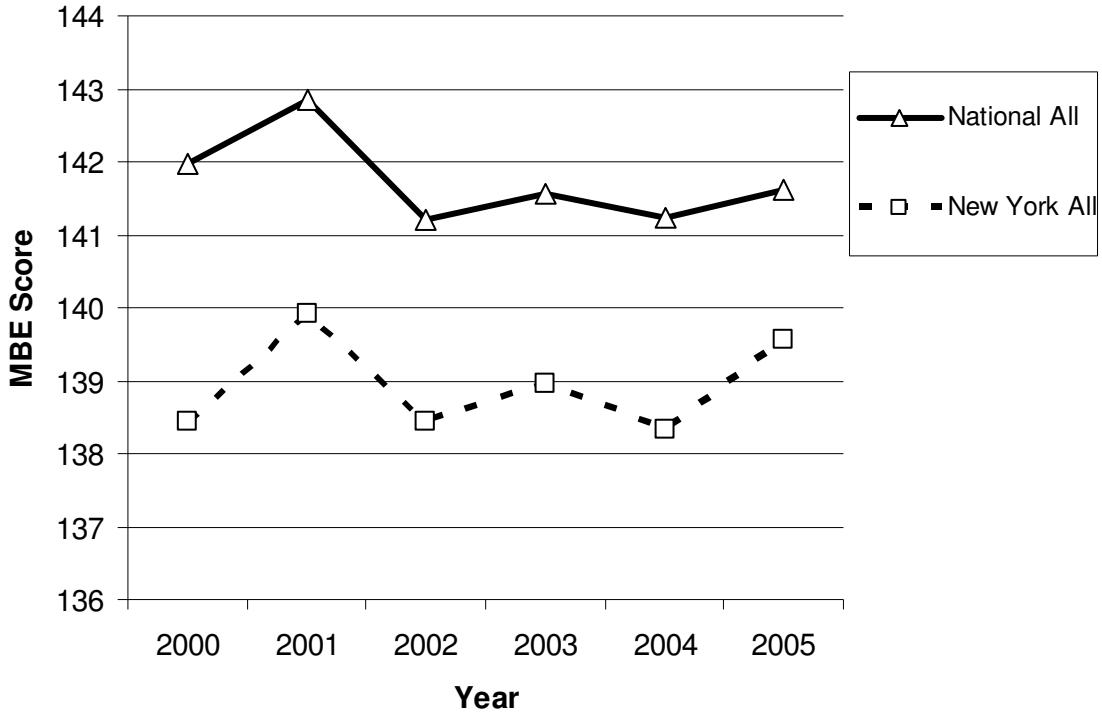


See note 5.

Second, we computed the national averages and the New York averages for all candidates taking the MBE for July administrations between 2000 and 2005. The results of this comparison are presented in Figure 0.2.[6] The trend in the national average of all

candidates was quite similar to that for first-time candidates; in both cases, it was fairly flat between 2000 and 2005, with a slight bump in 2001. The New York pattern for all candidates is very similar to that of the national sample, including a similar bump in 2001. The New York averages show somewhat more variability from year to year, but this is expected because the number of candidates in New York is much smaller than the number of candidates in the whole country, including New York. Again, there is no indication of any sharp increase or decrease in the average MBE score for New York in July 2005.

Figure 0.2
National and New York Average MBE Scores for All Candidates (First-time Takers and Repeaters) for the Six July Administrations between 2000 and 2005



See note 6.

Relationship between Undergraduate GPA, LSAT Scores, Law-School GPA, and Bar Examination Scores

In order to develop an understanding of the variability in passing rates across different possible passing scores and different subgroups, the relationship between performance on the bar examination and performance in law school was examined. These analyses address the third and fourth questions listed earlier.

One problem inherent in analyzing the relationship between measures of law school performance (GPA, rank in class) and performance on the bar examination is the lack of standardization in grading practices across law schools. Another problem is that law schools vary in the scales they use (e.g., the traditional 0 to 4 GPA scale, a 0 to 100 GPA scale).

For this study, the law-school GPA was scaled in two ways. First, the GPA for all law schools was put on a four-point GPA scale by rescaling the GPA for all law schools to a standard four-point grading scale. This transformation did not attempt to correct for differences in course difficulty or grading standards across law schools, but it did put all law-school GPAs onto a common four-point scale, and therefore made it reasonable to conduct statistical analyses based on law-school GPA.

Second, the *means*, or averages, and *standard deviations* (SDs), or spread, of the GPAs in each law school were set equal to the means and SDs for the same individuals on an index, defined as a weighted average of LSAT score (60%) and undergraduate GPA (40%). Scaling law-school GPA to this index does not ensure that the index, LSAT score, or the undergraduate GPA will be closely related to the law-school GPA, but it does reflect the differences in the meaning of law-school GPA associated with differences in the selectivity of different law schools.

A candidate's performance on the NY bar exam and in law school would be expected to be positively related to the candidate's score on the LSAT and to undergraduate GPA, and performance in law school would be expected to be related to performance on the bar examination. The relationships among NY bar exam score, law-school GPA, LSAT score, and undergraduate GPA were examined in several ways (path analysis, linear regression, and logistic regression). The results of these analyses are reported in Section 5.

Notes

1. The NY bar exam includes four components, the Multistate Bar Examination (MBE), the New York Essay Examination (NY Essay), a Multistate Performance Test (MPT), and a multiple-choice test on New York law (NYMC). Scores on the NY bar exam are reported on a scale with a range from 0 to 1,000, and the 15-point change in passing score corresponds to a change of 3 points on the MBE scale, which has a range from 0 to 200. The first score increase, from 660 to 665, represented a one-point increase on the MBE scale.

2. Technically, this analysis is a cross-sectional analysis; it compares performance under different decision rules using data collected on a single occasion. However, the question being asked involves the changes in pass rates from one year to the next, with a change in the passing score between the two years; a study that evaluates changes from one year to the next is called a longitudinal study. It is not unusual to use cross-sectional data to address longitudinal questions, but there are potential problems in doing so, and we need to take these problems into consideration.

3. The increase in the passing score may have effects on candidate preparation, and therefore on bar examination performance. These effects may occur over an extended period as the candidates become better informed about the implications of a higher passing score.

4. Some candidates who are identified as first-time takers could have taken the bar examination in another jurisdiction. The numbers of such cross-jurisdictional repeaters is presumably small.

5. Although the average MBE scores for the first-time takers in NY in Figure 0.1 are consistently lower than those for the first-time takers nationally, this difference is potentially misleading. As indicated later in this report, the population of candidates taking the NY bar exam includes a substantial number of candidates who were educated in foreign countries and who tend to get lower scores on the MBE than domestic-educated candidates. Foreign-educated candidates make up a much smaller percentage of the national population of candidates. If we focus on domestic-educated first-time takers. The New York average MBE score in July 2005 was 145.4, slightly higher than the national average for that test date.

6. As indicated in note 5 attached to Figure 0.1, the New York sample includes a relatively high percentage of foreign-educated candidates who tend to get relatively low scores. If only domestic-educated candidates are considered, the New York average MBE scores are similar to the national average.

1. Data Sources

Staff at the NYBLE and at NCBE planned and coordinated the transfer of several sources of data to NCBE for use in this study. In this section, we provide a brief description of the procedures for assembling the database that was used for the analyses presented in subsequent sections of this report. Appendix C (at the end of this report) provides a more detailed description of the process used for assembling the database.

1.1 Database Elements

The database used in this report contains information from five primary data sets. The different data sets each contain at least one of two indices that could be used to match data records belonging to the same individual. These two indices were (1) applicant identification number, which was the candidate's social security number (SSN) or (2) applicant seat number, which was a number coded by candidates that indicated the seat number they used when taking the NY bar exam.

The first data set was derived from a survey of NY bar exam respondents (i.e., candidates who completed the survey) at the time of application for the NY bar exam and consisted primarily of demographic information (e.g. self-reported age, gender, ethnicity, citizenship, and country of legal education). Candidates who supplied the information needed in an analysis (or authorized its release) will be referred to as *respondents* in cases where it seems useful to remind the reader that some candidates are not included in the analyses. The second data set contained more detailed performance information on the July 2005 administration of the NY bar exam and included scores on the NY bar exam and on each of its components [i.e., New York Essay Examination (NY Essay), Multistate Performance Test (MPT), Multistate Bar Examination (MBE), and New York multiple-choice test (NYMC)]. The third data set supplied by the NYBLE included birthdates and law school graduation dates of candidates. The fourth data source was from LSAC and included demographic information (e.g. birthdates, gender, ethnicity, name, social security number, undergraduate institution, and undergraduate major) and performance data (e.g., undergraduate GPA and average LSAT score from all attempts) for candidates who gave permission for LSAC to release these data. The fifth data set contained candidates' law school performance data (e.g., GPAs) obtained from their law schools. There was some redundancy in these data sets, and as indicated below, this redundancy was used to check on the accuracy of the data where possible.

1.2 Database Construction

The database was assembled sequentially at NCBE as the data sets became available. As data were assembled, they were checked for accuracy using available data (see Appendix C for details). First, the New York demographic data and bar examination scores were matched using applicant identification/seat number to identify

corresponding records. Next, this combined information was matched by applicant seat number with the data set that contained their birthdates and law school graduation dates. Then, the LSAC data were matched to the data set. Finally, the law school data were matched to the data set with New York demographic data, New York performance data, and LSAC data using SSNs. The resultant database contained a total of 10,175 records, one for each of the 10,175 candidates who took the NY bar exam in July 2005.

Because some data were not available, (e.g., LSAT records and law-school GPAs for foreign-educated candidates) and because some candidates and law schools chose not to release certain data, many of the candidate records had missing elements. Of the 10,175 candidates who took the NY bar exam in July 2005, 7,093 cases contained LSAC data and 7,055 cases contained law school data (for 125 U.S. law schools represented in the July 2005 NY bar exam administration).

1.3 Database Finalization

The data collection methods used in this study sometimes resulted in the availability of the same information from multiple sources. As discussed in more detail in Appendix C, at several points in the matching process, comparisons were made across data sets to verify accuracy using this redundant information. As a final step in the database preparation process, additional checks and analyses were implemented to identify and rectify potentially errant or conflicting data for the following variables: gender, racial/ethnic group, MBE score, and age/birthdate.

As a final step in the data processing, a generic identification number (ID) was created to eliminate the need to carry any specific identifying information (e.g., candidate name, SSN, or seat number) forward into the database used for purposes of analysis.

1.4 Representativeness of the Database

In studies like this, in which information is provided voluntarily by participants, missing data are always a matter of some concern. To the extent that candidates who choose to participate are systematically different from those who do not participate, the results may be biased. As indicated below, participation in this study was excellent. Some information was not available for some groups (particularly for graduates of foreign law schools), but over 90% of the candidates supplied the information requested of them.

Data were available for all 10,175 candidates on three variables included in the operational database for the NY bar exam: NY bar exam scores, number of bar examination attempts, and age when taking the bar exam. Table 1.1 displays response rates for the variables obtained from candidates. For gender, origin of legal education, and race/ethnicity, less than 10% of the information was omitted. Age at law school graduation, undergraduate GPA, LSAT scores, and law-school GPA are missing from

the database for about 21% to 35% of the candidates. For the variables with large percentages of omitted data, the omissions are mostly in the records of the foreign-educated candidates for whom such information is simply unavailable. The foreign-educated candidates generally did not have LSAC records, and we made no attempt to obtain GPAs from foreign law schools. The lack of some kinds of information for graduates of foreign law schools did not cause a problem, because most of our analyses were performed separately for foreign-educated and domestic-educated candidates; the analyses involving variables that were not available for the foreign-educated candidates were simply not conducted for this group.

Table 1.1
The Numbers and Percentages of Omitted Responses for Variables in the Database

Variable	Number of Omitted Responses	Percentage of Omitted Responses*
Gender	847	8.3%
Origin of Legal Education	961	9.4%
Race/Ethnicity	855	8.4%
Age at Law School Graduation	2,184	21.5%
Undergraduate GPA	3,402	33.4%
LSAT Score	3,332	32.7%
Law-School GPA	3,573	35.1%

Number of candidates in database (N) = 10,175
*Omitted responses include responses that were not released, not available, or not resolvable (e.g., because of contradictory information).

Table 1.2 displays the percentages of candidates not responding to the main variables in this study as a function of whether the candidates' legal education was domestic or foreign. Note that 961 (or about 9.4%) of the candidates did not provide information on the country where they obtained their legal education and did not provide information on most of the other variables. Of the candidates who indicated that they had graduated from a U.S. law school, the data for the six variables in Table 1.2 is quite complete. The variable with the most omitted data for this group is the law-school GPA (with 21.3% omitted). A substantial number of these candidates with omitted data on law-school GPA graduated from two New York law schools for which the relevant data were either not available or not available in usable form at the time of this report.

Table 1.2
Numbers and Percentages of Omitted Responses for Candidates Who Graduated from Domestic and Foreign Law Schools

Variable (Count of Omitted Responses)	Type of Legal Education					
	Domestic (n = 7,252)		Foreign (n = 1,962)		Unknown* (n = 961)	
	n	%	n	%	n	%
Gender (847)	4	0.0%	17	0.9%	826	86.0%
Race/Ethnicity (855)	14	0.2%	11	0.6%	830	86.4%
Age at Law School Graduation (2,184)	81	1.1%	1,949	99.3%	154	16.0%
Undergraduate GPA (3,402)	625	8.6%	1,948	99.3%	829	86.3%
LSAT Scores (3,332)	619	8.5%	1,883	96.0%	830	86.4%
Law-School GPA (3,573)	1,548	21.3%	1,178	60.0%	847	88.1%

n = number of candidates
N = total number of candidates (10,175)
*Unknown responses include those that were not released, not available, or not resolvable (e.g., because of contradictory information).

The omitted data in this study causes less of a problem than it might in some cases, because most of the analyses focus on subgroups (domestic- vs. foreign-educated candidates), and the omitted data tends to occur in predictable places. About 8 percent of the candidates chose not to provide data and are omitted from most of the analyses, and certain kinds of data are not available for foreign-educated candidates.

The column for foreign-educated candidates indicates that the majority of omitted responses in age at law school graduation, undergraduate GPA, LSAT scores, and law-school GPA are from foreign-educated candidates. Again, this is because these data are not available for most foreign-educated candidates.

1.5 Confidentiality of data

The data sets were combined and analyzed by NCBE. NCBE was responsible for maintaining the confidentiality of the data. To ensure confidentiality, we collated the data from the NYBLE, participating law schools, and LSAC. We then linked the data from various sources for each candidate who agreed to provide data for the study.

Personal identifiers for candidates and identifiers for schools were necessary in order to link all of the separate data elements for each candidate into a single record. After these records were assembled and checked for accuracy, all personal identifiers (name, SSN) were deleted from the main database and kept in separate data sets. School identifiers that indicate the students who attended each school were retained in each candidate's record, but the association with any specific school was not included in the database.

2. Demographic Characteristics of the Candidates

The analyses included in this report are based on data collected from 10,175 candidates who took the New York Bar Examination (NY bar exam) in July 2005. In this section, the following characteristics of the candidates are analyzed: origin of legal education, gender, race/ethnicity, age at graduation, age when taking the NY bar exam in July 2005, and the number of attempts taking the NY bar exam. These variables are referred to as *demographic variables* to distinguish them from scores or pass rates on the NY bar exam. The latter variables are referred to as *performance variables* and are discussed in Sections 3 and 4, respectively.

2.1 General Demographics

Gender

Table 2.1 provides an analysis of the numbers and percentages[1] of females and males in the sample and indicates that 847 (or 8.3%) of the candidates did not record their genders, yielding a response rate of over 91%. Of the candidates who indicated their gender, 48.9% (or 4,557) are female and 51.1% (or 4,771) are male. Because 8.3% of the candidates omitted their gender, all analyses involving gender as a classification variable are subject to some uncertainty, but the percentages in Table 2.1 are based on information from over 91% of the July 2005 candidates and provide a good indication of what to expect for July administrations of the New York Bar examination.

Table 2.1
Numbers and Percentages of Females and Males in the Sample

Gender	Number	Percentage of Respondents
Female	4,557	48.9%
Male	4,771	51.1%
Omitted	847	--

Number of Candidates in Database (N) = 10,175

Domestic or Foreign Legal Education

Table 2.2 describes the sample in terms of whether the candidates obtained their legal education in the United States (domestic-educated) or in a foreign country (foreign-educated). In the sample, 961 (or 9.4%) of the candidates did not indicate whether their law school was domestic or foreign. Of the candidates who indicated their law-school type, 78.7% (or 7,252) graduated from a domestic law school, and 21.3% (or 1,962) graduated from a foreign law school.

Table 2.2
Numbers and Percentages in the Sample Who Graduated from Domestic and Foreign Law Schools

Origin of Legal Education	Frequency	Percentage of Respondents
Domestic	7,252	78.7%
Foreign	1,962	21.3%
Omitted	961	--

N = 10,175
Note: Domestic refers to candidates who graduated from a law school in the United States. Foreign refers to candidate who graduated from a law school outside of the United States.

The foreign-educated respondents make up just over a fifth of the respondents, and as a group, they are quite different from the domestic-educated respondents in several respects. As we shall see, the foreign-educated respondents tend to have lower scores on the NY bar exam, and therefore, tend to have higher failure rates than the domestic-educated respondents. On average, the foreign-educated respondents are older than the domestic-educated respondents, and they have a somewhat different distribution across racial/ethnic groups. In addition, the foreign-educated respondents do not take the LSAT, and therefore some of the data available for most of the domestic-educated respondents is not available for the foreign-educated respondents (e.g., LSAT). Because of these differences, most of the analyses in this report are presented separately for the domestic-educated respondents and the foreign-educated respondents.

Race/Ethnicity

Table 2.3 provides an analysis of the racial/ethnic composition of the sample, using the categories employed by the Law School Admission Council (LSAC) which were used in the candidate survey administered to the New York candidates in July

2005. As indicated in Table 2.3, 855 (or 8.4%) of the candidates omitted their race/ethnicity. Of those who indicated their race/ethnicity, 63.2% were Caucasian/White, 18.2% were Asian/Pacific Islander, 8.3% were Black/African American, 4.0% were Hispanic/Latino, 1.0% were Puerto Rican, 0.3% were Chicano/Mexican American, and 0.1% were American Indian/Alaskan Native. Of the respondents, 4.9% listed their race/ethnicity as "Other," which could refer to some other preferred designation or to a multi-racial/ethnic background, or it may reflect a simple reluctance to provide information on race/ethnicity.

Table 2.3
Numbers and Percentages in Different Racial/Ethnic Groups

Race/Ethnicity	Number	Percentage of Respondents
Caucasian/White	5,888	63.2%
Asian/Pacific Islander	1,697	18.2%
Black/African American	773	8.3%
Hispanic/Latino	371	4.0%
Puerto Rican	91	1.0%
Chicano/Mexican American	28	0.3%
American Indian/Alaskan Native	11	0.1%
Other	461	4.9%
Omitted	855	--

N = 10,175

Age at Law School Graduation, Age When Taking the Bar Examination, and Number of Bar Attempts

Table 2.4 describes the sample in terms of the candidates' ages at graduation from law school. This information was not available for 2,184 (or 21.5%) of the candidates. Most of the candidates for whom this information was not available completed law school outside of the United States. Of those who responded, 54.5% were under 27, and 20.2% were 27 or 28. Almost 84% of the candidates were under 31, and less than one percent were over 50 when they graduated from law school.

Table 2.4
Numbers and Percentages at Various Ages at Law School Graduation
(Using Age Ranges)

Age at Law School Graduation	Number	Percentage of Respondents
<27	4,358	54.5%
27-28	1,618	20.2%
29-30	738	9.2%
31-35	725	9.1%
36-40	272	3.4%
41-45	140	1.8%
46-50	73	0.9%
51-55	43	0.5%
56-60	18	0.2%
>60	6	0.1%
Omitted	2,184	--

N = 10,175

Table 2.5
Numbers and Percentages at Various Ages at July 2005 Bar Attempt
(Using Age Ranges)

Age at Bar Attempt	Number	Percentage of Respondents*
<27	4,493	44.2%
27-28	2,015	19.8%
29-30	1,127	11.1%
31-35	1,332	13.1%
36-40	574	5.6%
41-45	314	3.1%
46-50	172	1.7%
51-55	83	.8%
56-60	43	.4%
>60	22	.2%

N = 10,175

*There was no data missing for this variable, so the percentage of respondents equals the percentage of candidates in the total sample.

Table 2.5 describes the sample in terms of the candidates' ages when they took the bar examination in July 2005. Almost half, 44.2%, were under 27, and 19.8% were 27 or 28. Just over 75% of the candidates were under 31, and about one and a half percent were over 50 when they took the NY bar exam in July 2005.

Figure 2.1 plots age at the July 2005 bar attempt with age at law school graduation. As indicated in this figure, age when taking the bar examination in July 2005 was always approximately equal to or greater than age at graduation. For most candidates, age at graduation and age when taking the bar examination in July 2005 was quite close. The candidates for whom age in July 2005 is substantially higher than age at graduation are generally repeat takers.

Figure 2.1
Age at Bar Attempt as a Function of Age at Law School Graduation

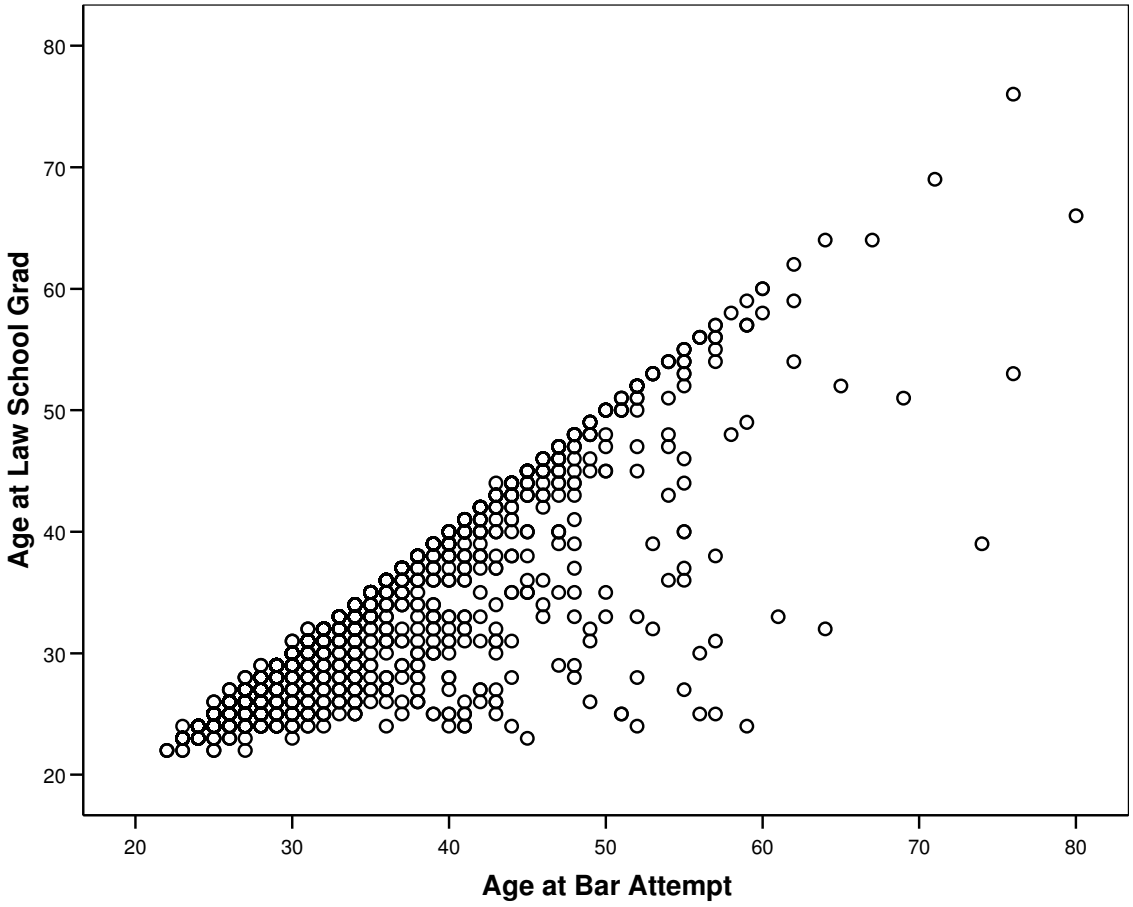


Table 2.6
Numbers and Percentages for Number of Bar Attempts as of July 2005

Number of NY Bar Exam Attempts	Number	Percentage of Respondents*
1	8,613	84.6%
2	506	5.0%
3	433	4.3%
4	211	2.1%
5	138	1.4%
6	68	0.7%
7	48	0.5%
8	27	0.3%
9	30	0.3%
10	19	0.2%
11	13	0.1%
12	9	0.1%
13	10	0.1%
14	7	0.1%
15	3	0.0%
16	6	0.1%
17	5	0.0%
18	3	0.0%
19	6	0.1%
21	1	0.0%
22	1	0.0%
23	1	0.0%
24	1	0.0%
25	2	0.0%
26	2	0.0%
27	2	0.0%
28	2	0.0%
30	1	0.0%
31	1	0.0%
32	1	0.0%
35	1	0.0%
41	1	0.0%
48	1	0.0%
55	1	0.0%
59	1	0.0%

N = 10,175

*There was no omitted data for this variable, so the percentage of respondents equals the percentage of candidates in the total sample.

Table 2.6 indicates the number of times the candidates had taken the NY bar exam as of July 2005. 84.6% of the candidates were taking the examination for the first time (first-time takers). 5.0% were taking it for the second time, 4.3% for the third time, 2.1% for the fourth time, 1.4% for the fifth time, etc. The great majority of the candidates were taking the examination for the first time, but 15.4% were repeat takers. One candidate was taking it for the 59th time and one for the 55th time, but over 97% were taking it for the fifth time or less.

2.2 Domestic-Educated and Foreign-Educated Candidates

As indicated earlier, 9,214 of the candidates indicated whether their law-school education was domestic or foreign and 961 (9.4%) of the candidates did not indicate whether they were domestic or foreign educated. This section provides comparisons between the domestic- and foreign-educated candidates on the other demographic variables.

Table 2.7 reports the percentages of females and males for the domestic- and foreign-educated groups in the sample. Of the 7,252 candidates who indicated that they completed law school in the United States, 49.5% were female, 50.4% were male, and 0.1% omitted their gender. Of the 1,962 candidates who indicated that they completed law school in a foreign country, 45.9% were female, 53.2% were male, and 0.9% omitted their gender. So, gender was very evenly balanced for the domestic-educated respondents, while the foreign-educated group had more males than females.

Table 2.7
Percentages of Females and Males for Domestic- and Foreign-Educated Candidates

Gender (N = 10,175)	Origin of Legal Education		
	Domestic (n = 7,252)	Foreign (n = 1,962)	Omitted (n = 961)
Female (n = 4,557)	49.5%	45.9%	6.7%
Male (n = 4,771)	50.4%	53.2%	7.4%
Omitted (n = 847)	0.1%	0.9%	86.0%

n = the number of candidates within a group
N = the total number of candidates

Table 2.8 provides a similar analysis of race/ethnicity as a function of the type of legal education (domestic or foreign) for the candidates who indicated the country of their law-school education. Of the 7,252 candidates who indicated that they completed law school in the United States, 70.6% were Caucasian/White, 11.7% were

Asian/Pacific Islander, 8.1% were Black/African American, 3.5% were Hispanic/Latino, 1.2% were Puerto Rican, 0.4% were Chicano/Mexican American, 0.2% were American Indian/Alaskan native, and 4.1% listed their race/ethnicity as "Other." Of the 1,962 respondents who indicated that they completed law school in a foreign country, 34.4% were Caucasian/White, 42.5% were Asian/Pacific Islander, 9.2% were Black/African American, 5.6% were Hispanic/Latino, and 7.8% listed their race/ethnicity as "Other." None of the foreign-educated candidates listed their race/ethnicity as Puerto Rican, Chicano/Mexican American, or American Indian/Alaskan native. Of the domestic-educated candidates, 0.2% omitted their race/ethnicity, and of the foreign-educated candidates, 0.6% omitted their race/ethnicity.

Table 2.8
Percentages Choosing Various Race/Ethnicity Categories for Domestic- and Foreign-Educated Candidates

Race/Ethnicity (N = 10,175)	Origin of Legal Education		
	Domestic (n = 7,252)	Foreign (n = 1,962)	Omitted (n = 961)
Caucasian/White (n = 5,888)	70.6%	34.4%	9.7%
Asian/Pacific Islander (n = 1,697)	11.7%	42.5%	1.4%
Black/African American (n = 773)	8.1%	9.2%	0.9%
Hispanic/Latino (n = 371)	3.5%	5.6%	0.6%
Puerto Rican (n = 91)	1.2%	0.0%	0.1%
Chicano/Mexican American (n = 28)	0.4%	0.0%	0.1%
American Indian/Alaskan Native (n = 11)	0.2%	0.0%	0.0%
Other (n = 461)	4.1%	7.8%	0.8%
Omitted (n = 855)	0.2%	0.6%	86.4%

The racial/ethnic categories chosen by the foreign-educated candidates are generally consistent with their reported countries of legal education. The foreign-educated respondents who classified themselves as Caucasian/White were mainly educated in Europe, Canada, and Australia. Of the Caucasian/White foreign-educated candidates, 14.5% were educated in France, 10.7% in the United Kingdom, 8.1% in

Germany, 8.0% in Canada, 6.5% in Israel, 5.2% in Italy, 4.4% in Ireland, 4.0% in Australia, and most of the remainder were educated in other countries in Europe. The foreign-educated candidates who classified themselves as Asian/Pacific Islander were mainly educated in Asia. Over one-fourth, 26.4%, were educated in Japan, 17.0% in Korea, 16.6% in China, 13.6% in Taiwan, 7.6% in India, 5.3% in the Philippines, and 4.7% in the United Kingdom. Of the Black/African American graduates of foreign law schools, 47.8% were educated in Nigeria, 18.3% in the United Kingdom, 6.7% in Cameroon, and 3.9% in Ghana; Barbados, France, Jamaica, and Liberia each contributed 2.2% and most of the others were educated in other countries in Africa. Most of the Hispanic/Latino foreign-educated candidates were educated in Latin America; 20.2% were educated in Colombia, 12.8% in Brazil, 11.9% in Mexico, 11.0% in Peru, and 9.2% in Venezuela. Panama and Spain each contributed 3.7%, and most of the rest were educated in other countries in Central and South America. Of the graduates of foreign law schools who listed their race/ethnicity as “Other,” 35.0% were educated in the United Kingdom, 7.8% in France, 7.1% in Nigeria, 5.2% in Israel; Canada, China, and India each contributed 3.2%.

The most dramatic differences between the racial/ethnic composition of the domestic-educated group and that of the foreign-educated group were that over 70% of the domestic-educated group was Caucasian/White, while less than 35% of the foreign-educated group was Caucasian/White, and that over 42% of the foreign-educated group was Asian/Pacific Islander, while less than 12% of the domestic-educated candidates put themselves in this category. Note that 8% of the foreign-educated group classified themselves as “Other,” while about 4% of the domestic-educated group chose this category.

Table 2.9 provides an analysis of age at law school graduation as a function of type of law-school education (domestic or foreign) for the candidates who indicated the country of their law-school education. As noted earlier in the discussion of Table 2.4, age at law school graduation was not available for 21.5% (or 2,184) of the candidates, and most of those for whom this information was not available were foreign educated (99.3%). Of the domestic-educated candidates, over 75% were under 29 when they graduated from law school, and over 90% were under 36. The average age of the domestic-educated candidates when they completed law school was 27.65 years (with an SD of 4.86 years).

Table 2.9
Percentages at Various Ages at Law School Graduation (Using Age Ranges) for Domestic- and Foreign-Educated Candidates

Age at Law School Grad. (N = 10,175)	Origin of Legal Education		
	Domestic (n = 7,252)	Foreign (n = 1,962)	Omitted (n = 961)
<27 (n = 4,358)	54.9%	0.1%	38.8%
27-28 (n = 1,618)	19.9%	0.3%	17.7%
29-30 (n = 738)	8.9%	0.1%	9.4%
31-35 (n = 725)	8.8%	0.2%	8.8%
36-40 (n = 272)	3.2%	0.1%	4.4%
41-45 (n = 140)	1.6%	0.0%	2.6%
46-50 (n = 73)	0.9%	0.0%	1.1%
51-55 (n = 43)	0.5%	0.0%	0.6%
56-60 (n = 18)	0.2%	0.0%	0.3%
>60 (n = 6)	0.1%	0.0%	0.2%
Omitted (n = 2,184)	1.1%	99.3%	16.0%

Table 2.10 provides an analysis of age at bar attempt in July 2005 as a function of law-school education (domestic or foreign) for the candidates who indicated the country of their law-school education. For the foreign-educated candidates, these data were much more complete than they were for the age at graduation. The foreign-educated candidates were generally older when they took the bar in July 2005 than the domestic-educated candidates, with smaller percentages in the under-27 and the 27-28 categories, and larger percentages in all of the other categories. The average age of the domestic-educated candidates taking the bar examination in July 2005 was 28.26, and that for the foreign-educated candidates was 31.34 (with SDs of 5.52 and 6.85 respectively), for a difference of about three years.

Table 2.10
Percentages at Various Ages at July 2005 Bar Attempt (Using Age Ranges) for Domestic- and Foreign-Educated Candidates

Age at Bar Attempt	Origin of Legal Education		
	Domestic (n = 7,252)	Foreign (n = 1,962)	Omitted (n = 961)
<27 (n = 4,493)	50.6%	25.0%	34.8%
27-28 (n = 2,015)	21.0%	15.3%	20.0%
29-30 (n = 1,127)	9.9%	14.7%	12.9%
31-35 (n = 1,332)	10.1%	23.5%	14.5%
36-40 (n = 574)	3.7%	12.0%	7.2%
41-45 (n = 314)	2.3%	5.0%	4.9%
46-50 (n = 172)	1.2%	2.8%	2.8%
51-55 (n = 83)	0.7%	0.8%	1.6%
56-60 (n = 43)	0.3%	0.7%	1.1%
>60 (n = 22)	0.2%	0.4%	0.3%

Table 2.11 provides an analysis of the number of bar attempts as of July 2005 as a function of origin of legal education (domestic or foreign) for the candidates who indicated the country of their law-school education. The foreign-educated candidates were more likely than the domestic-educated candidates to be repeating the examination. About 90% of the domestic-educated candidates and about 70% of the foreign-educated candidates were taking the NY bar exam for the first time. As of July 2005, the domestic-educated candidates had taken the NY bar exam an average of 1.30 times, and the foreign-educated candidates had taken it an average of 1.88 times (with SDs of 1.66 and 2.51 respectively).

As noted earlier, the foreign-educated candidates tended to have lower scores on the NY bar exam than the domestic-educated candidates and to have correspondingly higher failure rates. As a result, they were more likely to repeat the examination than the domestic-educated candidates.

Table 2.11
Percentages of Number of Bar Attempts for Domestic- and Foreign-Educated Candidates

Number of Bar Attempts (N = 10175)	Origin of Legal Education		
	Domestic (n = 7252)	Foreign (n = 1962)	Omitted (n = 961)
1 (n = 8,613)	90.8%	70.6%	66.8%
2 (n = 506)	3.0%	11.2%	7.2%
3 (n = 433)	2.6%	8.1%	8.7%
4 (n = 211)	1.2%	3.6%	5.3%
5 (n = 138)	0.8%	2.1%	3.6%
6 (n = 68)	0.4%	1.0%	2.1%
7 (n = 48)	0.3%	0.8%	1.0%
8 (n = 27)	0.1%	0.5%	1.0%
9 (n = 30)	0.2%	0.4%	1.0%
10 (n = 19)	0.1%	0.4%	0.3%
>10 (n = 82)	0.4%	1.2%	2.8%

2.3 Characteristics of Domestic-Educated Candidates

As noted earlier, the domestic-educated candidates differed substantially from the foreign-educated candidates in a number of ways, and therefore, most of our analyses were run separately for these two groups. In this section, we examine some relationships among demographic variables for the domestic-educated candidates.

Tables 2.12 and 2.13 display the relationship between race/ethnicity and gender for first-time takers and repeaters. Table 2.12 reports the percentages of females and males in each racial/ethnic group for the domestic-educated first-time takers, and Table 2.13 reports the percentages of females and males in each of the racial/ethnic group for the domestic-educated repeaters.

Table 2.12
Percentages of Domestic-Educated First-Time Taking Female and Male Candidates in Various Race/Ethnicity Categories

Race/Ethnicity	Gender		Total* (N = 6,585)
	Female (n = 3,284)	Male (n = 3,299)	
Caucasian/White (n = 4,818)	69.0%	77.4%	73.2%
Asian/Pacific Islander (n = 740)	12.9%	9.6%	11.2%
Black/African American (n = 430)	8.5%	4.6%	6.5%
Hispanic/Latino (n = 214)	3.3%	3.2%	3.2%
Puerto Rican (n = 73)	1.3%	0.9%	1.1%
Chicano/Mexican American (n = 23)	0.5%	0.2%	0.3%
American Indian/Alaskan Native (n = 9)	0.2%	0.1%	0.1%
Other (n = 268)	4.3%	3.8%	4.1%
Omitted (n = 10)	0.1%	0.2%	0.2%

*Total includes two candidates who did not record their genders.

Table 2.12 reports the racial/ethnic distributions of the female and the male domestic-educated first-time takers. Similar to all domestic-educated candidates (see Table 2.8) the male group included a higher percentage of Caucasian/White candidates than the female group and lower percentages in all of the other racial/ethnic groups. Of the male domestic-educated first-time takers, 77.4% were Caucasian/White, and of the females, 69.0% were Caucasian/White. Each of the other racial/ethnic groups constituted a higher percentage of females than they did of males.

Table 2.13
Percentages of Domestic-Educated Repeat Taking Female and Male Candidates in Various Race/Ethnicity Categories

Race/Ethnicity	Gender		Total* (N = 667)
	Female (n = 308)	Male (n = 357)	
Caucasian/White (n = 302)	43.2%	47.3%	45.3%
Asian/Pacific Islander (n = 111)	15.3%	17.6%	16.6%
Black/African American (n = 154)	25.3%	21.3%	23.1%
Hispanic/Latino (n = 42)	8.4%	4.5%	6.3%
Puerto Rican (n = 17)	2.3%	2.8%	2.5%
Chicano/Mexican American (n = 4)	0.6%	0.6%	0.6%
American Indian/Alaskan Native (n = 2)	0.3%	0.3%	0.3%
Other (n = 31)	4.2%	4.8%	4.6%
Omitted (n = 4)	0.3%	0.8%	0.6%

*Total includes two candidates who did not record their genders.

Table 2.13 presents the percentages of females and males in each racial/ethnic group for the domestic-educated repeaters. Note that about 45% of the repeat takers were Caucasian/White, while about 73% of the first-time takers were Caucasian/White, and that about 23% of the repeaters were Black/African American, compared to 6.5% of the first-time takers. The Caucasian/White group constituted a higher percentage of the males (about 47.3%) than of the females (about 43.2%).

As was the case for domestic-educated first-time takers, males outnumbered females in the Caucasian/White group, and females tended outnumber males in several other groups.

Among the domestic-educated candidates, the females had an average age at graduation of 27.42 years, while the males had an average age at graduation of 27.87, years (with SDs of 4.90 and 4.83 respectively), for a difference of less than half a year. Table 2.14 presents a more detailed analysis of the relationship between gender and age at graduation for the domestic-educated candidates. Most of the graduates (about 59% of the females and about 52% of the males) were under 27 when they graduated. An additional 31% of the males and over 27% of the females were between 27 and 30 years old when they graduated.

Table 2.14
Percentages of Domestic-Educated Female and Male Candidates at Various Ages at Law School Graduation (Using Age Ranges)

Age at Law School Graduation	Gender		
	Female (n = 3,556)	Male (n = 3,612)	Omitted (n = 3)
<27 (n = 3,983)	58.9%	52.2%	66.7%
27-28 (n = 1,443)	19.5%	20.8%	0.0%
29-30 (n = 647)	7.9%	10.2%	0.0%
31-35 (n = 636)	7.8%	9.9%	33.3%
36-40 (n = 229)	2.7%	3.7%	0.0%
41-45 (n = 115)	1.7%	1.6%	0.0%
46-50 (n = 62)	0.7%	1.0%	0.0%
51-55 (n = 37)	0.6%	0.4%	0.0%
56-60 (n = 15)	0.3%	0.1%	0.0%
>60 (n = 4)	0.1%	0.1%	0.0%

We also looked at the distributions of ages at graduation from law school for domestic-educated candidates across race/ethnicity and did not find any large differences. The range of average ages at graduation across race/ethnicity goes from 27.2 years for the “Other” group to 29.3 years for the American Indian/Alaskan Native group.

Among the domestic-educated candidates, females had an average age of 27.93

years when they took the bar examination in July 2005, while males had an average age at bar attempt of 28.57 years at this point (with SDs of 5.41 and 5.60 respectively), for a difference of a little over half a year. Table 2.15 presents a more detailed breakdown of the relationship between gender and age at bar attempt for the domestic-educated candidates.

Table 2.15
Percentages of Domestic-Educated Female and Male Candidates at Various Ages at Bar Attempt (Using Age Ranges)

Age at Bar Attempt (N = 7,252)	Gender		
	Female (n = 3,592)	Male (n = 3,656)	Omitted (n = 4)
<27 (n = 3,669)	54.1%	47.1%	25.0%
27-28 (n = 1,523)	20.6%	21.4%	25.0%
29-30 (n = 715)	8.8%	10.9%	0.0%
31-35 (n = 732)	9.0%	11.2%	0.0%
36-40 (n = 270)	3.1%	4.3%	0.0%
41-45 (n = 169)	2.0%	2.6%	25.0%
46-50 (n = 90)	1.1%	1.4%	25.0%
51-55 (n = 53)	0.7%	0.8%	0.0%
56-60 (n = 19)	0.3%	0.2%	0.0%
>60 (n = 12)	0.2%	0.2%	0.0%

Table 2.16 provides a breakdown of the number of bar attempts by the domestic-educated candidates as a function of gender as of July 2005. Most of the domestic-educated candidates taking the NY bar exam in July 2005 were taking it for the first time, with males a bit more likely to be repeating the examination than females. Modest percentages were taking the examination for the second or third times, with 96.8% of females and 96.0% of males taking the NY bar exam for the third time or less. As of July 2005, the domestic-educated females had taken the bar examination an average of 1.25 times, while the domestic-educated males had taken it an average of 1.34 times (with SDs of 1.24 and 1.98, respectively).

Table 2.16
Percentages of Female and Male Domestic-Educated Candidates for Number of Bar Attempts

Number of Bar Attempts (N = 7,252)	Gender		
	Female (n = 3,592)	Male (n = 3,656)	Omitted (n = 4)
1 (n = 6,585)	91.4%	90.2%	50.0%
2 (n = 217)	2.6%	3.4%	0.0%
3 (n = 190)	2.8%	2.4%	25.0%
4 (n = 89)	1.1%	1.3%	0.0%
5 (n = 61)	0.7%	1.0%	25.0%
6 (n = 29)	0.4%	0.4%	0.0%
7 or more (n = 81)	1.0%	1.3%	0.0%

2.4 Characteristics of Foreign-Educated Candidates

The demographic characteristics of the foreign-educated candidates are quite different from those of the domestic-educated candidates.

Tables 2.17 and 2.18 analyze the relationship between gender and race/ethnicity for the foreign-educated candidates, first-time takers and repeaters. Table 2.17 reports the racial/ethnic distributions of the female and the male foreign-educated first-time takers. The race/ethnic category with the highest percentage of candidates is the Asian/Pacific Islander category, followed by the Caucasian/White category, “Other” category, Hispanic/Latino category, and Black/African American category. None of the foreign-educated candidates chose the Puerto Rican, Chicano/Mexican American, or American Indian/Alaskan Native categories.

Table 2.17
Percentages of Foreign-Educated First-Time Takers in Various Race/Ethnicity Categories for Female and Male Candidates

Race/Ethnicity	Gender		Total* (N = 1386)
	Female (n = 633)	Male (n = 748)	
Caucasian/White (n = 554)	42.5%	38.1%	40.0%
Asian/Pacific Islander (n = 590)	38.7%	45.9%	42.6%
Black/African American (n = 67)	5.4%	4.3%	4.8%
Hispanic/Latino (n = 73)	6.0%	4.7%	5.3%
Other (n = 92)	6.6%	6.7%	6.6%
Omitted (n = 10)	0.8%	0.4%	0.7%

*Total includes five candidates who did not record their genders.

In contrast with the domestic-educated first-time takers, for the foreign-educated first-time takers, females were more likely than males to be Caucasian/White. Among the foreign-educated first-time takers, the female category had a higher percentage of Caucasian/Whites and a lower percentage of Asian/Pacific Islanders than the male category; 42.5% of the female foreign-educated first-time takers were Caucasian/White, and 38.1% of the male foreign-educated first-time takers were Caucasian/White, while 38.7% of the female foreign-educated first-time takers were Asian/Pacific Islander, and 45.9% of the male foreign-educated first-time takers were Asian/Pacific Islander. The foreign-educated first-time takers who categorized themselves as Black/African American constituted a higher percentage of the females than of the males (5.4% to about 4.3%) as did those categorizing themselves as Hispanic/Latino (6.0% to about 4.7%).

Table 2.18
Percentages of Foreign-Educated Repeaters in Various Race/Ethnicity Categories for Female and Male Candidates

Race/Ethnicity	Gender		Total* (N = 576)
	Female (n = 268)	Male (n = 296)	
Caucasian/White (n = 121)	21.3%	20.6%	21.0%
Asian/Pacific Islander (n = 243)	44.0%	40.5%	42.2%
Black/African American (n = 113)	15.7%	23.6%	19.6%
Hispanic/Latino (n = 36)	7.1%	5.4%	6.3%
Other (n = 62)	11.6%	9.8%	10.8%
Omitted (n = 1)	0.4%	0.0%	0.2%

*Total includes 12 candidates who did not record their genders.

For the foreign-educated repeaters, Table 2.18 presents the percentages of the females and of the males in each racial/ethnic group. A slightly higher percentage of the females than of the males classified themselves as Caucasian/White (21.3% to about 20.6%) and as Asian/Pacific Islander (44.0% to 40.5%). In the Black/African American group, males outnumbered females. In the Hispanic/Latino group, females outnumbered males.

The results in Table 2.18 differ from those of the domestic-educated repeat takers (Table 2.13), where the Caucasian/White and Asian/Pacific Islander groups constituted lower percentages of females than males and the Black/African American group constituted higher percentages of females than males. The results are comparable for the Hispanic/Latino group, where females outnumber males for the domestic- and foreign-educated repeaters.

Data on the ages at graduation from law school was not available for essentially all of the foreign-educated candidates, and therefore, analyses involving this variable could not be conducted for the foreign-educated candidates.

The foreign-educated candidates were generally a bit older than the domestic-educated candidates when they took the NY bar exam in July 2005. Among the foreign-educated candidates, females had an average age of 29.61 years when they took the

bar examination (compared to 27.93 for the domestic-educated females), and males had an average age at bar attempt of 32.74 years at this point (compared to 28.57 for the domestic-educated males). Table 2.19 presents a detailed description of the relationship between gender and age at bar attempt for the foreign-educated candidates. Note that a third of the foreign-educated females were under 27 and over two-thirds were under 30 when they took the NY bar exam, but just over 45% of the males were under 30 when they took the bar examination.

Table 2.19
Percentages of Foreign-Educated Female and Male Candidates at Various Ages at Bar Attempt (Using Age Ranges) in July 2005

Age at Bar Attempt (N = 1,962)	Gender		
	Female (n = 901)	Male (n = 1,044)	Omitted (n = 17)
<27 (n = 490)	33.6%	17.8%	5.9%
27-28 (n = 300)	18.0%	13.1%	5.9%
29-30 (n = 288)	15.2%	14.4%	5.9%
31-35 (n = 461)	19.6%	26.6%	35.3%
36-40 (n = 235)	8.1%	15.0%	29.4%
41-45 (n = 98)	2.7%	7.0%	5.9%
46-50 (n = 55)	2.2%	3.3%	5.9%
51-55 (n = 15)	0.3%	1.1%	0.0%
56-60 (n = 13)	0.1%	1.1%	0.0%
>60 (n = 7)	0.1%	0.5%	5.9%

The foreign-educated candidates were much more likely than the domestic-educated candidates to be repeating the NY bar exam, with just under 10% of the domestic-educated candidates repeating, compared to almost 30% of the foreign-educated candidates repeating. Table 2.20 provides an analysis of the number of bar attempts as of July 2005 as a function of gender for the foreign-educated candidates. Females were a bit more likely than males to be repeating the bar exam, but were more likely to be taking it for the second, third, or fourth time, rather than the fifth time or higher. 70.3% of the females and 71.6% of males were taking the bar examination for

the first time. As of July 2005, the foreign-educated females had taken the examination an average of 1.72 times, and the foreign-educated males had taken it an average of 1.96 times (with SDs of 1.72 and 2.83 respectively).

Table 2.20
Percentages of Foreign-Educated Female and Male Candidates for Number of Bar Attempts

Number of Bar Attempts (N = 1,962)	Gender		
	Female (n = 901)	Male (n = 1,044)	Omitted (n = 17)
1 (n = 1,386)	70.3%	71.6%	29.4%
2 (n = 220)	12.5%	10.1%	11.8%
3 (n = 159)	8.7%	7.4%	23.5%
4 (n = 71)	4.2%	3.2%	0.0%
5 (n = 42)	1.6%	2.7%	0.0%
6 (n = 19)	0.7%	1.0%	17.6%
7 (n = 16)	0.8%	0.8%	5.9%
8 (n = 10)	0.2%	0.8%	0.0%
9 (n = 7)	0.3%	0.4%	0.0%
10 (n = 8)	0.0%	0.8%	0.0%
>10 (n = 24)	0.8%	1.4%	11.8%

Notes:

1. Adding the percentages listed in tables throughout this report may result in total percentages that differ slightly from 100% due to rounding (e.g., a total percentage of 100.1%), as percentages reported in the tables were rounded to the nearest tenth of a percent.

3. Analyses of Candidate Performance on the July 2005 New York Bar Examination

This section provides detailed descriptions of the performance of the domestic-educated candidates and the foreign-educated candidates on the July 2005 administration of the NY bar exam. It includes analyses of scores on the three different components of the NY bar exam and on the examination as a whole for various groups of candidates. The implications of these results in terms of percentages passing and failing the bar examination are examined in the next section.

The NY bar exam includes four sections, each with different kinds of questions or tasks; the Multistate Bar Examination (MBE), which includes 200 multiple-choice questions; the New York Essay Examination with five essay questions (NY Essay); one Multistate Performance Test task (MPT); and the New York multiple-choice test (NYMC) with 50 questions. In determining the scores on the New York bar exam, the five New York Essays and the MPT are combined to produce a total essay score (essay).

The scores on each component of the NY bar exam (the MBE, the essay, and the NYMC) are scaled to a 0-1,000-point scale. First, the MBE score, which is reported on a 0-200 scale, is multiplied by 5, putting it onto a 0-1,000 scale. The essay scores and the NYMC scores are then scaled to this MBEx5 scale. Scaling the essay and NYMC scores to the MBEx5 ensures that, for the total group of candidates taking the NY bar exam on a given test date, the mean, or average, and the SD (standard deviation), or spread, of the essay scores and of the NYMC scores will be the same as the mean and SD of the MBE scores on the MBEx5.

This scaling does not ensure that the means and SDs on the different components will be the same in the sample of candidates who agreed to participate in the study (the respondents), although we expect them to be similar because most of the candidates agreed to participate. Also, the scaling does not ensure that the means and SDs of the different tests will be the same in different sub-groups of respondents, and the means are not necessarily expected to be similar in these sub-groups. When reported below, scores for components of the NY bar exam will be reported on a 0-1,000 scale, unless otherwise noted.

In computing the total score for each candidate on the NY bar exam, the MBE gets a weight of 40%, and the NYMC gets a weight of 10%. The five New York essay questions together get a weight of 40%, and the MPT gets a weight of 10%, and therefore, the essay score, derived from the scores on the five essays and the MPT, is assigned a weight of 50%.

An important aspect of test scores is their *reliability*. Reliability refers to the consistency or repeatability in scores and reflects the extent to which the measurements are free of random variation or random error. Reliability is typically reported as a

correlation coefficient that varies from 0.0 to 1.0, where higher values reflect more precision and lower values indicate less precision. All measurement contains some random (i.e., unexplained) variability; for example, if a person takes two tests covering the same content in more-or-less the same way, the two scores are not likely to be exactly the same. We expect the two scores to be similar, but we do not expect them to be identical. Such variability is typically attributed to *random errors* that have some impact on observed scores.

The reliabilities for the components of the NY bar exam are all fairly high.[1] MBE scores have a reliability of about .90. Multiple-choice tests typically have high reliabilities, and long multiple-choice tests (the MBE has 200 items) tend to have especially good reliability. The New York Multiple-Choice test (NYMC) is much shorter than the MBE, and mainly as a result of that has a somewhat lower reliability, about 0.78. The essay component (including the MPT) has a reliability of about .80. The total score on the NY bar exam that results when the three components are combined with the appropriate weights has a reliability of about .92.[2]

For purposes of this report, having the component scores of the NY bar exam on the same 0-1,000 scale facilitated comparisons of component scores across and within groups of candidates. In analyzing the patterns of performance on the NY bar exam, we will focus on the results for various groups of candidates defined in terms of the demographic variables discussed in Section 2 (e.g., domestic-educated male candidates) and then summarize the results in terms of the patterns of performance across groups. We will begin with the domestic-educated first-time takers and repeat takers, and then examine results for the foreign-educated first-time takers and repeaters. Within each of these broadly defined groups, we will also look at performance in terms of gender, race/ethnicity, and age.

3.1 Technical Note on Standard Errors in Estimating Group Mean Scores

We have tried to make this report as non-technical and therefore as accessible as possible, but the accurate interpretation of many of the results in this section requires at least a general understanding of what is called the *standard error of the mean* (SEM). SEMs are intended to provide an indication of the uncertainty in an estimated mean or average score based on a sample from the population being analyzed. Standard errors provide an explicit caveat about the potential for over-interpreting small differences.

The sample analyzed in this report includes over 90% of the candidates who took the NY bar exam in July 2005, and therefore provides good estimates of group means for the total population of candidates who took that exam in July 2005, and for various subgroups in that population. However, in extending the interpretation to future July administrations, the inference must be more tentative. The results from July 2005 are likely to be fairly representative of those that will result from future July NY bar exam administrations, assuming that the tests remain the same, and the educational system and candidate population do not change too much.

However, even if everything stays the same, the results are likely to vary somewhat, just because the sample of specific individuals taking the examination will be different. This sampling variability tends to have an especially big impact if the number of candidates in the group being examined, the *sample size*, is small. For example, if the sample size is 5, the addition of one candidate with an especially high or low score would have a major impact on the average score; if the sample size were 5,000, the addition of one candidate with an especially high or low score would have little impact on the group average. Results tend to be more variable from one sample to another if the sample size is small.

The formulas used to estimate standard errors are based on statistical sampling theory, and reflect the random variability associated with the sampling of individuals on any given test date. They do not include any systematic errors due to changes in the population over time.

The theory used to develop formulas for estimating the standard error is quite complicated, but the final result is fairly simple. The standard error in estimating the mean (or average) score for a group is equal to the SD (standard deviation) for the group over the square root of the sample size (i.e., the number of candidates), and therefore, as the sample size gets larger, the standard error of the mean (SEM) gradually gets smaller. The decrease in the standard error as the sample size increases is gradual because the SEM is inversely proportional to the *square root* of the sample size. As a result, in order to cut the SEM in half, the sample size has to be made four times as large. So, if the SEM is based on a sample of 100, the sample size would have to be increased to 400 to cut the SEM in half and to 1,600 to cut it by three quarters. A law of diminishing returns operates for standard errors, and the standard error never reaches zero.

Thus, the standard error for a group mean depends on the SD within the group and the sample size for the group. The SDs for the various groups considered in this section vary somewhat (from about 50 to about 90), but the sample sizes vary much more (from a few individuals to sample sizes of over 5,000). Therefore, the sample size tends to be the dominant factor in determining the standard error.

Assuming a typical SD of about 70, a sample size of 100 would yield a SEM of about 7 ($70/\sqrt{100} = 7$), and a sample size of 49 would yield a SEM of about 10 ($70/\sqrt{49} = 10$). For a sample size of about 25, the SEM would be about 14. As a rule of thumb, we will not place much emphasis on group means based on fewer than 100 candidates and even less emphasis on group means based on fewer than 50 candidates. In this and subsequent sections, we will generally not report group means for groups with fewer than 20 candidates. As the sample size gets small (e.g., below 20), the group mean says more about the particular individuals in the sample than it does about the group as a whole or about what might be found in future July bar examination administrations. Note that we did, however, report group counts and percentages in

Section 2 for groups with fewer than 20 candidates to provide information regarding the characteristics (e.g., race/ethnicity) of the candidate sample from the July 2005 NY bar exam administration.

3.2 Note on Confidence Intervals

Confidence intervals are often used to indicate the uncertainty in a reported statistic. Assuming that the main source of uncertainty in a reported statistic is sampling variability, confidence intervals can be defined in terms of standard errors. In particular, a 68% confidence interval covers the range from one standard error below the mean, or average, to one standard error above the mean. It is called a "68% confidence interval" because such intervals are expected to include the true value of the mean about 68% of the time. Similarly, a 95% confidence interval includes the range from two standard errors below the mean to two standard errors above the mean and is expected to include the true value of the mean about 95% of the time.[3]

Standard errors are reported in many of the tables in this report and can be used to construct approximate confidence intervals if the reader wishes to do so. Alternately, they can be taken simply as cautionary notes not to over interpret relatively small differences (i.e., differences that are not much bigger than the standard errors involved in the comparison) in generalizing the result across future July administrations.[4]

3.3 Domestic-Educated First-Time Takers

As discussed in Section 2, the domestic-educated first-time takers include candidates who had graduated from a law school in the United States and were taking the bar examination for the first time in New York during the July 2005 administration. (It is possible that some of these candidates had taken a previous bar examination in a different jurisdiction). Most of these candidates were recent graduates of law school. This group is 73.2% Caucasian/White, but also includes substantial numbers of other racial/ethnic groups. It has approximately the same number of males (50.1%) and females (49.9%).

Table 3.1 reports the means and SDs on each part of the NY bar exam and the means and SDs on the total NY bar exam for domestic-educated first-time takers. Table 3.1 includes separate rows for females, males, and the total group. The mean bar examination score for the total group of just over 727 is well above the current passing score. Note that the standard errors (ranging from 0.9 to 1.3) are quite small because the sample sizes are quite large.

Table 3.1
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated First-Time Takers: Females and Males

Gender		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Female (n = 3,284; SEM ≈ 1.2)	Mean	713.28	734.08	719.75	724.34
	(SD)	(72.53)	(69.21)	(76.85)	(63.74)
Male (n = 3,299; SEM ≈ 1.3)	Mean	740.04	724.12	724.62	730.54
	(SD)	(72.97)	(71.98)	(78.77)	(65.05)
Total* (N = 6,585; SEM ≈ 0.9)	Mean	726.69	729.07	722.20	727.44
	(SD)	(73.96)	(70.80)	(77.84)	(64.47)

*Total includes two candidates in the sample of domestic-educated first-time test takers who did not record their genders.
Note: The standard error of the mean (SEM) is equal to the SD divided by the square root of the sample size, and is given in the table after the sample size (n or N).

The male candidates did better on average than the females on the MBE and slightly better on the NYMC. The female candidates did better on average than males on the essay, which includes both the essay questions and the MPT task. The difference between males and females on the MBE is about 27 points (about 5 points on the MBE scale), while the difference on the essay is 10 points, and as a result the average score for males on the total NY bar exam is about six points higher than the average score for females. This difference of 6 points is equal to about a tenth of the SD (64.47) for the total group. A difference of less than a tenth of an SD would be considered a small difference in most contexts.

Table 3.2 presents similar results for the domestic-educated first-time takers, as a function of their race/ethnicity. Note that some of the sample sizes in this table are quite small (e.g., the Chicano/Mexican American group had 23 candidates), and therefore, the corresponding standard errors are fairly large (over 15 points), and these mean scores would not be expected to be very stable for this group from one test date to another.[5]

There are two general characteristics of the data in Table 3.2 that are worthy of note. First, in general, the results are fairly consistent across test components within each racial/ethnic group; the difference between the highest average component score and the lowest average component score within each group is generally less than ten points (about one seventh of an SD). An exception to this generalization is the difference between the average MBE score and the average NYMC score for Chicano/Mexican American candidates, but note that this group has a small sample size

and therefore, large standard errors for the different mean scores.

Table 3.2
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 4,818; SEM ≈ 1.0)	Mean	735.63	737.03	730.21	735.79
	(SD)	(71.73)	(68.26)	(75.34)	(61.79)
Asian/ Pacific Islander (n = 740; SEM ≈ 2.7)	Mean	712.70	719.09	711.90	715.82
	(SD)	(73.54)	(72.89)	(77.57)	(65.37)
Black/ African American (n = 430; SEM ≈ 3.3)	Mean	673.21	678.97	671.39	675.90
	(SD)	(66.53)	(67.39)	(81.71)	(59.28)
Hispanic/ Latino (n = 214; SEM ≈ 5.1)	Mean	699.59	706.52	702.10	703.31
	(SD)	(82.47)	(68.49)	(77.95)	(67.20)
Puerto Rican (n = 73; SEM ≈ 8.5)	Mean	710.46	707.86	712.24	709.37
	(SD)	(71.93)	(73.60)	(77.84)	(65.55)
Chicano/ Mexican American (n = 23; SEM ≈ 15.2)	Mean	720.91	710.25	698.85	713.39
	(SD)	(70.49)	(81.25)	(74.28)	(65.76)
Other (n = 268; SEM ≈ 4.3)	Mean	718.20	719.32	708.45	717.81
	(SD)	(69.61)	(72.19)	(76.54)	(63.25)
Total* (N = 6,585; SEM ≈ 0.9)	Mean	726.69	729.07	722.20	727.44
	(SD)	(73.96)	(70.80)	(77.84)	(64.47)

*Total includes racial/ethnic groups with fewer than 20 candidates, which are not separately listed in the table.
Note: The SEM tends to be large for groups with small sample sizes. For example, for the Chicano/Mexican American group (with 23 candidates) the SEM is over 15 points.

Second, the differences between racial/ethnic groups in Table 3.2 are quite large. The Caucasian/White group has the highest overall average score, and the Black/African American group has the lowest overall average score on the examination as a whole. The difference between these two groups is almost 60 points, which is close to one standard deviation (SD) for the total sample. The American Indian/Alaskan Native group (not reported in Table 3.2 because this group included only 9 candidates) has the second highest overall mean, followed by “Other,” Asian/Pacific Islander,

Chicano/Mexican American, Puerto Rican, and Hispanic/Latino groups.

Combining these two observations, it is clear that the differences among the racial/ethnic groups are not associated with particularly high or low scores on one component of the bar examination. Rather, the differences are fairly consistent across all of the components.

Table 3.3
Score Means, Standard Deviations, and Standard Errors
Female Domestic-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 2,265; SEM ≈ 1.4)	Mean	722.57	743.52	728.50	733.65
	(SD)	(70.42)	(66.48)	(73.59)	(61.02)
Asian/ Pacific Islander (n = 424; SEM ≈ 3.4)	Mean	706.47	726.98	715.30	717.63
	(SD)	(70.11)	(69.05)	(76.19)	(62.40)
Black/ African American (n = 279; SEM ≈ 4.1)	Mean	666.93	687.87	673.75	678.08
	(SD)	(68.48)	(66.32)	(81.50)	(59.94)
Hispanic/ Latino (n = 108; SEM ≈ 7.2)	Mean	686.44	708.84	702.68	699.25
	(SD)	(79.36)	(70.93)	(81.69)	(68.56)
Puerto Rican (n = 42; SEM ≈ 11.0)	Mean	712.01	730.79	715.62	721.74
	(SD)	(74.81)	(69.33)	(75.46)	(64.59)
Other (n = 142; SEM ≈ 5.9)	Mean	698.35	717.93	700.97	708.43
	(SD)	(70.58)	(67.19)	(78.36)	(62.72)
Total* (N = 3,284; SEM ≈ 1.2)	Mean	713.28	734.08	719.75	724.34
	(SD)	(72.53)	(69.21)	(76.85)	(63.74)

*Total includes racial/ethnic groups with fewer than 20 candidates, which are not separately listed in the table.

Tables 3.3 and 3.4 provide a more detailed analysis of test scores, and make it possible to identify some interactions between gender and race/ethnicity. Table 3.3 reports the means and SDs on each component of the NY bar exam and the means and SDs on the total NY bar exam for female candidates as a function of race/ethnicity. Table 3.4 reports the corresponding results for male candidates as a function of race/ethnicity. For some of the racial/ethnic groups (particularly American Indian/Alaskan Native and Chicano/Mexican American) the sample sizes are too small to draw any firm conclusions and are not included.

Table 3.4
Score Means, Standard Deviations, and Standard Errors
Male Domestic-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 2,552; SEM ≈ 1.4)	Mean	747.22	731.34	731.72	737.73
	(SD)	(70.91)	(69.25)	(76.84)	(62.41)
Asian/ Pacific Islander (n = 316; SEM ≈ 4.3)	Mean	721.05	708.51	707.33	713.41
	(SD)	(77.25)	(76.59)	(79.27)	(69.18)
Black/ African American (n = 151; SEM ≈ 5.5)	Mean	684.81	662.52	667.02	671.88
	(SD)	(61.29)	(66.46)	(82.19)	(58.02)
Hispanic/ Latino (n = 106; SEM ≈ 7.1)	Mean	712.98	704.15	701.52	707.44
	(SD)	(83.79)	(66.16)	(74.34)	(65.84)
Puerto Rican (n = 31; SEM ≈ 12.7)	Mean	708.35	676.79	707.67	692.61
	(SD)	(68.99)	(68.55)	(81.99)	(64.09)
Other (n = 126; SEM ≈ 6.1)	Mean	740.58	720.89	716.89	728.37
	(SD)	(61.48)	(77.68)	(73.84)	(62.41)
Total* (N = 3,299; SEM ≈ 1.3)	Mean	740.04	724.12	724.62	730.54
	(SD)	(72.97)	(71.98)	(78.77)	(65.05)

*Total includes racial/ethnic groups with fewer than 20 candidates, which are not separately listed in the table.

For the remaining groups in Tables 3.3 and 3.4 and for both females and males, the differences across racial/ethnic groups are larger than the differences across test components within groups. The differences across test components within groups generally cover a range of about 20 points or less, while the difference between the highest and lowest group averages is about 55 points for females and over 65 points for males. In both cases, the Caucasian/White group has the highest mean and the Black/African American group has the lowest mean. For females, the second, third, fourth, and fifth averages are for Puerto Rican, Asian/Pacific Islander, "Other," and Hispanic/Latino, respectively. For males, the second through fifth averages are for "Other," Asian/Pacific Islander, Hispanic/Latino, and Puerto Rican, respectively.

The finding that females tend to do relatively well on the essay and males do relatively well on the MBE holds up across racial/ethnic groups. The females have a

higher average score on the essay than they do on the MBE for every racial/ethnic group other than the Chicano/Mexican American group, and in this one group, the sample size is relatively small, resulting in relatively large standard errors. The male candidates have a higher average score on the MBE than they do on the essay for every racial/ethnic group. The finding that females do better than males on the essay and males do better than females on the MBE is quite consistent across analyses.

Comparing results for different groups across Tables 3.3 and 3.4, we see that the differences between females and males in their average total scores are inconsistent in magnitude and direction. For the Caucasian/White group the average total score for females is about 4 points lower than that for males, and for the Hispanic/Latino group, the average for females is about 8 points lower than that for males. For the Asian/Pacific Islander, Black/African American, and Puerto Rican groups, females have higher average total scores than males. The "Other" group has a 20-point difference favoring males.

As indicated earlier there is a substantial interaction between gender and race/ethnicity among the candidates taking the NY bar exam. Within the Caucasian/White group, there were more males than females, but in all other racial/ethnic groups, females outnumbered males. Therefore, in comparing the performance of females to that of males, we are comparing two groups that differ not just in gender, but in their racial/ethnic composition.

In order to check on the impact of this interaction, we created an artificial sample in which percentages of males and females would be the same for each racial/ethnic group, and then computed the overall means for males and females in this artificial sample. More specifically, we multiplied the percentage of candidates in each racial/ethnic group by the mean for males in that racial/ethnic group to get a population-weighted mean for males. Separately, we multiplied the percentage of the sample in each racial/ethnic group by the mean for females in that racial/ethnic group to get a population-weighted mean for females. The resulting mean total score for males was 728.74 and the mean total score for females was 725.88 for a difference of about 3 points, which is about half the difference reported in Table 3.1 for the actual sample of candidates. So, about half of the observed difference in mean scores between females and males can be attributed to the fact that racial/ethnic groups with relatively low scores on the bar examination are more heavily represented among the females than the males.

Figure 3.1 displays the trends in scores for each part of the NY bar exam and for the total bar exam. In this figure, the scores within racial/ethnic groups are fairly similar across the components of the NY bar exam and total NY bar exam. In contrast, racial/ethnic groups show larger differences in their average scores. That is, the lines for different racial/ethnic groups are relatively flat, but they are widely separated, covering a range of nearly 60-points between the Caucasian/White group (highest scoring) and the Black/African American group (lowest scoring).

Figure 3.1
Trends in Essay, NYMC, MBE, and Total NY Bar Exam Scores
Racial/Ethnic Groups

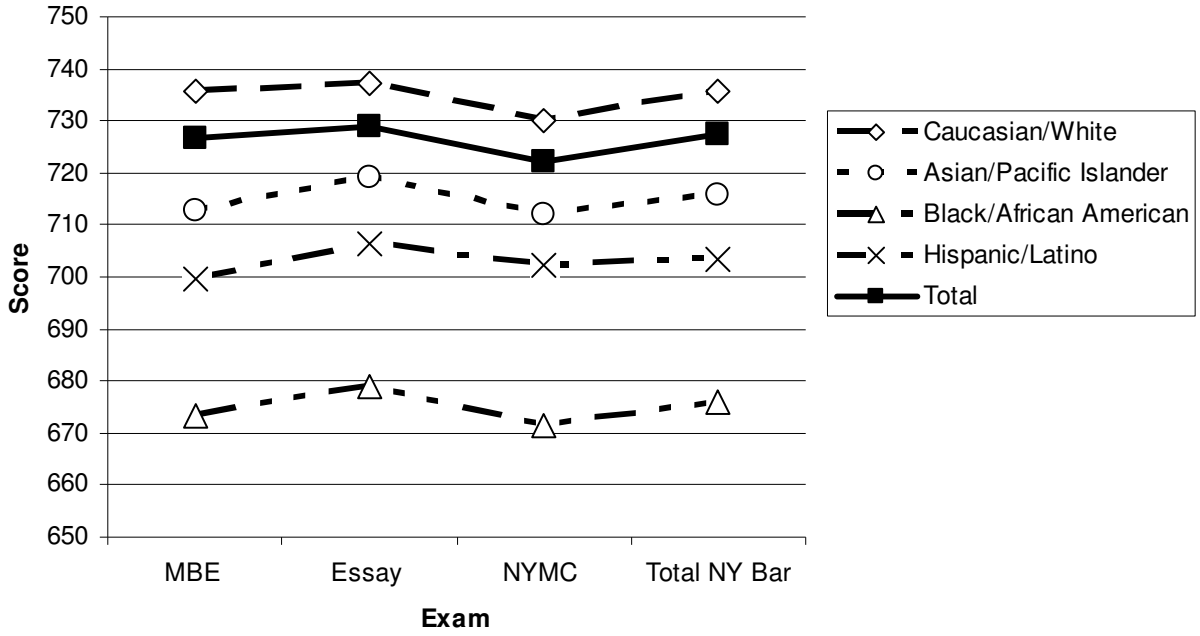


Table 3.5 examines the relationship between average test scores and age at graduation from law school for domestic-educated first-time takers. The average score for the total NY bar exam decreases systematically from the first age category (less than 27) until the seventh category (46 - 50) and then increases for the last category included in the table. The trends for the three test components are similar, with a systematic decrease in the early categories, and then a slight upturn for the last category (Note that the last few categories have large standard errors, and as a result, the increases for the last categories are not statistically significant).

Table 3.5
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated First-Time Takers: Age at Graduation

Age at Graduation		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Less than 27 (n = 3,768; SEM ≈ 1.1)	Mean	730.80	739.53	727.62	734.86
	(SD)	(71.94)	(68.01)	(76.72)	(62.06)
27 - 28 (n = 1,343; SEM ≈ 1.9)	Mean	728.75	725.96	721.79	726.66
	(SD)	(74.16)	(68.86)	(76.63)	(63.80)
29 - 30 (n = 585; SEM ≈ 3.0)	Mean	724.37	720.35	713.29	721.25
	(SD)	(73.83)	(69.74)	(80.47)	(63.95)
31 - 35 (n = 537; SEM ≈ 3.1)	Mean	715.80	706.27	712.11	710.67
	(SD)	(73.38)	(68.01)	(79.31)	(62.56)
36 - 40 (n = 160; SEM ≈ 6.1)	Mean	704.86	688.36	701.17	696.28
	(SD)	(82.09)	(77.02)	(76.32)	(71.45)
41 - 45 (n = 78; SEM ≈ 9.1)	Mean	694.44	676.82	701.32	686.35
	(SD)	(87.08)	(80.08)	(78.97)	(76.04)
46 - 50 (n = 47; SEM ≈ 10.9)	Mean	697.16	670.63	688.11	682.91
	(SD)	(75.87)	(74.40)	(81.94)	(66.25)
51 - 55 (n = 26; SEM ≈ 14.6)	Mean	714.04	669.65	710.51	691.58
	(SD)	(68.14)	(79.06)	(84.81)	(65.85)
Total* (N = 6,556; SEM ≈ 0.9)	Mean	727.15	729.49	722.57	727.87
	(SD)	(73.47)	(70.40)	(77.63)	(64.02)

*Total includes age ranges with fewer than 20 candidates not separately listed in the table.

3.4 Domestic-Educated Repeaters

Table 3.6 reports the means and SDs on the three components of the bar examination and the means and SDs on the total NY bar exam for domestic-educated repeaters. It reports results for females, males, and the total group of domestic-educated repeaters.

The first thing to note in examining Table 3.6 in relation to Table 3.1 is that for both females and males and on all components of the test, the average scores for repeat takers are much lower than they are for the first-time takers. For the total group of domestic-educated first-time takers, the average score on the NY bar exam is over 100 points higher than that for the repeat takers (727.44 vs. 623.77). The repeat takers have all failed the NY bar exam on at least one previous test date and generally have lower scores than the first-time takers on subsequent test dates. Past performance tends to be correlated with future performance.

The female repeat takers do better on average than male repeat takers on the essay and on the NYMC. The male repeat takers do better on average than females on the MBE. The difference between males and females on the MBE is about 13 points on the 0-1,000-point scale, while the difference on the essay is about 17 points, and, as a result, the average scores for female repeat takers on the total NY bar exam is about 4 points higher than the average for male repeat takers. This difference of 4 points is less than one-tenth of an SD (and is less than the standard error for the difference between these two means).

Table 3.6
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated Repeaters: Females and Males

Gender		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Female (n = 308; SEM ≈ 3.4)	Mean	615.65	633.84	626.14	625.78
	(SD)	(57.17)	(63.54)	(68.09)	(51.95)
Male (n = 357; SEM ≈ 3.2)	Mean	628.51	617.14	620.64	622.03
	(SD)	(58.28)	(63.80)	(71.59)	(50.29)
Total* (N = 667; SEM ≈ 2.4)	Mean	622.52	624.88	623.33	623.77
	(SD)	(58.01)	(64.26)	(69.94)	(51.06)

*Total includes two candidates in the sample of domestic-educated repeaters who did not record their genders.

Table 3.7 presents results for the domestic-educated repeaters as a function of their race/ethnicity. Note that some of the sample sizes in this table are quite small, and therefore the standard errors are large. The results are fairly consistent across test components within each racial/ethnic group; the difference between the highest average component score and the lowest average component score in each group is generally less than fifteen points (about a fourth of an SD), though the difference is 20 points for the “Other” group.

The differences between racial/ethnic groups for domestic-educated repeaters

are much smaller than they are for the domestic-educated first-time takers. Among the repeat takers, the Caucasian/White group has the highest overall average total score, and the Black/African American group has the lowest average total score. The difference between these two groups is about 18 points, which is much smaller than the corresponding difference for first-time takers.

Table 3.7
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated Repeaters: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 302; SEM ≈ 3.5)	Mean	626.85	633.83	628.92	630.53
	(SD)	(55.68)	(66.40)	(68.87)	(50.75)
Asian/ Pacific Islander (n = 111; SEM ≈ 6.0)	Mean	626.23	616.38	629.85	621.67
	(SD)	(61.22)	(66.21)	(70.44)	(54.82)
Black/ African American (n = 154; SEM ≈ 5.0)	Mean	613.98	613.15	604.98	612.67
	(SD)	(61.57)	(60.77)	(74.89)	(52.15)
Hispanic/ Latino (n = 42; SEM ≈ 8.4)	Mean	618.89	614.09	631.68	617.74
	(SD)	(57.00)	(56.19)	(60.73)	(43.86)
Other (n = 31; SEM ≈ 9.9)	Mean	615.21	635.10	615.33	625.06
	(SD)	(60.14)	(57.21)	(59.67)	(44.45)
Total* (N = 667; SEM ≈ 2.4)	Mean	622.52	624.88	623.33	623.77
	(SD)	(58.01)	(64.26)	(69.94)	(51.06)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Tables 3.8 and 3.9 provide an analysis of domestic-educated repeater performance as a function of gender and race/ethnicity. Table 3.8 reports the means and SDs on each component of the NY bar exam and the mean and SD on the total NY bar exam for female candidates as a function of race/ethnicity. Table 3.9 reports the corresponding results for male candidates as a function of race/ethnicity. For some of the racial/ethnic groups (particularly Puerto Rican, American Indian/Alaskan Native, Chicano/Mexican American, and the "Other" group), the sample sizes are too small to draw any firm conclusions and are not included in the tables.

For the remaining groups and for both females and males, the differences across racial/ethnic groups are smaller than they are for the first-time takers, covering a range

of about 20 points. The differences across test components within groups are comparable to what they were for the first-time takers. In both cases the Caucasian/White group has the highest mean and the Black/African American group has the lowest mean. In general, across racial/ethnic groups, female repeat takers tend to do relatively well on the essay and males do relatively well on the MBE.

Table 3.8
Score Means, Standard Deviations, and Standard Errors
Female Domestic-Educated Repeaters: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 133; SEM ≈ 5.2)	Mean	619.79	640.27	630.50	631.07
	(SD)	(55.24)	(66.66)	(65.94)	(52.57)
Asian/ Pacific Islander (n = 47; SEM ≈ 9.0)	Mean	628.07	642.12	636.79	635.96
	(SD)	(58.29)	(65.18)	(69.17)	(55.15)
Black/ African American (n = 78; SEM ≈ 7.1)	Mean	605.47	624.90	606.51	615.31
	(SD)	(62.11)	(60.19)	(74.90)	(54.68)
Hispanic/ Latino (n = 26; SEM ≈ 9.9)	Mean	605.19	616.05	638.63	613.96
	(SD)	(51.11)	(55.52)	(54.10)	(40.44)
Total* (N = 308; SEM ≈ 3.4)	Mean	615.65	633.84	626.14	625.78
	(SD)	(57.17)	(63.54)	(68.08)	(51.95)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Table 3.9
Score Means, Standard Deviations, and Standard Errors
Male Domestic-Educated Repeaters: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 169; SEM ≈ 4.7)	Mean	632.40	628.76	627.69	630.11
	(SD)	(55.56)	(65.96)	(71.26)	(49.42)
Asian/ Pacific Islander (n = 63; SEM ≈ 7.8)	Mean	625.47	598.42	623.80	611.78
	(SD)	(64.05)	(60.79)	(71.63)	(52.74)
Black/ African American (n = 76; SEM ≈ 7.0)	Mean	622.71	601.09	603.40	609.96
	(SD)	(60.17)	(59.36)	(75.35)	(49.64)
Total* (N = 357; SEM ≈ 3.2)	Mean	628.51	617.14	620.64	622.03
	(SD)	(58.28)	(63.80)	(71.59)	(50.29)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Table 3.10 examines the relationship between average test scores and age at graduation from law school for domestic-educated repeaters. The relationship between average bar scores and age at graduation in Table 3.10 is not as regular and systematic as it is for the first-time takers. This is, no doubt, due in part to the relatively small sample sizes for repeat takers and to the restriction in range of their scores, which have lower averages and smaller SDs than those of the first-time takers.

Table 3.10
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated Repeaters: Age at Graduation

Age at Graduation		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Less than 27 (n = 215; SEM ≈ 3.9)	Mean	627.85	638.62	617.57	632.20
	(SD)	(54.79)	(62.53)	(65.01)	(48.14)
27 - 28 (n = 100; SEM ≈ 6.1)	Mean	632.11	641.61	623.78	636.04
	(SD)	(60.61)	(59.06)	(71.68)	(50.96)
29 - 30 (n = 62; SEM ≈ 7.5)	Mean	620.61	628.02	623.02	624.48
	(SD)	(54.01)	(64.41)	(69.05)	(48.18)
31 – 35 (n = 99; SEM ≈ 6.2)	Mean	615.14	608.62	622.63	612.66
	(SD)	(59.68)	(59.36)	(79.66)	(49.26)
36 - 40 (n = 69; SEM ≈ 7.4)	Mean	621.09	612.60	631.23	617.86
	(SD)	(60.03)	(63.64)	(69.12)	(53.26)
41 - 45 (n = 37; SEM ≈ 9.0)	Mean	615.46	615.80	629.13	616.92
	(SD)	(47.89)	(57.60)	(70.63)	(42.65)
Total* (N = 615; SEM ≈ 2.4)	Mean	623.93	628.21	623.16	625.98
	(SD)	(56.72)	(62.16)	(69.71)	(49.26)

*Total includes age ranges with fewer than 20 candidates not separately listed in the table.

Table 3.11
Score Means, Standard Deviations, and Standard Errors
Domestic-Educated Takers: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1	Mean	726.69	729.07	722.20	727.44
(n = 6,585; SEM ≈ 0.9)	(SD)	(73.96)	(70.80)	(77.84)	(64.47)
2	Mean	638.10	633.83	626.74	634.82
(n = 217; SEM ≈ 4.2)	(SD)	(60.90)	(62.36)	(74.29)	(51.99)
3	Mean	621.69	630.40	635.42	627.38
(n = 190; SEM ≈ 4.4)	(SD)	(54.57)	(66.10)	(71.74)	(50.59)
4	Mean	617.49	622.00	615.77	619.55
(n = 89; SEM ≈ 6.0)	(SD)	(56.65)	(62.04)	(62.26)	(47.16)
5	Mean	608.78	623.41	608.97	616.15
(n = 61; SEM ≈ 7.4)	(SD)	(52.94)	(66.49)	(61.11)	(50.09)
6	Mean	621.24	616.60	610.52	617.90
(n = 29; SEM ≈ 10.9)	(SD)	(56.19)	(56.47)	(78.60)	(43.96)
7 or more	Mean	599.05	595.15	609.59	598.15
(n = 81; SEM ≈ 6.1)	(SD)	(53.27)	(60.55)	(59.89)	(47.41)
Total	Mean	717.11	719.48	713.11	717.90
(N = 7,252; SEM ≈ 0.9)	(SD)	(78.63)	(76.40)	(82.27)	(70.08)

Table 3.11 presents the averages and the SDs of the scores for each test component and for the total NY bar exam for domestic-educated first-time takers, second-time takers, third-time takers, etc. As noted earlier, the average score for the repeat takers, as a group, is substantially lower than that of the first-time takers. The average score on the total NY bar exam declines sharply as we move from the first-time takers to the second-time takers, and then declines more gradually as the number of attempts increases. The only exception to this steady decline is a slight increase in the average score between the groups with five and six attempts (for which, the standard errors are fairly large). This pattern also generally holds for the MBE and the essay, and with less consistency for the NYMC.

As indicated in Tables 3.12 and 3.13, this pattern is consistent across males and females. Table 3.12 indicates that females do better on the essay than they do on the MBE, regardless of their repeat status. As indicated in Table 3.13, males do better on the MBE than they do on the essay regardless of their repeat status.

Table 3.12
Score Means, Standard Deviations, and Standard Errors
Female Domestic-Educated Takers: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1	Mean	713.28	734.08	719.75	724.34
(n = 3,284; SEM ≈ 1.2)	(SD)	(72.53)	(69.21)	(76.85)	(63.74)
2	Mean	629.36	647.36	633.26	638.73
(n = 94; SEM ≈ 6.6)	(SD)	(62.05)	(66.24)	(71.34)	(57.23)
3	Mean	616.70	636.41	634.88	628.37
(n = 101; SEM ≈ 5.8)	(SD)	(53.03)	(62.77)	(67.13)	(48.24)
4	Mean	608.31	631.91	609.13	620.18
(n =40; SEM ≈ 7.4)	(SD)	(46.41)	(61.17)	(62.03)	(43.24)
5	Mean	606.75	629.72	630.35	620.54
(n =24; SEM ≈ 11.0)	(SD)	(59.08)	(54.13)	(56.27)	(45.92)
6	Mean	607.64	621.29	597.93	613.43
(n =14; SEM ≈ 14.6)	(SD)	(52.73)	(49.87)	(71.41)	(44.54)
7 or more	Mean	593.47	600.17	609.66	598.46
(n =35; SEM ≈ 10.4)	(SD)	(60.32)	(62.20)	(69.67)	(53.48)
Total	Mean	704.91	725.49	711.73	715.89
(N = 3,592; SEM ≈ 1.3)	(SD)	(76.40)	(74.25)	(80.52)	(68.60)

Table 3.13
Score Means, Standard Deviations, and Standard Errors
Male Domestic-Educated Takers: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1 (n = 3,299; SEM ≈ 1.3)	Mean	740.04	724.12	724.62	730.54
	(SD)	(72.97)	(71.98)	(78.77)	(65.05)
2 (n = 123; SEM ≈ 5.4)	Mean	644.78	623.50	621.76	631.82
	(SD)	(59.40)	(57.37)	(76.38)	(47.62)
3 (n = 88; SEM ≈ 6.8)	Mean	627.26	622.58	635.76	625.72
	(SD)	(56.35)	(69.17)	(77.42)	(53.44)
4 (n = 49; SEM ≈ 8.5)	Mean	624.98	613.91	621.19	619.04
	(SD)	(63.30)	(62.20)	(62.56)	(50.58)
5 (n = 36; SEM ≈ 9.9)	Mean	610.71	621.59	592.61	614.42
	(SD)	(49.91)	(73.56)	(59.73)	(53.34)
6 (n = 15; SEM ≈ 16.2)	Mean	633.93	612.21	622.28	622.07
	(SD)	(58.10)	(63.45)	(85.52)	(44.56)
7 or more (n = 46; SEM ≈ 7.4)	Mean	603.29	591.34	609.53	597.91
	(SD)	(47.47)	(59.66)	(52.05)	(42.84)
Total (N = 3,656; SEM ≈ 1.3)	Mean	729.15	713.67	714.47	719.94
	(SD)	(78.94)	(77.98)	(83.97)	(71.43)

In general, and not surprisingly, the repeat takers get lower scores on average than the first-time takers, and the performance tends to be worse for candidates with larger number of previous attempts. In addition, we have the consistent finding that, for domestic-educated repeaters, females do better than males on the essay, and males do better than females on the MBE.

3.5 Foreign-Educated First-Time Takers

Table 3.14 reports the means and SDs on each component of the NY bar exam and the means and SDs on the total NY bar exam for females, males, and the total group of foreign-educated first-time takers in the sample. As is the case for the domestic-educated first-time takers, males do better on average than females on the MBE and on the NYMC, and females do better than males on the essay. The difference between males and females on the MBE is about 26 points, while the difference on the essay is about 20 points, and the average total score for males on the bar examination

is about 2 points higher than the average total score for female candidates. This difference of two points is very small compared to the overall SD of almost 90 points and is less than the standard error (and therefore not statistically significant).

Table 3.14
Score Means, Standard Deviations, and Standard Errors
Foreign-Educated First-Time Takers: Females and Males

Gender		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Female (n = 633; SEM ≈ 3.8)	Mean	637.38	651.10	653.44	645.87
	(SD)	(96.90)	(94.63)	(98.85)	(89.54)
Male (n = 748; SEM ≈ 3.4)	Mean	663.33	631.06	670.25	647.89
	(SD)	(97.60)	(96.74)	(92.77)	(90.07)
Total* (N = 1,386; SEM ≈ 2.6)	Mean	651.36	640.22	662.54	646.92
	(SD)	(98.10)	(96.21)	(96.12)	(89.79)

*Total includes five candidates in the sample of foreign-educated first-time test takers who did not record their genders.

Table 3.15 presents average scores on each part of the NY bar exam and on the total NY bar exam for the foreign-educated first-time takers, as a function of their race/ethnicity. The results are not as consistent across test components within each racial/ethnic group as they were for the domestic-educated first-time takers. In particular, the Asian/Pacific Islander group has a substantially lower average on the essay than on the MBE or the NYMC. The other groups are relatively consistent in their mean scores across the three components.

The differences across groups are quite large. The largest difference between racial/ethnic groups (i.e., between Caucasian/White and Black/African American) is almost 90 points, or one SD. The Asian/Pacific Islander group, the “Other” group, and the Hispanic/Latino group fall about halfway between these two groups.

Table 3.15
Score Means, Standard Deviations, and Standard Errors
Foreign-Educated First-Time Takers: Racial/Ethnic Group

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 554; SEM ≈ 3.8)	Mean	674.49	675.48	678.82	675.43
	(SD)	(90.87)	(88.01)	(93.01)	(82.05)
Asian/ Pacific Islander (n = 590; SEM ≈ 4.0)	Mean	646.09	616.15	660.42	632.56
	(SD)	(102.04)	(98.16)	(97.03)	(93.11)
Black/ African American (n = 67; SEM ≈ 10.5)	Mean	576.66	594.14	600.75	587.85
	(SD)	(81.91)	(85.55)	(98.26)	(77.36)
Hispanic/ Latino (n = 73; SEM ≈ 9.5)	Mean	617.42	623.53	642.90	623.03
	(SD)	(79.74)	(82.79)	(85.62)	(75.32)
Other (n = 92; SEM ≈ 9.1)	Mean	627.44	629.18	639.49	629.53
	(SD)	(96.95)	(82.44)	(89.23)	(82.29)
Total* (N = 1,386; SEM ≈ 2.6)	Mean	651.36	640.22	662.54	646.92
	(SD)	(98.10)	(96.21)	(96.12)	(89.79)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Tables 3.16 and 3.17 provide more detailed analyses of these relationships, which make it possible to identify some interactions between gender and race/ethnicity. Table 3.16 reports the means and SDs on each part of the NY bar exam and on the total NY bar exam for female candidates as a function of race/ethnicity. Table 3.17 reports the corresponding results for male candidates as a function of race/ethnicity. The females generally have higher means on the essay than they do on the other components, but this result is not entirely consistent. For the Asian/Pacific Islander females, the mean on the essay is lower than the means for the MBE and the NYMC, and for the Hispanic/Latino females, the mean on the NYMC is slightly higher than that on the essay. For the foreign-educated males, the essay mean is consistently lower than the MBE and NYMC means.

Table 3.16
Score Means, Standard Deviations, and Standard Errors
Female Foreign-Educated First-Time Takers: Racial/Ethnic Group

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 269; SEM ≈ 5.3)	Mean	658.55	684.36	671.02	672.72
	(SD)	(89.82)	(84.27)	(94.62)	(81.25)
Asian/ Pacific Islander (n = 245; SEM ≈ 6.4)	Mean	635.19	627.88	652.01	633.25
	(SD)	(102.55)	(101.94)	(100.01)	(96.16)
Black/ African American (n = 34; SEM ≈ 16.0)	Mean	587.41	629.41	617.58	611.41
	(SD)	(91.83)	(87.38)	(108.83)	(84.59)
Hispanic/ Latino (n = 38; SEM ≈ 11.8)	Mean	603.72	630.15	632.01	619.76
	(SD)	(72.46)	(67.60)	(86.66)	(63.57)
Other (n = 42; SEM ≈ 13.3)	Mean	585.70	608.14	603.92	598.79
	(SD)	(92.51)	(76.38)	(97.35)	(77.41)
Total* (N = 633; SEM ≈ 3.8)	Mean	637.38	651.10	653.44	645.87
	(SD)	(96.90)	(94.63)	(98.85)	(89.54)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

For the Caucasian/White and Hispanic/Latino groups males have higher average scores than females, with differences of about five points and seven points, respectively. For the “Other” category, males have an average score that is about 57 points higher than that of females. In the Asian/Pacific Islander group, females have an average score less than two points higher than that of males, and in the Black/African American group, the female average is about 47 points higher than that of the males.

Table 3.17
Score Means, Standard Deviations, and Standard Errors
Male Foreign-Educated First-Time Takers: Racial/Ethnic Group

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 285; SEM ≈ 5.2)	Mean	689.54	667.10	686.17	677.98
	(SD)	(89.42)	(90.76)	(91.03)	(82.86)
Asian/ Pacific Islander (n = 343; SEM ≈ 5.1)	Mean	653.93	607.52	666.50	631.97
	(SD)	(101.27)	(94.46)	(94.14)	(90.98)
Black/ African American (n = 32; SEM ≈ 12.6)	Mean	566.98	557.68	585.21	564.25
	(SD)	(70.60)	(68.42)	(84.90)	(62.24)
Hispanic/ Latino (n = 35; SEM ≈ 15.0)	Mean	632.29	616.34	654.72	626.57
	(SD)	(85.53)	(97.15)	(84.11)	(87.12)
Other (n = 50; SEM ≈ 11.3)	Mean	662.50	646.85	669.37	655.36
	(SD)	(86.88)	(83.93)	(69.71)	(77.91)
Total* (N = 748; SEM ≈ 3.4)	Mean	663.33	631.06	670.25	647.89
	(SD)	(97.60)	(96.74)	(92.77)	(90.07)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

3.6 Foreign-educated repeaters

Table 3.18 reports the means and SDs on the three components of the bar examination and on the total NY bar exam for females, males, and the total group of foreign-educated repeaters.

The average scores for both female and male foreign-educated repeaters reported in Table 3.18 are lower than those for the foreign-educated first-time takers (see Table 3.14) on the total NY bar exam and on all components of the exam.

Table 3.18
Score Means, Standard Deviations, and Standard Errors
Foreign-Educated Repeaters: Females and Males

Gender		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Female (n = 268; SEM ≈ 4.3)	Mean	594.47	605.56	616.43	602.21
	(SD)	(66.94)	(75.22)	(79.32)	(61.75)
Male (n = 296; SEM ≈ 4.1)	Mean	606.99	580.60	622.51	595.37
	(SD)	(73.75)	(70.07)	(75.76)	(62.33)
Total* (N = 576; SEM ≈ 3.0)	Mean	601.46	592.44	620.27	598.85
	(SD)	(71.14)	(73.31)	(77.46)	(62.15)

*Total includes twelve candidates in the sample of domestic-educated first-time test takers who did not record their genders.

As was the case for foreign-educated first-time takers, foreign-educated female repeat takers do better on average than male repeat takers on the essay. The male candidates have higher average scores than females on the MBE and on the NYMC. The difference between males and females on the MBE is about 13 points, and the difference on the NYMC is about 6 points. The difference on the essay favors female candidates by about 25 points. Also, similar to the foreign-educated first-time takers, both female and male repeat takers have relatively higher average scores on the NYMC than on either of the other two components. Unlike the parallel groups in the foreign-educated first-time takers, the average score for foreign-educated female repeat takers on the total NY bar exam was higher than the average for the foreign-educated male repeat takers (by about seven points).

Table 3.19 presents results for the foreign-educated repeaters, as a function of their race/ethnicity. The results are not as consistent across test components within each racial/ethnic group as they were for the domestic-educated first-time takers. In particular, the Asian/Pacific Islander group has a substantially lower average on the essay than they do on the MBE or the NYMC, and the Black/African American and Hispanic/Latino groups have higher averages on the NYMC than they do on the two other components.

Table 3.19
Score Means, Standard Deviations, and Standard Errors
Foreign-Educated Repeaters: Racial/Ethnic Group

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 121; SEM ≈ 5.9)	Mean	621.94	624.72	624.55	623.60
	(SD)	(63.15)	(66.53)	(76.44)	(53.69)
Asian/ Pacific Islander (n = 243; SEM ≈ 4.6)	Mean	604.93	579.65	624.75	594.28
	(SD)	(74.26)	(69.94)	(80.18)	(62.80)
Black/ African American (n = 113; SEM ≈ 6.4)	Mean	580.82	577.55	609.01	582.03
	(SD)	(66.04)	(73.63)	(70.00)	(60.36)
Hispanic/ Latino (n = 36; SEM ≈ 13.2)	Mean	580.42	579.91	614.71	583.64
	(SD)	(72.53)	(80.38)	(94.45)	(69.08)
Other (n = 62; SEM ≈ 8.7)	Mean	598.59	613.15	617.68	607.79
	(SD)	(70.48)	(71.96)	(71.12)	(60.15)
Total* (N = 576; SEM ≈ 3.0)	Mean	601.46	592.44	620.27	598.85
	(SD)	(71.14)	(73.31)	(77.46)	62.15

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

The differences between racial/ethnic groups within the foreign-educated repeaters are smaller than they are for the corresponding first-time takers (see Table 3.15). Among the repeat takers, the Caucasian/White group has the highest overall average on the NY bar exam, followed by the “Other” group, Asian/Pacific Islander, Hispanic/Latino, and Black/African American groups. The range of average scores across these groups is about 42 points, from about 582 for the Black/African American group to about 624 for the Caucasian/White group. For all groups except the Caucasian/White group, the NYMC yields a higher average score than the MBE or the essay.

Tables 3.20 and 3.21 provide an analysis of foreign-educated repeater performance as a function of gender and race/ethnicity. Table 3.20 provides average scores and SDs for female candidates as a function of race/ethnicity. Table 3.21 reports the corresponding results for male candidates. Females generally do better on the essay than on the MBE with the exception of the Asian/Pacific Islander group, in which females did better on the MBE than they did on the essay. Males do better on the MBE

than on the essay for all racial/ethnic groups except the "Other" group. In general, the foreign-educated repeaters (like the foreign-educated first-time takers) do relatively well on the NYMC compared to both the MBE and the essay.

Table 3.20
Score Means, Standard Deviations, and Standard Errors
Female Foreign-Educated Repeaters: Racial/Ethnic Group

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 57; SEM ≈ 8.8)	Mean	602.81	635.31	611.54	619.93
	(SD)	(59.92)	(68.88)	(81.28)	(56.54)
Asian/ Pacific Islander (n = 118; SEM ≈ 6.5)	Mean	598.40	589.97	622.34	596.58
	(SD)	(69.27)	(71.25)	(79.54)	(61.79)
Black/ African American (n = 42; SEM ≈ 10.9)	Mean	575.69	598.28	615.59	590.95
	(SD)	(66.06)	(80.84)	(71.57)	(64.45)
Other (n = 31; SEM ≈ 11.3)	Mean	603.56	629.03	617.47	617.71
	(SD)	(63.57)	(67.02)	(68.22)	(53.30)
Total* (N = 268; SEM ≈ 4.3)	Mean	594.47	605.56	616.43	602.21
	(SD)	(66.94)	(75.22)	(79.32)	(61.75)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Table 3.21
Score Means, Standard Deviations, and Standard Errors
Male Foreign-Educated Repeaters: Racial/Ethnic Groups

Race/Ethnicity		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
Caucasian/ White (n = 61; SEM ≈ 7.9)	Mean	638.93	615.35	634.39	626.70
	(SD)	(62.11)	(64.56)	(69.61)	(51.83)
Asian/ Pacific Islander (n = 120; SEM ≈ 6.7)	Mean	610.93	570.05	625.48	591.97
	(SD)	(78.53)	(67.81)	(81.56)	(64.11)
Black/ African American (n = 70; SEM ≈ 7.8)	Mean	582.85	565.04	603.98	576.10
	(SD)	(66.25)	(67.05)	(69.09)	(57.78)
Other (n = 29; SEM ≈ 13.0)	Mean	595.24	596.61	620.57	598.45
	(SD)	(71.24)	(73.12)	(73.94)	(61.68)
Total* (N = 296; SEM ≈ 4.1)	Mean	606.99	580.60	622.51	595.37
	(SD)	(73.75)	(70.07)	(75.75)	(62.33)

*Total includes racial/ethnic groups with fewer than 20 candidates not separately listed in the table.

Table 3.22 presents the averages and the SDs of the scores for each test component and for the total NY bar exam for foreign-educated first-time takers, second time takers, third-time takers, etc. As noted earlier, the average score for the repeat takers, as a group, is substantially lower than that of the first-time takers. The average score on the total NY bar exam declines sharply as we go from the first-time takers to the second-time takers, and then declines more gradually as the number of attempts increases. Two exceptions to this steady decline are a slight increase in the average score between the groups with 2 and 3 attempts and between those with 4 and 5 attempts. Note that the increase from the fourth to the fifth attempt is quite small compared to the standard error for the difference between the means for four and five attempts, which indicates that the increase is not statistically significant. This pattern also generally holds for the MBE, but with less consistency for the essay and NYMC.

Table 3.22
Score Means, Standard Deviations, and Standard Errors
Foreign-Educated Repeaters: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1 (n = 1,386; SEM ≈ 2.6)	Mean	651.36	640.22	662.54	646.92
	(SD)	(98.10)	(96.21)	(96.12)	(89.79)
2 (n = 220; SEM ≈ 5.1)	Mean	602.86	594.88	619.35	600.53
	(SD)	(75.35)	(78.97)	(79.07)	(67.52)
3 (n = 159; SEM ≈ 5.7)	Mean	611.03	604.50	625.75	609.25
	(SD)	(71.19)	(72.71)	(79.07)	(62.24)
4 (n = 71; SEM ≈ 7.8)	Mean	592.53	589.07	618.19	593.39
	(SD)	(61.96)	(73.77)	(71.18)	(55.39)
5 (n = 42; SEM ≈ 8.6)	Mean	603.30	584.48	620.64	595.64
	(SD)	(61.13)	(48.30)	(70.59)	(44.19)
6 (n = 19; SEM ≈ 17.8)	Mean	583.18	580.11	625.04	585.95
	(SD)	(79.46)	(69.34)	(95.30)	(65.54)
7 or more (n = 65; SEM ≈ 8.1)	Mean	587.16	567.11	610.59	579.52
	(SD)	(67.31)	(62.92)	(74.89)	(54.52)
Total (N = 1,962; SEM ≈ 2.1)	Mean	636.71	626.19	650.13	632.80
	(SD)	(93.79)	(92.67)	(93.04)	(85.48)

As indicated in Tables 3.23 and 3.24, this pattern is consistent across females and males. Table 3.23 indicates that females do better on the essay than on the MBE or the NYMC regardless of the number of bar attempts. As indicated in Table 3.24, males do better on the MBE than they do on the essay regardless of their number of bar attempts.

In general, among foreign-educated repeaters, females do better than males on the essay, and to a lesser extent, on the NYMC, and males do better than females on the MBE. Finally, foreign-educated candidates generally do relatively well on the NYMC, compared to their performance on the other two components.

Table 3.23
Score Means, Standard Deviations, and Standard Errors
Female Foreign-Educated Repeaters: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1 (n = 633; SEM ≈ 3.8)	Mean	637.38	651.10	653.44	645.87
	(SD)	(96.90)	(94.63)	(98.85)	(89.54)
2 (n = 113; SEM ≈ 7.1)	Mean	589.49	599.10	615.70	596.88
	(SD)	(74.03)	(80.81)	(81.28)	(67.58)
3 (n = 78; SEM ≈ 7.7)	Mean	605.72	621.64	624.69	615.59
	(SD)	(62.12)	(70.81)	(80.40)	(58.87)
4 (n = 38; SEM ≈ 10.9)	Mean	582.47	601.89	594.34	593.39
	(SD)	(60.05)	(79.28)	(69.36)	(60.04)
5 (n = 14; SEM ≈ 16.8)	Mean	605.21	595.42	634.84	603.21
	(SD)	(56.87)	(57.05)	(83.53)	(53.92)
6 (n = 6; SEM ≈ 24.8)	Mean	565.25	617.07	632.00	598.00
	(SD)	(54.08)	(63.83)	(71.63)	(53.73)
7 or more (n = 19; SEM ≈ 14.1)	Mean	603.21	589.18	612.47	597.21
	(SD)	(62.02)	(60.24)	(80.79)	(43.15)
Total (N = 901; SEM ≈ 3.0)	Mean	624.62	637.56	642.43	632.88
	(SD)	(91.15)	(91.66)	(94.95)	(84.62)

Table 3.24
Score Means, Standard Deviations, and Standard Errors
Male Foreign-Educated Repeaters: Number of Bar Attempts

Number of Bar Attempts		MBE Scaled Score x 5	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
1 (n = 748; SEM ≈ 3.4)	Mean	663.33	631.06	670.25	647.89
	(SD)	(97.60)	(96.74)	(92.77)	(90.07)
2 (n = 105; SEM ≈ 7.2)	Mean	615.94	589.25	621.40	603.18
	(SD)	(74.64)	(77.14)	(76.00)	(67.53)
3 (n = 77; SEM ≈ 8.5)	Mean	615.23	587.36	625.46	602.31
	(SD)	(80.38)	(71.53)	(79.48)	(65.84)
4 (n = 33; SEM ≈ 10.5)	Mean	604.11	574.32	645.66	593.39
	(SD)	(63.01)	(64.94)	(63.77)	(50.42)
5 (n = 28; SEM ≈ 9.9)	Mean	602.34	579.01	613.54	591.86
	(SD)	(64.14)	(43.40)	(63.64)	(38.99)
6 (n = 10; SEM ≈ 25.2)	Mean	584.30	557.09	624.06	574.70
	(SD)	(70.34)	(69.26)	(113.52)	(66.24)
7 or more (n = 43; SEM ≈ 10.1)	Mean	580.92	558.69	607.64	572.49
	(SD)	(69.45)	(64.12)	(73.45)	(58.34)
Total (N = 1,044; SEM ≈ 2.8)	Mean	647.35	616.76	656.72	633.00
	(SD)	(94.90)	(92.79)	(90.83)	(86.43)

3.7 Correlations among Scores

The previous sections provided a description of the component and total scores on the NY bar exam by domestic-educated and foreign-educated candidates, including first-time takers and repeat takers. In this section, we examine the *correlations* among component and total scores on the NY bar exam across all candidates to obtain a general sense of the relationships among components of the NY bar exam. In addition, we examine the relationships among NY bar exam scores for several sub-groups.

Tables 3.25 through 3.31 present correlations among scores for the total sample and separately by gender, and by race/ethnicity. Racial/ethnic groups with 100 or more candidates were used in this analysis because smaller groups result in less stable correlation coefficients. A correlation coefficient between two variables indicates the degree of linear relationship between the two variables. Correlation coefficients have values between -1.0 and +1.0, with a correlation of +1.0 indicating a perfect direct linear relationship between the two variables, and a correlation of -1.0 indicating a perfect inverse linear relationship between the two variables. In either of these two extreme cases, either variable can be predicted perfectly from the other using a simple straight-line relationship. A correlation of 0.0 indicates the complete absence of any linear relationship between the two variables.

A correlation matrix, like Table 3.25, presents all of the correlations among a set of variables in a relatively compact format. For example, the first column includes the correlations of the MBE with each of the other variables. The 1 in the first entry in the first column indicates that the MBE is perfectly correlated with itself, which is true for all variables. The second entry in the first column indicates that the correlation between the MBE and the essay is .74.

Table 3.25
Correlations Among Scores for the Total Sample

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.74	1		
NYMC Scaled Score	.73	.68	1	
Total NY Bar Score	.92	.94	.79	1

N = 10,175

In Tables 3.25 to 3.31, the correlations are all positive, indicating that an increase in one score is associated with an increase in the other score. In all of these correlation matrices, the largest correlation is between essay scores and total NY bar exam scores, with a correlation between .92 and .95 (reflecting the fact that the essay score constitutes 50% of the total bar examination score). The second largest correlation in all cases is between MBE scores and NY bar exam scores, with a correlation between .90 and .93 (reflecting the fact that the MBE score constitutes 40% of the total bar examination score). These correlations are quite large because they involve relationships between the total bar examination score and major components of the total score. The correlation between the total score and the NYMC is also consistently large because the NYMC also contributes to the total score (although its weight, 0.10, is relatively small). The remaining correlations also tend to be large (ranging from .59 to .87).

Table 3.26
Correlations Among Scores for Females

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.77	1		
NYMC Scaled Score	.72	.68	1	
Total NY Bar Score	.93	.95	.79	1

N = 4,557

Table 3.27
Correlations Among Scores for Males

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.76	1		
NYMC Scaled Score	.74	.68	1	
Total NY Bar Score	.93	.95	.80	1

N = 4,771

The correlations among components of and the total scores on the bar examination are similar in magnitude across females and males. These correlations range from .68 to .95 and differ at most by .02.

Tables 3.28 to 3.31 report similar correlation matrices among scores for four racial/ethnic groups. In some cases, correlations appear to differ across the racial/ethnic groups. These correlations range from .59 to .95 and differ at most by .12. In part, these correlations appear to differ because of sampling variation (with relatively small sample sizes) and because of a phenomenon referred to as *restriction of range*. This occurs when a particular sample or group of interest has scores that represent a more limited range of scores than another sample or group of interest. This difference in score range results in correlation coefficients that are smaller (attenuated) for the group with a limited range of scores on one or both of the variables being correlated.

Table 3.28
Correlations Among Component Scores for the Caucasian/White Group

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.68	1		
NYMC Scaled Score	.71	.64	1	
Total NY Bar Score	.90	.92	.79	1

N = 5,888

Table 3.29
Correlations Among Component Scores for the Asian/Pacific Islander Group

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.87	1		
NYMC Scaled Score	.73	.68	1	
Total NY Bar Score	.93	.95	.79	1

N = 1,697

Table 3.30
Correlations Among Scores for the Black/African American Group

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.70	1		
NYMC Scaled Score	.59	.60	1	
Total NY Bar Score	.90	.94	.71	1

N = 773

Table 3.31
Correlations Among Scores for the Hispanic/Latino Group

	MBE Scaled Score	Essay Scaled Score	NYMC Scaled Score	Total NY Bar Score
MBE Scaled Score	1			
Essay Scaled Score	.76	1		
NYMC Scaled Score	.69	.67	1	
Total NY Bar Score	.93	.95	.77	1

N = 371

These consistently large correlations among the three components of the bar examination across correlation matrices (Tables 3.25 to 3.31) suggest that performance is fairly consistent across these components for the sample as a whole and for various groups within the sample. Combined with the results in Table 3.1 (i.e., large differences across racial/ethnic groups and relatively small differences across components) these results suggest that there is considerable overlap in the competencies measured by the different components or that the competencies measured by the different components are strongly related.

Notes:

1. The reliabilities reported here are Cronbach's alpha coefficients. The reliabilities of .78 for the NYMC and of .80 for the essay component were estimated using candidates taking the NY bar exam in July 2005.

2. The reliability of the total NY bar exam was obtained by computing the composite reliability, which uses the variances in scores, component score reliabilities, and component score weights. High-stakes examinations are generally expected to have a reliability of 0.90 or above.

3. The standard error in the difference between the mean scores for two groups depends on the standard error in the two mean scores. If the standard error for the mean of one group is much larger than the standard error of the mean for the other group (usually because the first group is much smaller than the second), the standard error of the difference is essentially the same as the larger of the two standard errors. If the standard errors for the two groups are about the same size, the standard error of the difference will be about 1.4 times the average of the two standard errors.

4. Tests of statistical significance are often used in studies like this to decide whether an observed difference was due to sampling variation or represents a real difference between the populations being sampled. We have decided not to include such tests for three reasons:
    - First, in interpreting the results as an indication of what happened in July, 2005, significance testing is not appropriate, because the database includes over 90% of the relevant population, making sampling error a minor concern.
    - Second, in extending the interpretation to future July administrations, sampling variability is a concern, but it is not the main concern. Except in cases where sample sizes are small, systematic changes over time are probably more serious threats to the validity of the inference.
    - Third, if a test of statistical significance of the difference between two mean scores is needed, it can be derived from the standard error of the difference between the mean scores. If the difference between the two mean scores is greater than two times the standard error of the difference, the observed difference is statistically significant.

    The discussions in this section tend to focus on patterns in the data, rather than on differences between specific groups. Specific differences between groups are discussed mainly as a way of examining the more general patterns.

5. The group scores reported in this section are group averages (or mean scores), the sum of the scores for the group divided by the number of candidates in the group. An alternative statistic used to describe the "typical" score for a group is the median, or middle score. The median is determined by rank-ordering the

scores for the group and taking the middle score (or the average of the two middle scores) as the median. For test-score distributions involving large sample sizes, the mean and median tend to be close to each other, and the mean is generally preferred. For example, the median score for females is 729, that for males is 736, and the median for the total group is 733, all of which are about 5 points higher than the corresponding means in Table 3.1. In Table 3.2, the sample sizes are smaller and the relationship between the means and medians for different groups are more complicated. The medians for the first five groups in Table 3.2 are, respectively, 741.0, 723.0, 673.5, 696.5, and 715.0.

4. Analyses of Pass Rates on the July 2005 New York Bar Examination

The effect of changes in the passing score on pass rates was examined for the NY bar exam scores (scale 0 to 1,000) using data from the July 2005 bar examination administration. The original passing score for New York was 660 (out of 1,000), it was changed to 665 beginning with the July 2005 administration, and it was to go to 670 in July 2006 and to 675 in July 2007. The last two increases, to 670 and then to 675, are currently on hold. The analyses in this section examine what the pass rates would have been for the data from the July 2005 administration for passing scores of 660, 665, 670, and 675.

As discussed earlier, because these analyses employ a fixed data set, the pass rates of all groups necessarily decrease (or remain the same) as the passing score increases. Any candidate who fails when the passing score is 665, for example, would necessarily fail if the passing score were 670 or 675. However, some candidates who pass when the passing score is 665 (those with scores of 665 to just under 670) will fail if the passing score were 670. In practice, even if the passing score is increased from one test date to another, the pass rate can increase on the second test date if candidate performance improves between the first and second date. However, in these analyses the distributions of candidate scores are fixed and the pass rate necessarily decreases (or remains the same) as higher passing scores are considered.

Note, in these analyses, the *passing score* is the total score on the NY bar exam (e.g., 665) that a candidate has to achieve in order to pass. The *pass rate* for a group of candidates is the percentage of that group that would pass if the passing score had a particular value, given the fixed data in the data set.

The pass rates vary substantially between first-time takers and repeat takers, and between domestic-educated and foreign-educated candidates, and therefore overall pass rates are less informative than pass rates for the four groups defined by these two dichotomies. These differences are predictable, at least in general terms, from the results on score distributions presented in Section 3, in which repeat takers had lower average scores than first-time takers, and foreign-educated candidates had lower average scores than domestic-educated candidates.

4.1 Note on Standard Errors in Pass Rates

As noted earlier, we have tried to make this report as non-technical and therefore as accessible as possible, but an appropriate interpretation of many of the results in this section requires at least a general understanding of standard errors (SEs) in estimating percentages (a special case of the standard errors of the mean discussed in Section 3). We have not cluttered the tables with large numbers of SEs, but have tried to provide an indication of the general level of the SE in the results for different groups.

As noted earlier, standard errors are designed to provide an indication of the uncertainty in an estimate based on a sample from the population being analyzed. We generalize or extrapolate from the sample to the population, and in doing so, our estimate is always somewhat uncertain. The data analyzed in this report include results for a large percentage (>90%) of the candidates who took the NY bar exam in July 2005, and therefore provides a very good indication of what would happen to the pass rates for most groups if different passing scores were applied to the July 2005 results. However, generalizations of the interpretation to future July test dates are subject to uncertainty due to sampling, and this uncertainty is reflected in the standard errors.

The formulas used to estimate standard errors are based on statistical sampling theory, and reflect the level of error due to sampling from a fixed population. They do not include any systematic errors due to changes in the population over time. Like the standard error in estimates of the mean (SEM), the standard error in the percentage passing (SE) within any group depends on the *sample size* (the total number of candidates in that group). The SE is inversely related to the square root of the sample size, and therefore, as the sample size gets larger, the standard error gradually gets smaller.

The standard error in estimating the passing rate for a group also depends on the numerical value of the passing rate in the group. It tends to be largest when the passing rate is around 50% and gets quite small as the passing rate approaches 0% or 100%. However, over a fairly wide range of passing rates, the standard error does not change much. Assuming a sample size of 100, and a passing rate of 50%, the SE would be 5 percentage points. As the passing rate went up to 80% or down to 20%, the SE would gradually drop to 4 percentage points. For passing rates of 90% or 10%, the SE would drop to about 3 percentage points.

In the analyses reported here, the passing rates are generally between 20% and 80%, but the sample sizes for the sub-groups considered vary widely, from under ten to several thousand. So, the sample size is the dominant factor in determining the standard error. We have included information on the standard errors mainly as a caveat about the potential for over-interpreting small differences, especially small differences for groups with small sample sizes and therefore large standard errors.

This issue arises mainly in connection with analyses broken down by race/ethnicity, both gender and race/ethnicity, and age categories, where there are a number of groups and small sample sizes in some groups. Similar to Section 3, generally excluded in the tables are results for groups with fewer than 20 candidates, because pass rates for such groups are expected to be quite unstable. As mentioned previously, as the sample sizes get smaller, the standard errors get larger, and the uncertainty in the results increases. For example, for a group with a pass rate of 80% (or 20%), a sample size of 100 would yield an SE of 4 percentage points. For a sample size of 25, the SE would be about 8 percentage points. Similar to the SEMs described in Section 3, as a rule of thumb, the passing rates for groups with fewer than 100

candidates should be viewed as relatively uncertain and those for groups with about 50 or fewer candidates should be considered even more uncertain.

4.2 Domestic-Educated First-time Takers

Table 4.1 analyzes the impact of changes in the passing score on pass rates for the total sample of domestic-educated first-time takers and separately for females and males as the passing score increases from 660 to 675.[1] If the passing score was 660, the overall pass rate would have been 84.4% for this sample. With the current passing score of 665, 83.0% of the sample passed. If the passing score was 670, the pass rate for domestic-educated first-time takers would have been 81.7%, and if the passing score was 675, the pass rate would have been 80.5%, for a total decrease of about 4 percentage points as the passing score increases from 660 to 675. Between 660 and 675, the pass rate drops about one and a third percentage points for each five-point increase in the passing score.

Table 4.1
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated First-Time Takers: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female	Percentage	83.5%	81.9%	80.4%	79.0%
(n = 3,284; SE ≈ 0.7%)	(n)	(2,742)	(2,691)	(2,639)	(2,593)
Male	Percentage	85.3%	84.0%	83.0%	82.1%
(n = 3,299; SE ≈ 0.7%)	(n)	(2,814)	(2,772)	(2,739)	(2,707)
Total*	Percentage	84.4%	83.0%	81.7%	80.5%
(N = 6,585; SE ≈ 0.5%)	(n)	(5,557)	(5,464)	(5,379)	(5,301)

N = the total number of candidates in this analysis
n = the number of candidates in each group
*Total includes two candidates who did not record their genders.
Note: The standard error (SE) in the percentages provides an indication of the uncertainty (due to sampling) in the projections of percentage passing to other test dates.

Table 4.1 also shows the pass rate for female domestic-educated first-time takers decreasing from 83.5% to 79.0% as passing scores increase from 660 to 675, a decline of 4.5 percentage points. The pass rate for males decreases from 85.3% to 82.1%, a decline of 3.2 percentage points. Males have a slightly higher pass rate for all four passing scores, and the difference in pass rates between males and females increases from 1.8 percentage points to 3.1 percentage points as the passing score increases from 660 to 675.

Table 4.2
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated First-Time Takers: Racial/Ethnic Groups

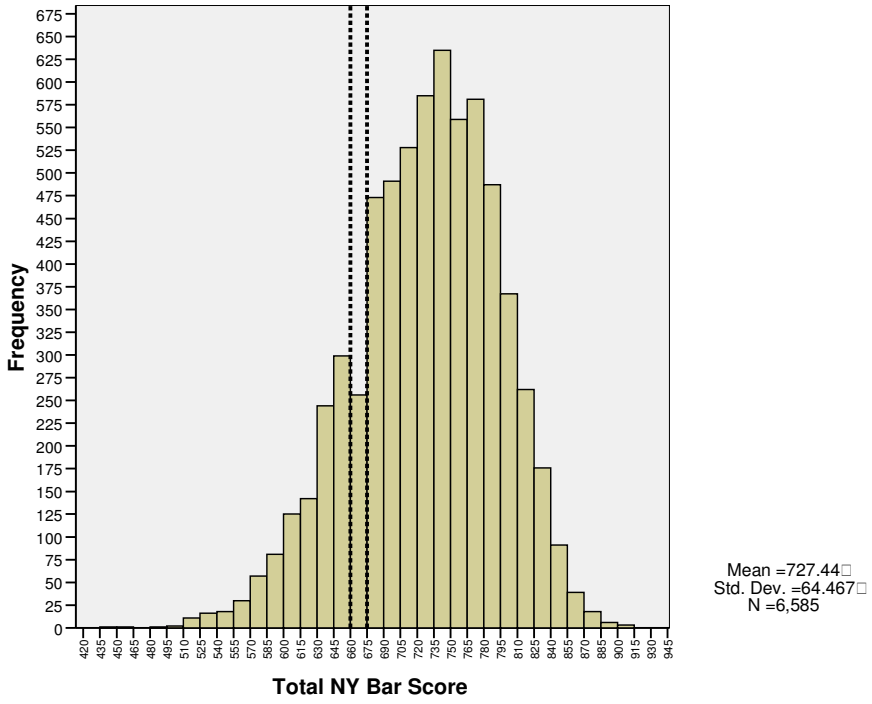
Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 4,818; SE ≈ 0.5%)	Percentage	87.9%	86.8%	85.8%	84.8%
	(n)	(4235)	(4184)	(4136)	(4087)
Asian/ Pacific Islander (n = 740; SE ≈ 1.5%)	Percentage	82.6%	80.1%	78.2%	76.6%
	(n)	(611)	(593)	(579)	(567)
Black/ African American (n = 430; SE ≈ 2.4%)	Percentage	57.9%	54.0%	51.6%	49.8%
	(n)	(249)	(232)	(222)	(214)
Hispanic/ Latino (n = 214; SE ≈ 3.2%)	Percentage	70.1%	69.6%	67.3%	65.4%
	(n)	(150)	(149)	(144)	(140)
Puerto Rican (n = 73; SE ≈ 5.0%)	Percentage	80.8%	76.7%	72.6%	71.2%
	(n)	(59)	(56)	(53)	(52)
Chicano/ Mexican American (n = 23; SE ≈ 8.8%)	Percentage	82.6%	78.3%	78.3%	78.3%
	(n)	(19)	(18)	(18)	(18)
Other (n = 268; SE ≈ 2.5%)	Percentage	81.3%	80.6%	78.7%	77.2%
	(n)	(218)	(216)	(211)	(207)
Total* (N = 6,585; SE ≈ 0.5%)	Percentage	84.4%	83.0%	81.7%	80.5%
	(n)	(5557)	(5464)	(5379)	(5301)

*Total includes racial/ethnic groups not separately listed in the table.
Note: The SEs tend to be large for groups with small sample sizes. For example, the SE for the Chicano/Mexican American group, with only 23 candidates, is almost 9 percentage points.

Table 4.2 examines the relationship between pass rate and passing score as the passing score increases from 660 to 675 for groups based on race/ethnicity. The overall pass rate for the total sample of domestic-educated first-time takers is included in the bottom row as a benchmark. Focusing on the first five rows in Table 4.2 (groups with close to 100 candidates or more), it is clear that there are large differences in pass rates across the racial/ethnic groups, and that the order of the five groups in terms of pass rates remains the same as the passing score is increased. The Caucasian/White group has the highest pass rates, the Asian/Pacific Islander group is second, the Puerto Rican group is third, the Hispanic/Latino group is fourth, and the Black/African American group

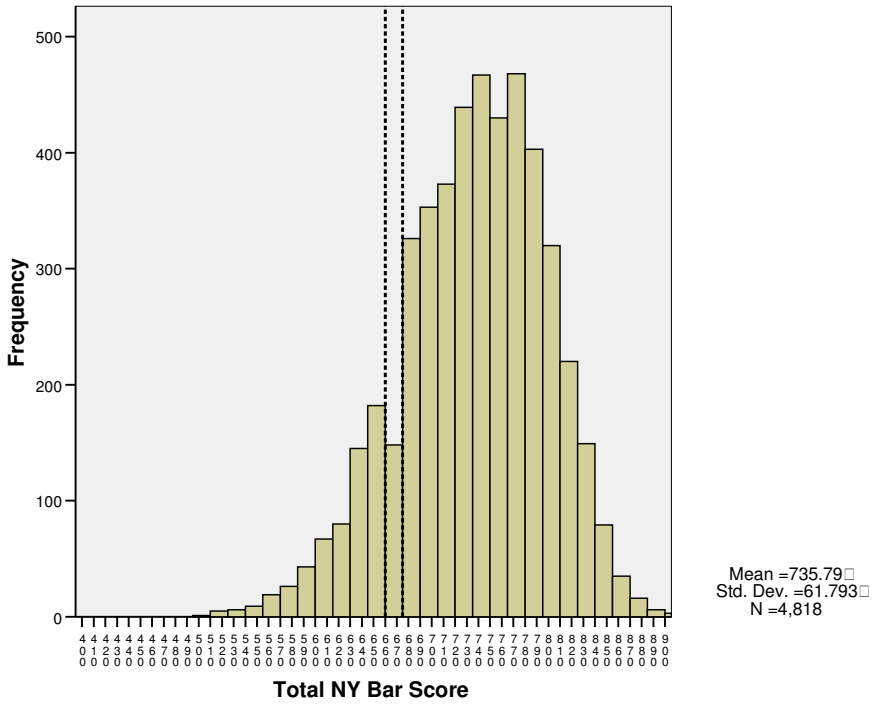
is fifth. The order of these groups is consistent for all four passing scores. If the "Other" group is included in the comparison, it tends to be in second or third place, alternating with the Asian/Pacific Islander group as the passing score increases. The Chicano/Mexican American and American Indian/Alaskan Native groups have small sample sizes and are not included in Table 4.2, but their pass rates are relatively flat (with about 80% passing) because they have essentially no candidates in the 660-675 range.

Figure 4.1
Score Distribution of July 2005 NY Bar Exam Scores
Domestic-Educated First-Time Takers



Increasing the passing score tends to have the most impact on groups with average scores near the passing score, and therefore, pass rates near 50%. Most of the groups have score distributions that approximate what is called a *normal distribution*, with the scores concentrated around the average or mean score (see Figure 4.1). If the passing score is near the mean for a group, even a modest change in the passing score can change the pass/fail status for a relatively large number of candidates in the group. If the passing score is far from the group's mean score, a comparable change in the passing score will affect relatively few candidates, because there are few candidates in the tails of the distribution.

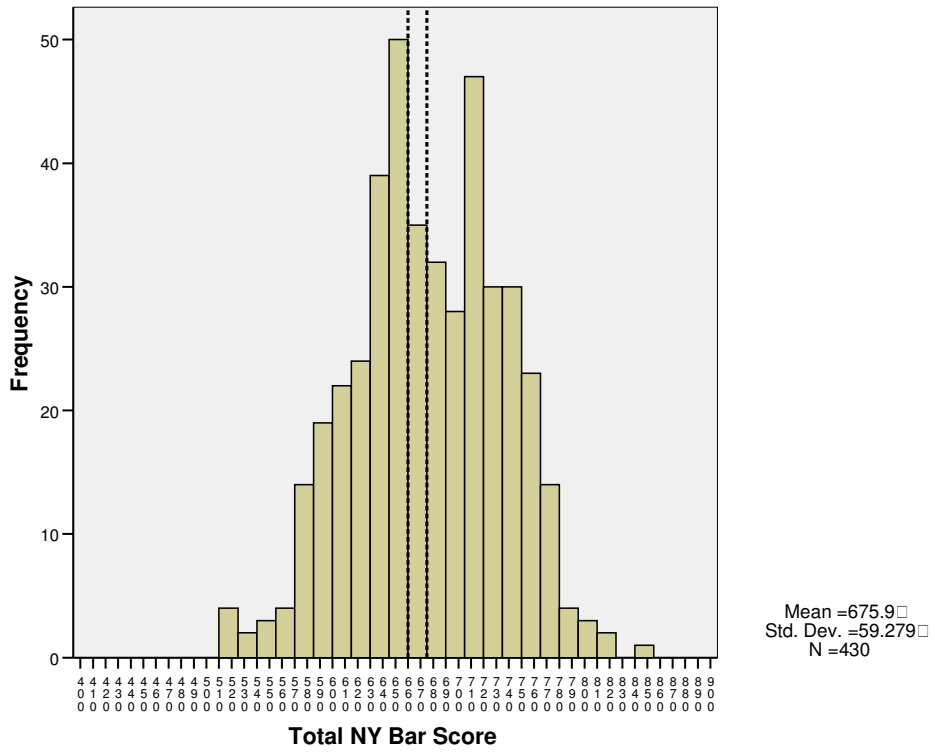
Figure 4.2
Score Distribution of July 2005 NY Bar Exam Scores
Caucasian/White Domestic-Educated First-Time Takers



For example, Figure 4.2 presents a graphical representation of the distribution of total scores on the NY bar exam for domestic-educated first-time takers in the Caucasian/White group. The mean for this group is 735.8, which is substantially above the current passing score of 665.[2] If the passing score were much lower to start, say around 600, the impact would be even smaller, because there are very few candidates in this group with scores around 600.

In contrast, Figure 4.3 presents a graphical representation of the distribution of scores on the July 2005 NY bar exam for Black/African American domestic-educated first time takers. The mean for this group is 675.9, which is only about eleven points above the current passing score of 665. Because the distribution is concentrated in this area of the score scale for the Black/African American group, any change in the passing score, either up or down tends to have a substantial impact on the proportion of Black/African American candidates passing.

Figure 4.3
Score Distribution of July 2005 NY Bar Exam Scores
Black/African American Domestic-Educated First-Time Takers



In addition, a change of one percentage point in the pass rate has a larger relative impact on a group's pass rate if the initial pass rate is relatively low. A change in pass rate of one percentage point from 90% to 89% represents a change of a little over one percent of the base rate of 90%. In contrast, a change of one percentage point in pass rate from 20% to 19% represents a change of one-twentieth, or five percent, of the base rate of 20%. The change from 20% to 19% is likely to be viewed as having more impact than a change from 90% to 89%.

These two tendencies are relevant to the results in Table 4.2. The pass rate for the Caucasian/White group drops from 87.9% to 84.8% as the passing score increases from 660 to 675, a drop of just over three percentage points, or about 3.5% on the base rate of 87.9%. The pass rate for the Asian/Pacific Islander group drops from 82.6% to 76.6% as the passing score increases from 660 to 675, a drop of six percentage points, or about 7.3% of the base rate of 82.6%. The pass rate for the Puerto Rican group drops from 80.8% to 71.2% as the passing score increases from 660 to 675, a drop of 9.6 percentage points, or about 11.9% of the base rate of 80.8%. The pass rate for the Hispanic/Latino group drops from 70.1% to 65.4% as the passing score increases, a drop of 4.7 percentage points, or about 6.7% on the base rate. The pass rate for the

Black/African American group drops from 57.9% to 49.8% as the passing score increases from 660 to 675, a drop of 8.1 percentage points, or about 14.0% of the base rate.

Another way to look at the projected impact of a change in the passing score from 660 to 675 for the July 2005 sample is in terms of the candidates whose pass/fail status changes as the passing score is increased. Of the 5,557 candidates who would have passed if the passing score were 660, a total of 5,301 would pass if the passing score were 675, for a difference of 256. Of this group of 256 candidates, 148 (or 57.8%) would be Caucasian/White, 44 (or 17.1%) would be Asian/Pacific Islander, 35 (or 13.6%) would be Black/African American, and 10 (or 3.9%) would be Hispanic/Latino.

Tables 4.3 and 4.4 present pass rates for females and males by race/ethnicity. The general patterns of decreasing pass rates as the passing score increases are similar to those in Table 4.2, and the pattern across the racial/ethnic groups is similar for females and males, at least for the first five groups, which have the largest sample sizes.

The results in Tables 4.3 and 4.4 reflect the interaction between gender and race/ethnicity in the data. Although Table 4.1 indicates that males have higher pass rates than females for all four passing scores (660 to 675), Tables 4.3 and 4.4 paint a more complicated picture. In the Caucasian/White group, males do have higher pass rates than females for all four passing scores, but the differences are smaller than they are in Table 4.1, increasing from about 1 percentage point to about 2 percentage points as the passing score increases from 660 to 675.

However, for the Asian/Pacific Islander, Black/African American, and Puerto Rican groups, females have consistently better pass rates than males for all four passing scores. In the Hispanic/Latino group, females had higher pass rates for passing scores of 660, 665, and 670, but a lower pass rate than males for a passing score of 675. Given that the female/male differential for the Caucasian/White group is only about half that in the total group of domestic-educated first-time takers, and that the differential is in the opposite direction for four other groups with substantial sample sizes, the results in Table 4.1 may be considered surprising. Note that the “Other” group has a large differential in favor of males, but this group is not large enough, in itself, to produce the result in Table 4.1.

The difference in pass rates between females and males in Table 4.1 is not large to begin with, but about half of it can be attributed to a statistical artifact (similar to that discussed in conjunction with Tables 3.3 and 3.4). As noted earlier, there are large differences in pass rates across the different racial/ethnic groups. The pass rates for the Caucasian/White group are about 85% or higher for both males and females and across the four passing scores. In contrast, the pass rates for the Black/African American group tend to be around or below 55% for both males and females and across the four passing scores. The differences between groups are much larger than those between

females and males within the racial/ethnic groups. As reported in Table 2.12, over 77% of the males are Caucasian/White, while about 69% of the females are Caucasian/White. The female group includes higher percentages of all other racial/ethnic categories than the male group does. For example, the male group is 4.6% Black/African American, while the female group is 8.5% Black/African American.

Table 4.3
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Female Domestic-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 2,265; SE ≈ 0.7%)	Percentage	87.4%	86.1%	84.9%	83.8%
	(n)	(1,979)	(1,950)	(1,924)	(1,898)
Asian/ Pacific Islander (n = 424; SE ≈ 1.9%)	Percentage	84.4%	82.1%	79.7%	78.3%
	(n)	(358)	(348)	(338)	(332)
Black/ African American (n = 279; SE ≈ 3.0%)	Percentage	59.5%	56.3%	53.4%	50.9%
	(n)	(166)	(157)	(149)	(142)
Hispanic/ Latino (n = 108; SE ≈ 4.5%)	Percentage	70.4%	70.4%	67.6%	63.9%
	(n)	(76)	(76)	(73)	(69)
Puerto Rican (n = 42; SE ≈ 6.5%)	Percentage	81.0%	78.6%	76.2%	76.2%
	(n)	(34)	(33)	(32)	(32)
Other (n = 142; SE ≈ 3.6%)	Percentage	77.5%	76.8%	73.9%	71.8%
	(n)	(110)	(109)	(105)	(102)
Total* (N = 3,284; SE ≈ 0.7%)	Percentage	83.5%	81.9%	80.4%	79.0%
	(n)	(2,742)	(2,691)	(2,639)	(2,593)

*Total includes racial/ethnic groups not separately listed in the table.

Table 4.4
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Male Domestic-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 2,552; SE ≈ 0.7%)	Percentage	88.4%	87.5%	86.7%	85.8%
	(n)	(2,256)	(2,234)	(2,212)	(2,189)
Asian/ Pacific Islander (n = 316; SE ≈ 2.4%)	Percentage	80.1%	77.5%	76.3%	74.4%
	(n)	(253)	(245)	(241)	(235)
Black/ African American (n = 151; SE ≈ 4.1%)	Percentage	55.0%	49.7%	48.3%	47.7%
	(n)	(83)	(75)	(73)	(72)
Hispanic/ Latino (n = 106; SE ≈ 4.5%)	Percentage	69.8%	68.9%	67.0%	67.0%
	(n)	(74)	(73)	(71)	(71)
Puerto Rican (n = 31; SE ≈ 8.3%)	Percentage	80.7%	74.2%	67.7%	64.5%
	(n)	(25)	(23)	(21)	(20)
Other (n = 126; SE ≈ 3.2%)	Percentage	85.7%	84.9%	84.1%	83.3%
	(n)	(108)	(107)	(106)	(105)
Total* (N = 3,299; SE ≈ 0.6%)	Percentage	85.3%	84.0%	83.0%	82.1%
	(n)	(2,814)	(2,772)	(2,739)	(2,707)

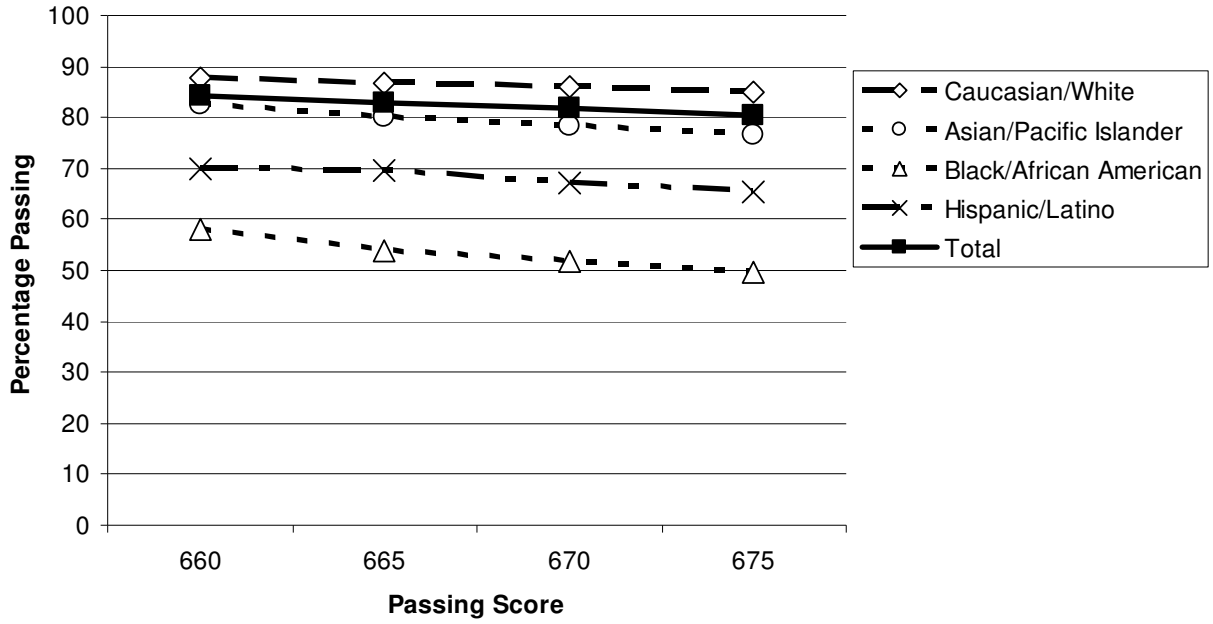
*Total includes racial/ethnic groups not separately listed in the table.

In order to check on the impact of this interaction, we created an artificial sample in which percentages of males and females would be the same across racial/ethnic groups, and then computed the overall pass rates for males and females in this artificial sample. More specifically, we multiplied the percentage in each racial/ethnic group by the pass rate for males in that racial/ethnic group to get a population-weighted pass rate for males. Separately, we multiplied the percentage of the sample in each racial/ethnic group by the pass rate for females in that racial/ethnic group to get a population-weighted pass rate for females. This population-weighted pass rate was 83.1% for males, and 82.7% for females, for a difference of 0.4%. This residual difference, after adjusting for the interaction between gender and race/ethnicity, is quite small and is less than the standard error in the difference between the pass rates for females and males. That is, among the domestic-educated first-time takers, there is no substantial difference in pass rates that is attributable to gender.

The analyses suggest three general conclusions about pass rates for domestic-

educated first-time takers. First, the differences in pass rates between males and females are, at most, quite small. Second, the differences in pass rates among the different racial/ethnic groups are quite large, particularly between Caucasian/White and Black/African American candidates (see Figure 4.4). Third, the interaction between gender and race/ethnicity tends to inflate the apparent differences in pass rates between females and males.

Figure 4.4
Trends in Pass Rates at Passing Scores of 660, 665, 670, and 675
Domestic-Educated First-Time Takers: Racial/Ethnic Groups



4.3 Domestic-Educated Repeaters

Candidates who fail the NY bar exam can repeat it on subsequent test dates. They can retake the NY bar exam as often as they wish. Table 4.5 indicates the impact of changes in the passing score from 660 to 675 for females, males, and the total sample of domestic-educated repeaters. As indicated in the bottom row of the table, the overall pass rate for the repeat takers who took the July 2005 bar examination would decrease from 23.4% to 15.9% if the passing score were increased from 660 to 675. The pass rates for the repeat takers are clearly much lower than they are for domestic-educated first-time takers in Table 4.1. The pass rates for female repeat takers are higher than those for male repeat takers for each of the passing scores. As the passing score increases from 660 to 675, the pass rates decrease for both groups, but they decrease faster for males than for females. For a passing score of 660, the female pass rate is two percentage points higher than that of males. For a passing score of 675, the female pass rate is almost four percentage points higher than that of males.

Table 4.5
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Repeaters: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female (n = 308; SE ≈ 2.4%)	Percentage	24.4%	22.7%	20.5%	17.9%
	(n)	(75)	(70)	(63)	(55)
Male (n = 357; SE ≈ 2.0%)	Percentage	22.4%	19.6%	16.0%	14.0%
	(n)	(80)	(70)	(57)	(50)
Total* (N = 667; SE ≈ 1.8%)	Percentage	23.4%	21.1%	18.1%	15.9%
	(n)	(156)	(141)	(121)	(106)

*Total includes two candidates who did not record their genders.

Table 4.6
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Second-Time Takers: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female (n = 94; SE ≈ 4.9%)	Percentage	35.1%	34.0%	33.0%	29.8%
	(n)	(33)	(32)	(31)	(28)
Male (n = 123; SE ≈ 3.9%)	Percentage	30.1%	26.8%	23.6%	20.3%
	(n)	(37)	(33)	(29)	(25)
Total (N = 217; SE ≈ 3.1%)	Percentage	32.3%	30.0%	27.7%	24.4%
	(n)	(70)	(65)	(60)	(53)

Table 4.6 indicates the impact of changes in the passing score from 660 to 675 on the pass rates for domestic-educated, second-time takers. Those taking the bar examination for the second time did well relative to other repeat takers. As indicated in the bottom row of the table, the overall pass rate for the second-time takers decreases from 32.3% to 24.4% as the passing score increases from 660 to 675. These pass rates are low compared to those of the domestic-educated first-time takers, but are higher than those for all repeat takers. The pass rates are higher for female second-time takers than they are for male second-time takers (but the differences are a bit smaller than the standard errors in these differences). As the passing score increases from 660 to 675, the pass rates decrease for both groups, but they decrease faster for males. For a passing score of 660, the female pass rate is five percentage points higher than that of males. For a passing score of 675, the female pass rate is 9.5 percentage points higher than that of males.

Table 4.7
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Third-Time Takers: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female (n = 101; SE ≈ 4.1%)	Percentage	24.8%	21.8%	20.8%	17.8%
	(n)	(25)	(22)	(21)	(18)
Male (n = 88; SE ≈ 4.4%)	Percentage	27.3%	23.9%	20.5%	19.3%
	(n)	(24)	(21)	(18)	(17)
Total* (N = 190; SE ≈ 3.0%)	Percentage	26.3%	23.2%	21.1%	19.0%
	(n)	(50)	(44)	(40)	(36)

*Total includes one candidate who did not record his or her gender.

Table 4.7 indicates the impact of changes in the passing score on the pass rates of domestic-educated, third-time bar takers. The overall pass rate for the third-time bar takers decreases from 26.3% to 19.0%, as the passing score increases from 660 to 675. These pass rates are lower than those for first-time or second-time candidates, but are higher than those of candidates taking the examination for the fourth time. For the third-time takers, the pass rates tend to be higher for male candidates than they are for female candidates. As the passing score increases from 660 to 675, the pass rates decrease for both groups, but they decrease faster for males. For a passing score of 660, the pass rate for males is 2.5 percentage points higher than that of females. For a passing score of 675, the pass rate for males is only 1.5 percentage points higher than that for females.

Table 4.8 indicates the impact of a change in passing score on the pass rates for repeat takers as a function of race/ethnicity. The overall pass rate for the total sample of domestic-educated repeaters is included in the bottom row as a benchmark. Focusing on the first four rows in Table 4.8, the order remains the same as the passing score is increased. The Caucasian/White group has the highest pass rates, the Asian/Pacific Islander group is second, the Hispanic/Latino group is third, and the Black/African American group is fourth. Most of these groups have relatively small sample sizes; therefore, the standard errors are likely to be fairly large. In general, however, it is clear that the repeat taker pass rates are low for all racial/ethnic groups, decreasing fairly sharply as the passing score increases from 660 to 675. This sharp decline is due in part to the fact that the repeat takers who would pass at 660 or 665 tend to have scores near the passing score.

Table 4.8
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Repeaters: Racial/Ethnic Group

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 302; SE ≈ 2.4%)	Percentage	26.8%	24.8%	21.9%	19.5%
	(n)	(81)	(75)	(66)	(59)
Asian/ Pacific Islander (n = 111; SE ≈ 3.9%)	Percentage	25.2%	22.5%	19.8%	16.2%
	(n)	(28)	(25)	(22)	(18)
Black/ African American (n = 154; SE ≈ 2.8%)	Percentage	17.5%	14.9%	13.0%	11.7%
	(n)	(27)	(23)	(20)	(18)
Hispanic/ Latino (n = 42; SE ≈ 5.5%)	Percentage	19.1%	16.7%	11.9%	11.9%
	(n)	(8)	(7)	(5)	(5)
Other (n = 31; SE ≈ 6.0%)	Percentage	19.4%	19.4%	12.9%	9.7%
	(n)	(6)	(6)	(4)	(3)
Total* (N = 667; SE ≈ 1.5%)	Percentage	23.4%	21.1%	18.1%	15.9%
	(n)	(156)	(141)	(121)	(106)

*Total includes racial/ethnic groups not separately listed in the table.

Table 4.9 presents pass rates as a function of passing score for the second-time candidates in the three groups with reasonably large sample sizes for this analysis. For all three groups and for all four potential passing scores, the pass rates are higher for the second-time takers than they are for all repeat takers. For the Caucasian/White and Asian/Pacific Islander groups, the pass rates for the second-time takers are about ten percentage points higher than they are for all repeat takers in that group. For the Black/African American group, the pass rates for the second-time takers are about 2 to 3 percentage points higher than they are for all Black/African American repeat takers. For all groups, however, the pass rates for second-time takers and for all repeat takers are much lower than they are for the first-time takers.

Table 4.9
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Second-Time Bar Takers: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 114; SE ≈ 4.5%)	Percentage	37.7%	36.0%	33.3%	29.8%
	(n)	(43)	(41)	(38)	(34)
Asian/ Pacific Islander (n = 33; SE ≈ 8.0%)	Percentage	33.3%	30.3%	27.3%	27.3%
	(n)	(11)	(10)	(9)	(9)
Black/ African American (n = 44; SE ≈ 5.6%)	Percentage	20.5%	18.2%	15.9%	13.6%
	(n)	(9)	(8)	(7)	(6)
Total* (N = 217; SE ≈ 3.1%)	Percentage	32.3%	30.0%	27.7%	24.4%
	(n)	(70)	(65)	(60)	(53)

*Total includes racial/ethnic groups not separately listed in the table.

Table 4.10 presents pass rates as a function of passing score for the third-time takers in the three groups with reasonably large sample sizes. The pass rates are generally higher for the third-time takers than they are for all repeat takers but lower than those for the second-time takers. For the Caucasian/White and Asian/Pacific Islander groups, the pass rates for the third-time takers are lower than they are for the second-time takers.

For the Black/African American group, the pattern is somewhat different. The pass rates for the third-time takers are close to (and sometimes higher than) those for the Black/African American second-time takers. One factor contributing to this difference in pattern is the relationship between the passing scores and the score distribution for the Black/African American group. Because the passing scores under consideration are near the center of the score distribution for Black/African American candidates rather than in the tails of the distribution, a relatively high proportion of the Black/African American candidates who fail the bar examination on their first attempt have scores that are close to the passing score, and therefore have a relatively good chance of passing on their second or third attempt.

Table 4.10
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Domestic-Educated Third-Time Bar Takers: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 78; SE ≈ 4.8%)	Percentage	28.2%	24.4%	23.1%	21.8%
	(n)	(22)	(19)	(18)	(17)
Asian/ Pacific Islander (n = 44; SE ≈ 6.4%)	Percentage	27.3%	25.0%	20.5%	13.6%
	(n)	(12)	(11)	(9)	(6)
Black/ African American (n = 38; SE ≈ 6.0%)	Percentage	21.1%	15.8%	15.8%	15.8%
	(n)	(8)	(6)	(6)	(6)
Total* (N = 190; SE ≈ 3.0%)	Percentage	26.3%	23.2%	21.1%	19.0%
	(n)	(50)	(44)	(40)	(36)

*Total includes racial/ethnic groups not separately listed in the table.

In general, for the domestic-educated candidates, the repeat takers have much lower pass rates than the first-time takers for all of the passing scores under consideration. Repeat takers who are taking the bar examination for the second time generally do better than those taking it for the third time, who in turn have higher pass rates than those who have already taken the bar examination three or more times.

The analyses provided above of the potential pass rates for repeat takers are subject to several limitations that do not apply to the corresponding analyses for first-time takers or do not apply with equal force. First, the standard errors for most of the projected pass rates are fairly large, because the sample sizes are small. Second, the repeat takers in all of these analyses had failed the NY bar exam when the passing score was 660, and so a score of 660 would be an improvement over these candidates' previous performance. In July 2006, the repeat takers will probably include candidates who got scores between 660 and 665 in July 2005 or February 2006, and if the passing score had been 675 over the last few years, there would be repeat takers who had gotten scores up to 674 on previous administrations.

The analyses presented here are based on repeat takers who had previous scores up to 659. As the passing score increases, the population of repeat takers will certainly change because the maximum previous scores of repeat takers will increase, and as a result, the average previous score of the repeat takers is likely to increase.

4.4 Foreign-Educated First-Time Takers

The foreign-educated candidates generally have lower NY bar exam scores and lower pass rates than the domestic-educated candidates. Table 4.11 indicates the impact of changes in the passing score from 660 to 675 for females, males, and the total sample of foreign-educated first-time takers. As indicated in the bottom row of Table 4.11, the overall pass rate for foreign-educated first-time takers decreases from 46.3% to 40.3%, as the passing score increases from 660 to 675. As indicated earlier in Table 4.1, the domestic-educated first-time takers' pass rates decrease from 84.4% to 80.5% as the passing score increases from 660 to 675. The male foreign-educated first-time takers have slightly higher pass rates than females for all four passing scores, but for the foreign-educated first-time takers, the difference in pass rates between males and females decreases from 1.5% to 0.3% as the passing score increases from 660 to 675.

Table 4.11
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Foreign-Educated First-Time Takers: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female (n = 633; SE ≈ 2.0%)	Percentage	45.5%	43.1%	41.4%	40.1%
	(n)	(288)	(273)	(262)	(254)
Male (n = 748; SE ≈ 1.8%)	Percentage	47.0%	44.5%	42.4%	40.4%
	(n)	(351)	(333)	(317)	(302)
Total* (N = 1386; SE ≈ 1.3%)	Percentage	46.3%	43.9%	41.9%	40.3%
	(n)	(641)	(608)	(581)	(558)

*Total includes five candidates who did not record their genders.

Table 4.12
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Foreign-Educated First-Time Takers: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 554; SE ≈ 2.1%)	Percentage	58.5%	55.6%	53.1%	51.4%
	(n)	(324)	(308)	(294)	(285)
Asian/ Pacific Islander (n = 590; SE ≈ 2.0%)	Percentage	42.0%	40.0%	38.3%	36.8%
	(n)	(248)	(236)	(226)	(217)
Black/ African American (n = 67; SE ≈ 4.0%)	Percentage	16.4%	13.4%	11.9%	10.5%
	(n)	(11)	(9)	(8)	(7)
Hispanic/ Latino (n = 73; SE ≈ 5.0%)	Percentage	27.4%	24.7%	23.3%	21.9%
	(n)	(20)	(18)	(17)	(16)
Other (n = 92; SE ≈ 5.0%)	Percentage	38.0%	37.0%	35.9%	32.6%
	(n)	(35)	(34)	(33)	(30)
Total* (N = 1,386; SE ≈ 1.3%)	Percentage	46.3%	43.9%	41.9%	40.3%
	(n)	(641)	(608)	(581)	(558)

*Total includes racial/ethnic groups not separately listed in the table.

Table 4.12 indicates the impact of changes in passing scores from 660 to 675 on the pass rates for foreign-educated first-time takers as a function of race/ethnicity. The overall pass rate for the total group of foreign-educated first-time takers is included in the bottom row of the table for reference. The order of the groups in Table 4.12 remains the same as the passing score is increased from 660 to 675. The Caucasian/White candidates have the highest pass rates, the Asian/Pacific Islander group is second, the Hispanic/Latino group is third, and the Black/African American group is fourth. None of the foreign-educated first-time takers indicated their race/ethnicity as Puerto Rican, Chicano/Mexican American, or American Indian/Alaskan Native.

As noted earlier, increasing the passing score tends to have a larger relative impact if the initial pass rate is low. The pass rate for the foreign-educated first-time takers in the Caucasian/White group decreases from 58.5% to 51.4% as the passing score increases from 660 to 675, a drop of just over seven percentage points, or about 12% of the base rate of 58.5%. The pass rate for the foreign-educated first-time takers in the Asian/Pacific Islander group decreases from 42.0% to 36.8%, a drop of 5.2 percentage points, or about 12.4% of the base rate of 42.0%. The pass rate for the "Other" group decreases from 38.0% to 32.6%, a drop of 5.4 percentage points, or

about 14.2% of the base rate. The pass rate for the foreign-educated first-time takers in the Hispanic/Latino group decreases from 27.4% to 21.9%, a drop of 5.5 percentage points, or about 20% of the base rate. The pass rates for the Black/African American group drops from 16.4% to 10.5% as the passing score increases, a drop of 5.9 percentage points, or almost 36% of the base rate.

4.5 Foreign-Educated Repeaters

Table 4.13 indicates the impact of changes in the passing score from 660 to 675 for females, males, and the total sample of foreign-educated repeaters. As indicated in the bottom row of the table, the overall pass rate for the foreign-educated repeaters decreases from 15.1% to 10.9% as the passing score increases from 660 to 675. The pass rates for foreign-educated repeaters are much lower than they are for foreign-educated first-time takers or for domestic-educated repeaters. For all four potential passing scores between 660 and 675, female foreign-educated repeaters have higher pass rates than males. As the passing score increases from 660 to 675, the pass rate decreases for both groups, and the difference between females and males decreases from 7.8 percentage points to 4.3 percentage points.

Table 4.14 indicates the impact of a change in passing score on foreign-educated repeaters as a function of race/ethnicity. The sample sizes in Table 4.14 are all fairly small and therefore the pass rates are likely to be too unstable to draw any strong conclusions about trends. The numbers and percentages are presented in Table 4.14 for the sake of completeness. The clearest general conclusion that can be drawn from these data is that the pass rates for foreign-educated repeaters are quite low for all passing scores and all racial/ethnic groups.

As indicated in Section 4.3, these projections apply to a group of repeat takers who had failed the NY bar exam when the passing score was 660. As the passing score increases, the maximum previous scores of repeat takers will also increase, and the average previous score of the repeat takers is also likely to increase.

Table 4.13
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Foreign-Educated Repeat Takers: Females and Males

Gender		Pass 660	Pass 665	Pass 670	Pass 675
Female (n = 268; SE ≈ 2.2%)	Percentage	19.0%	16.4%	13.8%	13.1%
	(n)	(51)	(44)	(37)	(35)
Male (n = 296; SE ≈ 1.7%)	Percentage	11.2%	10.5%	9.5%	8.8%
	(n)	(33)	(31)	(28)	(26)
Total* (N = 576; SE ≈ 1.4%)	Percentage	15.1%	13.5%	11.8%	10.9%
	(n)	(87)	(78)	(68)	(63)

*Total includes twelve candidates who did not record their genders.

Table 4.14
Projected Pass Rates for Passing Scores of 660, 665, 670, 675
Foreign-Educated Repeaters: Racial/Ethnic Groups

Race/Ethnicity		Pass 660	Pass 665	Pass 670	Pass 675
Caucasian/ White (n = 121; SE ≈ 3.8%)	Percentage	24.8%	23.1%	20.7%	18.2%
	(n)	(30)	(28)	(25)	(22)
Asian/ Pacific Islander (n = 243; SE ≈ 2.0%)	Percentage	13.6%	11.1%	9.9%	9.5%
	(n)	(33)	(27)	(24)	(23)
Black/ African American (n = 113; SE ≈ 2.3%)	Percentage	7.1%	7.1%	5.3%	4.4%
	(n)	(8)	(8)	(6)	(5)
Hispanic/ Latino (n = 36; SE ≈ 5.8%)	Percentage	13.9%	13.9%	13.9%	13.9%
	(n)	(5)	(5)	(5)	(5)
Other (n = 62; SE ≈ 4.5%)	Percentage	17.7%	16.1%	12.9%	12.9%
	(n)	(11)	(10)	(8)	(8)
Total* (N = 576; SE ≈ 1.4%)	Percentage	15.1%	13.5%	11.8%	10.9%
	(n)	(87)	(78)	(68)	(63)

*Total includes racial/ethnic groups not separately listed in the table.

Notes:

1. As noted earlier, all of the results in this report are based on the sample of candidates who agreed to participate in this study, and therefore these results are not in perfect agreement with the actual pass rates for all domestic-educated first-time candidates in New York.

2. Because a score of 665 is in the lower tail of the distribution for the Caucasian/White group, where there are few candidate scores, any change in the passing score, either up or down tends to have a modest impact on the percentage of candidates passing.

5. Performance before Law School, in Law School, and on the July 2005 New York Bar Examination

The primary purpose of this study was to examine the impact of recent (July 2005) and proposed changes in the passing score on pass rates for the NY bar exam, and the analyses most directly relevant to this issue have been discussed in Section 4. This section digs a little deeper. It examines the relationships among variables describing academic achievement before law school (undergraduate GPA and LSAT scores), performance in law school (law-school GPAs), and performance on the NY bar exam (total scores on the bar exam).

For a large sub-sample of the candidates in this study, undergraduate GPA, LSAT scores, law-school GPA, and NY bar exam scores were all available. The results for this sub-sample were used to develop and evaluate hypotheses about relationships between readiness for law school (as measured by undergraduate GPA and LSAT score), subsequent performance in law school (as measured by law-school GPA), and later performance on the bar exam.

5.1 The School-Based Sample

For the analyses described in this section, it was necessary to construct a sub-sample of the candidates for whom data on undergraduate GPA (U-GPA), LSAT scores, law-school GPA (L-GPA), and NY bar exam scores were all available. The data on foreign-educated candidates did not include information on U-GPAs, LSAT scores, or L-GPAs; therefore, the foreign-educated candidates are not included in these analyses. In addition, any domestic-educated candidate for whom one or more of the four relevant variables was not available is not included in the sample. Since this sample is defined, to a large extent, in terms of the availability of L-GPAs and law-school admissions measures, it will be referred to as the *school-based sample*.

In order to simplify the interpretation of the results of these analyses, we also excluded candidates who were taking the NY bar exam for the second or subsequent time. The experience of having taken the bar examination on previous administrations and the associated passage of time would be likely to have an impact on the relationships among the variables, and explicitly incorporating the number of previous bar examination attempts into the models would have made them quite cumbersome. Therefore, the school-based sample was limited to domestic-educated first-time takers with complete data on the variables employed in these analyses.

The school-based sample was further limited to candidates from law schools with twenty-five or more graduates who met all of the other requirements for inclusion. As discussed later, it was necessary to rescale the L-GPAs for some of the analyses, and this rescaling required within-law-school analyses for which it was necessary to have a reasonable number of candidates from the particular law school. All but two of the fifteen law schools in New York are represented in the school-based sample; the two

New York law schools not included in the school-based sample were not able to supply GPAs for their graduates. Nineteen additional schools from across the country were also represented in this sample, but the number of candidates from each of these schools is generally smaller than the number from the New York schools. Therefore, although many out-of-state schools are included in the sample, most of the candidates in the school-based sample are from law schools in New York. The school-based sample contains 4,388 candidates from 32 schools.

5.2 Description of the Sample

The characteristics of the 4,388 candidates in the school-based sample are described in Tables 5.1 to 5.6. These tables also include the corresponding results for the larger *reference group* of all domestic-educated first-time candidates from the full sample of candidates taking the July 2005 NY bar exam (6,585 of a total of 10,175 candidates) to determine the extent to which the sample was representative of this reference group.

Table 5.1 presents the frequencies and percentages of females and males in the school-based sample. The female-male split is almost even with a slightly larger number of males than females. The percentages of females and males in the school-based sample are quite close to the corresponding percentages in the reference group of domestic-educated first-time test takers.

Table 5.1
Numbers and Percentages of Males and Females in the School-Based Sample and the Reference Group of Domestic-Educated First-Time Takers

Gender	Number in School-Based Sample*	Percent in School-Based Sample*	Percent in Reference Group**
Female	2,187	49.8%	49.5%
Male	2,201	50.2%	50.4%

*N = 4,388
**Domestic-educated first-time takers only; N = 6,585

Table 5.2 displays the numbers and percentages of candidates in the school-based sample in each racial/ethnic category and the corresponding percentages in the reference group as a function of race/ethnicity. The distributions are generally similar for the school-based sample and the reference group, with the Caucasian/White group constituting about 75% of both samples and with the different groups in the same order in terms of their percentages in the two samples. The school-based sample has a larger percentage of Caucasian/White takers than the sample of all domestic-educated first-

time takers (75.1% versus 73.2%) and a smaller percentage of Asian/Pacific Islander candidates than the sample of all domestic-educated first-time takers (9.5% versus 11.2%), but, overall, the school-based sample matches the reference group pretty closely.

Table 5.2
Numbers and Percentages by Race/Ethnicity for the School-Based Sample and the Reference Group of Domestic-Educated First-Time Takers

Race/Ethnicity	Number in School-Based Sample*	Percent in School-Based Sample*	Percent in Reference Group**
Caucasian/White	3,294	75.1%	73.2%
Asian/Pacific Islander	416	9.5%	11.2%
Black/African American	284	6.5%	6.5%
Hispanic/Latino	151	3.4%	3.2%
Puerto Rican	54	1.2%	1.1%
Chicano/Mexican American	14	0.3%	0.3%
American Indian/Alaskan Native	7	0.2%	0.1%
Other	167	3.8%	4.1%
Omitted	1	0.0%	0.2%

*N = 4,388
**Domestic-educated first-time takers only; N = 6,585

Table 5.3 presents the percentages of candidates in the school-based sample as a function of gender and race/ethnicity, and Table 5.4 displays these percentages for the reference group. Overall, the school-based sample appears comparable to the reference group, but as seen in Table 5.2, the school-based sample contains a slightly larger percentage of Caucasian/White takers and a smaller percentage of Asian/Pacific Islander takers. In both the school-based sample and the reference group, the Caucasian/White group includes a higher percentage of males than females, while all other groups have more females than males (see Tables 5.3 and 5.4).

Table 5.3
Percentages of Race/Ethnicity by Gender for the School-Based Sample

Race/Ethnicity	Gender	
	Female (n = 2,187)	Male (n = 2,201)
Caucasian/White (n = 3,294)	70.6%	79.5%
Asian/Pacific Islander (n = 416)	10.9%	8.0%
Black/African American (n = 284)	8.5%	4.5%
Hispanic/Latino (n = 151)	3.5%	3.4%
Puerto Rican (n = 54)	1.4%	1.0%
Chicano/Mexican American (n = 14)	0.4%	0.3%
American Indian/Alaskan Native (n = 7)	0.2%	0.1%
Other (n = 167)	4.4%	3.2%
Omitted (n = 1)	0.0%	0.0%

N = 4,388

Table 5.4
Percentages of Race/Ethnicity by Gender for the Reference Group of Domestic-Educated First-Time Takers

Race/Ethnicity	Gender		
	Female (n = 3,284)	Male (n = 3,299)	Omitted (n = 2)
Caucasian/White (n = 4,818)	69.0%	77.4%	50.0%
Asian/Pacific Islander (n = 740)	12.9%	9.6%	0.0%
Black/African American (n = 430)	8.5%	4.6%	0.0%
Hispanic/Latino (n = 214)	3.3%	3.2%	0.0%
Puerto Rican (n = 73)	1.3%	0.9%	0.0%
Chicano/Mexican American (n = 23)	0.5%	0.2%	0.0%
American Indian/Alaskan Native (n = 9)	0.2%	0.1%	0.0%
Other (n = 268)	4.3%	3.8%	0.0%
Omitted (n = 10)	0.1%	0.2%	50.0%

N = 6,585

Table 5.5 reports the distribution of candidate ages when they took the NY bar exam for the school-based sample and the reference sample. The percentages are similar across age groups for the school-based sample and reference group; they differ at most by two percentage points.

Table 5.5
Frequencies and Percentages of Age at Bar Attempt for the School-Based Sample and the Reference Group of Domestic-Educated First-Time Takers

Age at Bar Attempt	Frequency in School-Based Sample*	Percent in School-Based Sample*	Percent in Reference Group**
< 27	2,478	56.5%	54.5%
27 - 28	925	21.1%	21.5%
29 – 30	387	8.8%	9.6%
31 – 35	360	8.2%	8.8%
36 – 40	113	2.6%	2.7%
41 – 45	63	1.4%	1.5%
46 – 50	31	0.7%	0.8%
51 – 55	22	0.5%	0.5%
56 – 60	8	0.2%	0.2%
> 60	1	0.0%	0.0%

*N = 4,388
**Domestic-educated first-time takers only; N = 6,585

Table 5.6 reports the distribution of candidates' ages at law school graduation in the school-based sample and in the reference group. The percentages in the various age groups are similar for the school-based sample and reference group; they differ at most by about one percentage point.

While some differences are observed in the percentages of Caucasian/White, Asian/Pacific Islander, and Black/African American takers between the school-based sample and the reference group of all domestic-educated first-time takers, the school-based sample appears to be representative of the reference group.

Table 5.6
Frequencies and Percentages of Age at Law School Graduation for the School-Based Sample and the Reference Group of Domestic-Educated First-Time Takers

Age at Law School Graduation	Frequency in School-Based Sample*	Percent in School-Based Sample*	Percent in Reference Group**
< 27	2,561	58.4 %	57.2%
27 - 28	887	20.2%	20.4%
29 – 30	367	8.4%	8.9%
31 – 35	335	7.6%	8.2%
36 – 40	110	2.5%	2.4%
41 – 45	63	1.4%	1.2%
46 – 50	30	0.7%	0.7%
51 – 55	21	0.5%	0.4%
56 – 60	8	0.2%	0.2%
> 60	1	0.0%	0.0%

*N = 4,383 (age at law school graduation was not available for five candidates).
**Domestic-educated first time takers only; N = 6,556 (age at law school graduation was not available for 29 candidates).

5.3 Scaling Law-School GPAs

The use of GPAs from different schools is always somewhat problematic, because the meaning of GPAs is likely to vary across schools as a result of differences in admissions policies, course requirements, grading standards, and the specific methods used to compute GPAs. There is no reason to think that law-school GPAs are immune to these factors, and in fact, our analyses of the relationships between law-school GPA (L-GPA) and other variables (e.g., U-GPAs, LSAT scores, and bar examination scores) indicates some variability in the meaning of GPAs across law schools.

In addition to the general problem associated with the use of GPAs from different schools in the same analysis, L-GPAs introduce some special problems. Although most of the law schools represented in the sample seem to use a traditional four-point definition of GPA, several reported GPAs on a 0-100 scale, and a few used other scales. The use of such widely different scales for the same variable within a single statistical analysis would make any results impossible to interpret in a sensible way. Some rescaling of the GPAs was essential.

The U-GPAs are subject to some of the same difficulties as L-GPAs, particularly the likelihood that GPAs from different undergraduate institutions and from different majors within institutions can reflect different kinds of performance and different levels of performance. However, the U-GPAs are from such a great variety of institutions and majors that any effects associated with institutions and majors can be effectively treated as sources of random error (or noise). The variability introduced by differences among undergraduate schools in grading standards tends to diminish the power of the U-GPA as a predictor of future performance, but it probably does not introduce any substantial systematic errors into the analyses. The problem with L-GPAs is not so easily resolved, largely because a substantial proportion of the sample of domestic-educated first-time takers graduated from a relatively small number of law schools in the same year.

We examined a number of ways of standardizing L-GPAs, and decided to use two approaches. In the first approach, we adjusted for the selectivity of the law school in terms of U-GPAs and LSAT scores. In particular, for each candidate in the sample, we computed an index based on his or her LSAT score and U-GPA. The U-GPAs and LSAT scores in the school-based sample were scaled[1] to have a mean of 0.0 and an SD (standard deviation) of 1.0. The two sets of scores were then combined into an index, with the LSAT score given a weight of 60% and the U-GPA given a weight of 40%. An arbitrary value of 10.0 was then added to the index to ensure that all values were positive. Each candidate in the school-based sample had a score on the index.

The mean and SD for the index was computed for each law school in the school-based sample using the candidates in the school-based sample who had graduated from that law school, and the L-GPAs for the candidates from that school were scaled to have the same mean and SD as the index for the law school. The resulting *Index-Based L-GPA* depends on the candidate's actual GPA and the distribution of the index for candidates from his or her law school. Using this scaling of the GPA to the index implies that if two candidates from different law schools have the same L-GPA, the candidate from the more selective school (i.e., with a higher average for the index) will generally have the higher Index-Based L-GPA.

In the second approach, we transformed L-GPAs within each law school to a common four-point scale, the *4-pt L-GPA*, by scaling the mean and SD within each school to the average GPA mean and SD for all of the schools that used a traditional four-point GPA scale. Under this definition, all of the law schools in the school-based sample have the same mean and SD for their GPAs. This approach makes no attempt

to adjust the L-GPAs to take account of differences across law schools, and in fact, any differences in means and SDs of L-GPAs that might have existed across schools are eliminated. The 4-pt L-GPA reflects each candidate's relative standing on GPA within their law school.

5.4 Distributions and summaries of scores

The results reported in this section summarize the means and SDs of the U-GPA, LSAT, 4-pt L-GPA, Index-Based L-GPA, and total NY bar exam scores for the school-based sample and for various subgroups within that sample. Figure 5.1 to 5.5 provide plots of score distributions using *histograms* for each of these five variables in the school-based sample. Each of the distributions approximates a normal distribution with a central peak and a gradual falloff at each end.

Figure 5.1 displays a distribution of the U-GPAs. The GPAs tend to be clustered around 3.3, with most of the GPAs between 3 and 4. The distribution falls off quickly at the high end and more slowly at the low end. Such distributions are said to be negatively skewed. The mean of the U-GPA is 3.33 (SD = 0.40).

Figure 5.2 displays a distribution of LSAT scores in the school-based sample. The LSAT scores tend to be centered on 160, with most of the scores between 150 and 170. The mean of the LSAT is 158.02 (SD = 7.61).

Figure 5.3 displays a distribution of 4-pt L-GPAs in the school-based sample. The 4-pt L-GPAs tend to be centered on 3.15, with most of the scores between 2.75 and 3.75. The mean of the 4-point L-GPA is 3.19 (SD = 0.36).

Figure 5.4 displays a distribution of Index-Based L-GPAs in the school-based sample. The Index-Based L-GPAs tend to be centered on 10, with most of the scores between 9 and 11.5. The mean of the Index-Based L-GPA is 10.16 (SD = 0.95).

Figure 5.5 displays the distribution of bar examination scores in the school-based sample. The scores tend to be clustered around 728.5, with most of them between 625 and 825. The mean bar examination score for the school-based sample is 728.45 (SD = 63.15).

Figure 5.1
Score Distribution for Undergraduate Grade-Point Average in the School-Based Sample

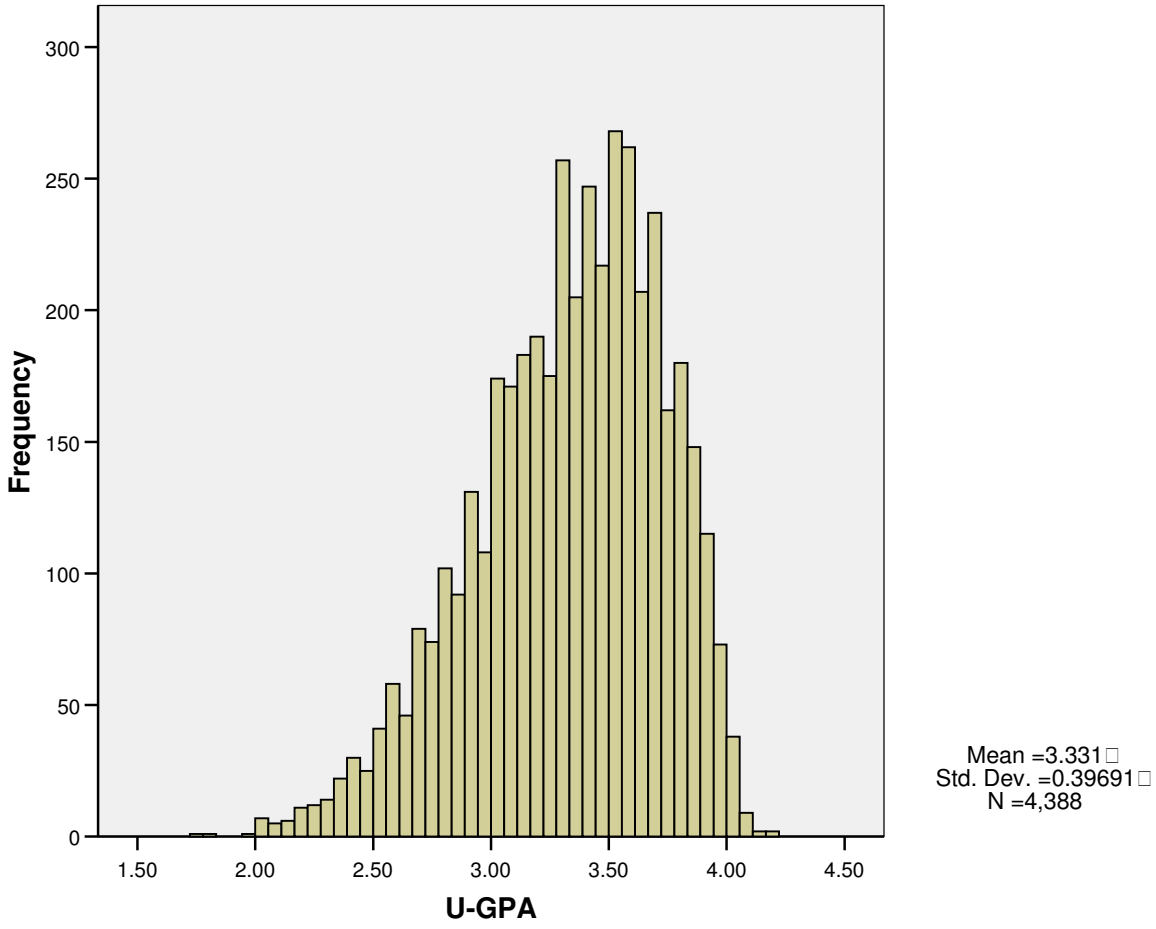


Figure 5.2
Score Distribution for LSAT Scores in the School-Based Sample

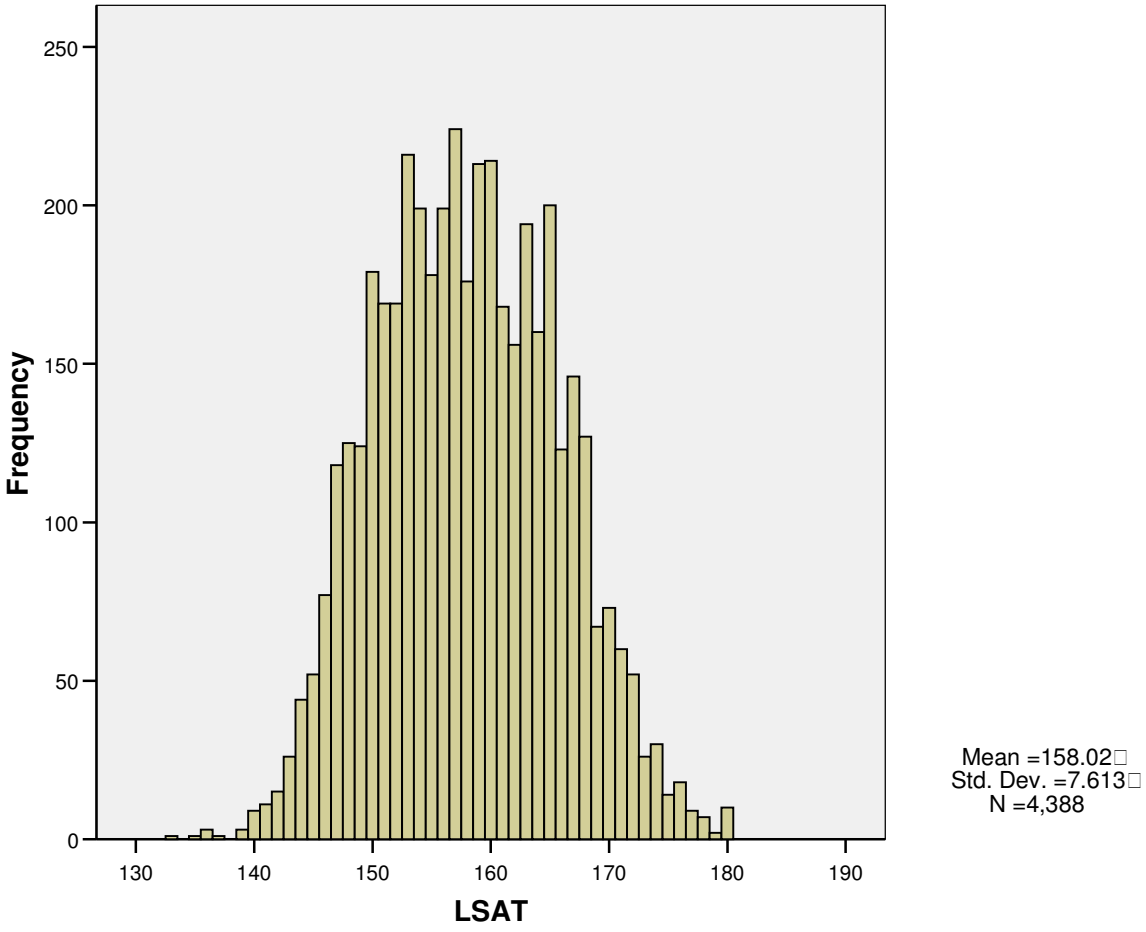


Figure 5.3
Score Distribution for 4-pt Law-School Grade-Point Average in the School-Based Sample

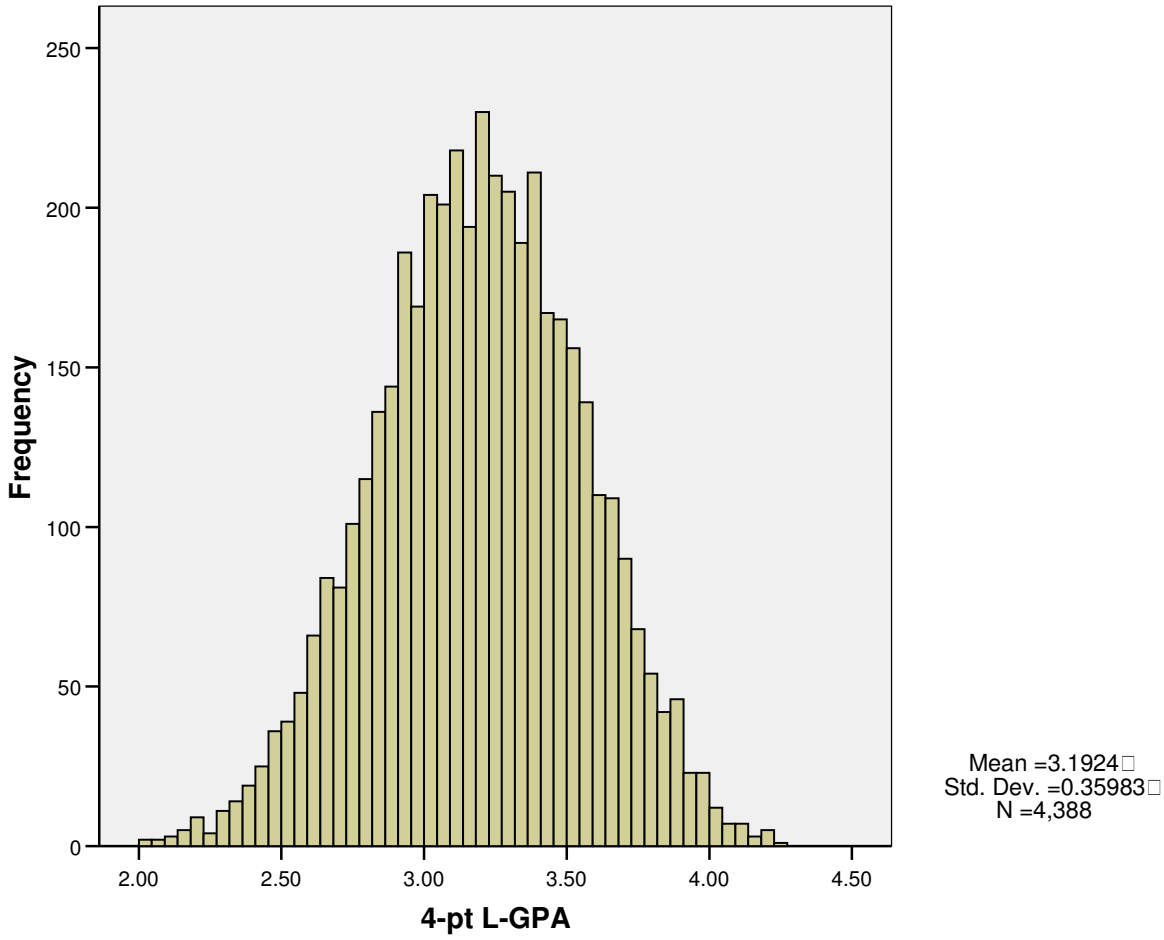


Figure 5.4
Score Distribution for Index-Based Law-School Grade-Point Average in the School-Based Sample

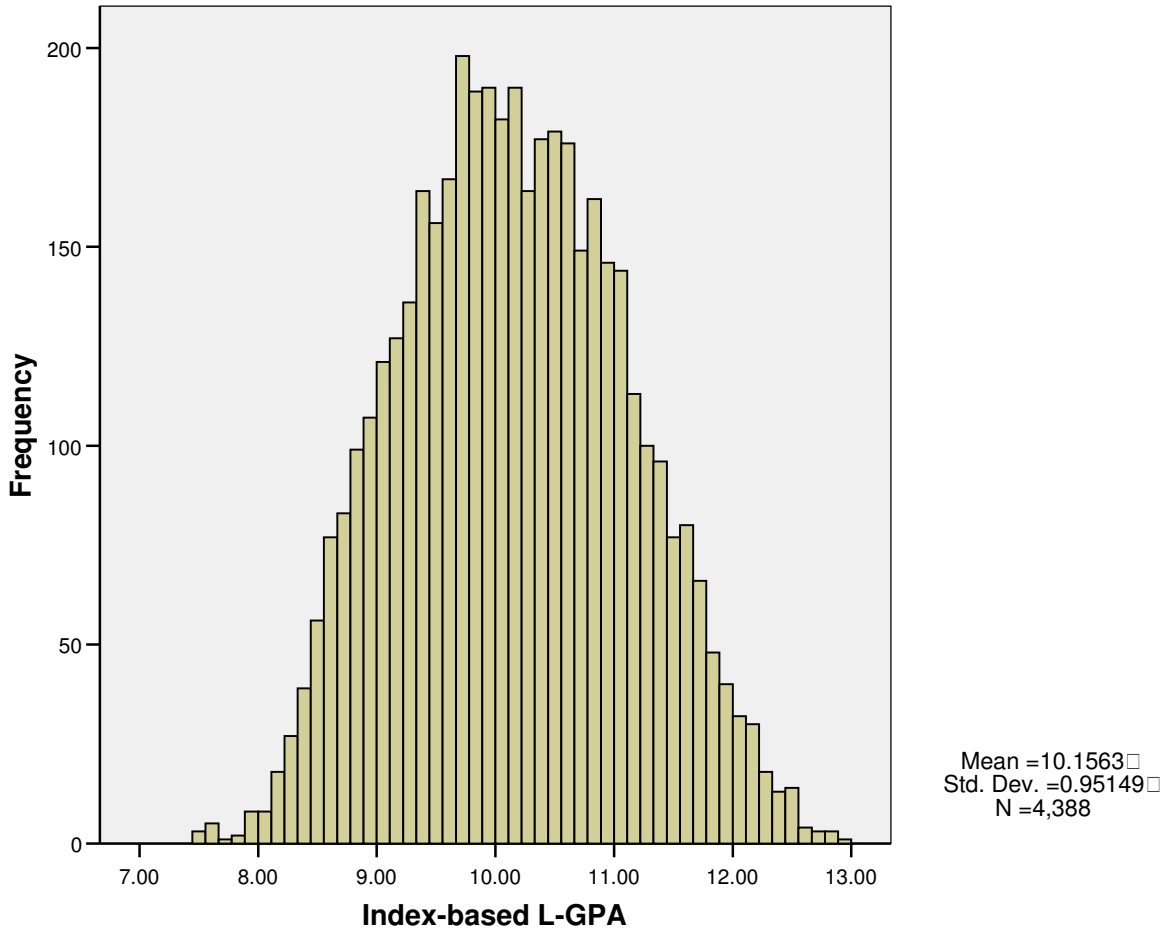


Figure 5.5
Score Distribution for NY Bar Scores in the School-Based Sample

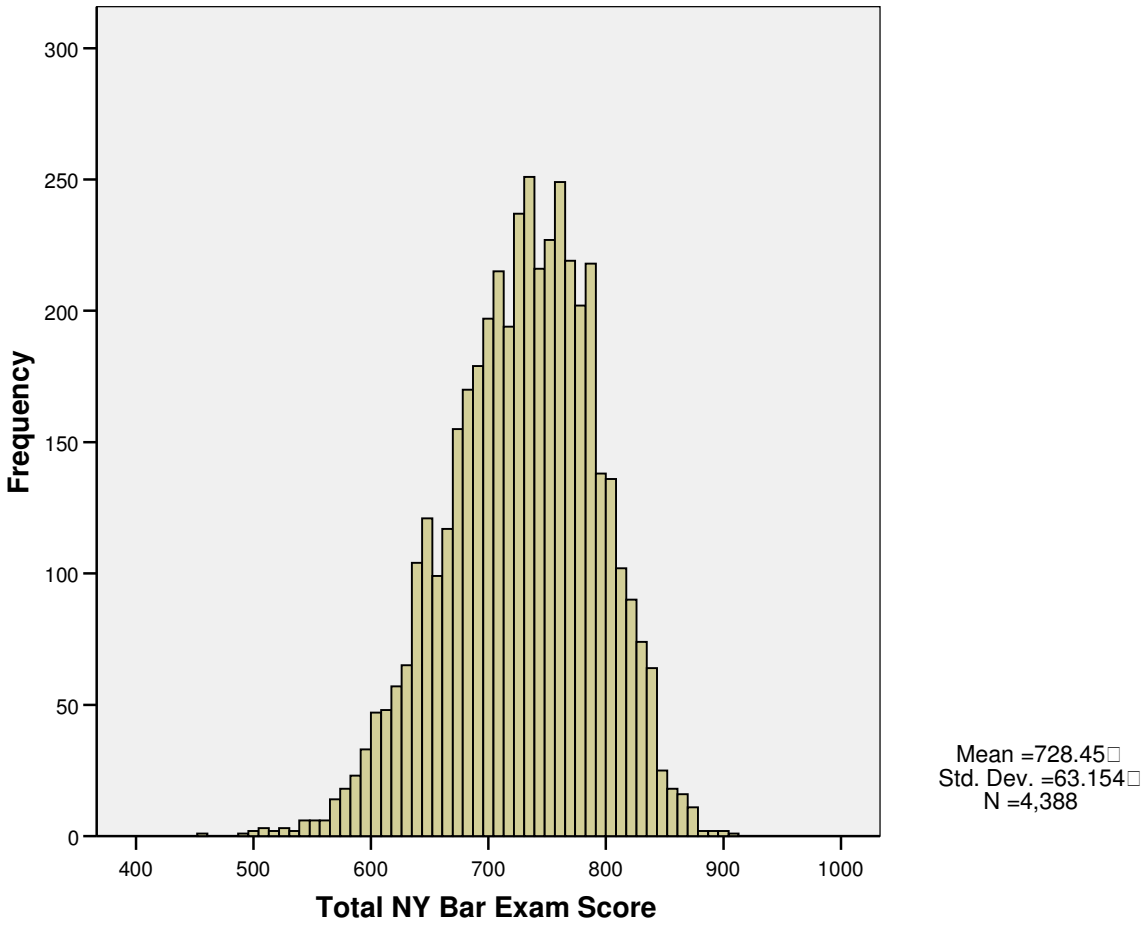


Table 5.7 presents the means and SDs for U-GPAs, LSAT scores, 4-pt L-GPAs, Index-Based L-GPAs, and NY bar exam scores by gender for the school-based sample. The first and second rows of Table 5.7 present the means and SDs for females and males, and the bottom row presents the means and SDs for the total school-based sample. The females have a slightly higher average U-GPA, and males have a slightly higher average LSAT score, L-GPAs, and bar examination score.

Note that the means and SDs of the total bar exam scores for females and males and for the total group in the school-based sample are very similar to those for the domestic-educated first-time takers (see Table 3.1). The school-based sample is quite representative of the total group of domestic-educated first-time takers.

Table 5.7
Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores by Gender for the School-Based Sample

Gender		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA*	Total NY Bar Score
Female (n = 2,187)	Mean	3.37	157.29	3.18	10.10	725.12
	(SD)	(0.37)	(7.52)	(0.36)	(0.93)	(62.77)
Male (n = 2,201)	Mean	3.29	158.74	3.20	10.21	731.76
	(SD)	(0.42)	(7.64)	(0.36)	(0.97)	(63.37)
Total (N = 4,388)	Mean	3.33	158.02	3.19	10.16	728.45
	(SD)	(0.40)	(7.61)	(0.36)	(0.95)	(63.15)

*Index is weighted average of 60% LSAT and 40% Undergraduate GPA

Table 5.8 presents the means and SDs of the five performance variables for racial/ethnic groups with more than 20 candidates (Appendix D.1 presents the standard errors for this table). Performance on the bar examination mirrors that found in the reference sample of domestic-educated first-time takers as described in Table 3.2. The Caucasian/White group has the highest mean, followed by the Asian/Pacific Islander, Puerto Rican, Hispanic/Latino, and Black/African American groups. The same ordering also occurs for U-GPA and the 4-pt L-GPA. The Asian/Pacific Islander group has the highest average on the LSAT and on the Index-Based GPA, followed by the Caucasian/White, Hispanic/Latino, Puerto Rican, and Black/African American groups. Since the Index-Based L-GPA depends in part on LSAT scores, it is not surprising that the ordering of groups on these two variables is related.

Table 5.8
Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 3,294)	Mean	3.36	158.56	3.24	10.21	735.85
	(SD)	(0.39)	(7.47)	(0.35)	(0.95)	(60.92)
Asian/ Pacific Islander (n = 416)	Mean	3.31	159.50	3.10	10.23	720.09
	(SD)	(0.39)	(7.61)	(0.32)	(0.97)	(61.53)
Black/ African American (n = 284)	Mean	3.13	152.19	2.90	9.66	680.33
	(SD)	(0.40)	(6.42)	(0.34)	(0.89)	(59.71)
Hispanic/ Latino (n = 151)	Mean	3.23	154.28	3.03	9.86	702.98
	(SD)	(0.41)	(6.71)	(0.37)	(0.89)	(66.92)
Puerto Rican (n = 54)	Mean	3.28	153.48	3.06	9.85	710.15
	(SD)	(0.37)	(7.56)	(0.36)	(0.93)	(68.12)
Other (n = 167)	Mean	3.34	158.37	3.14	10.12	715.76
	(SD)	(0.40)	(7.26)	(0.33)	(0.89)	(63.72)
Total* (N = 4,388)	Mean	3.33	158.02	3.19	10.16	728.45
	(SD)	(0.40)	(7.61)	(0.36)	(0.95)	(63.15)

*Total includes racial/ethnic groups not separately listed in the table.

Table 5.9
Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores for Females by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,545)	Mean	3.42	158.03	3.24	10.16	733.94
	(SD)	(0.36)	(7.25)	(0.35)	(0.92)	(60.24)
Asian/ Pacific Islander (n = 239)	Mean	3.34	159.00	3.08	10.15	717.61
	(SD)	(0.36)	(7.51)	(0.30)	(0.92)	(59.10)
Black/ African American (n = 186)	Mean	3.15	151.17	2.92	9.62	681.74
	(SD)	(0.39)	(6.38)	(0.33)	(0.90)	(61.31)
Hispanic/ Latino (n = 77)	Mean	3.26	153.47	3.03	9.81	701.88
	(SD)	(0.42)	(6.52)	(0.36)	(0.92)	(68.07)
Other (n = 96)	Mean	3.37	157.30	3.12	10.08	706.41
	(SD)	(0.41)	(7.80)	(0.32)	(0.88)	(64.25)
Total* (N = 2,187)	Mean	3.37	157.29	3.18	10.10	725.12
	(SD)	(0.37)	(7.52)	(0.36)	(0.93)	(62.77)

*Total includes racial/ethnic groups not separately listed in the table.

Tables 5.9 and 5.10 present the corresponding breakdown of the data separately for females and males (Appendix D.2 and D.3 present the standard errors for these tables). For each of the racial/ethnic groups represented in these tables, females have higher average U-GPAs and males have higher average LSAT scores. For each of the racial/ethnic groups, except the Black/African American group, males have a higher average bar examination score than females. For the Black/African American group, females have a higher average bar examination score than the males. Note that, although the overall numbers of males and females are approximately equal, there are almost twice as many females as males in the Black/African American group.

Table 5.10
Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores for Males by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,749)	Mean	3.30	159.03	3.24	10.25	737.54
	(SD)	(0.42)	(7.64)	(0.35)	(0.97)	(61.48)
Asian/ Pacific Islander (n = 177)	Mean	3.27	160.18	3.14	10.32	723.44
	(SD)	(0.42)	(7.72)	(0.35)	(1.02)	(64.67)
Black/ African American (n = 98)	Mean	3.08	154.13	2.86	9.73	677.64
	(SD)	(0.41)	(6.09)	(0.36)	(0.87)	(56.78)
Hispanic/ Latino (n = 74)	Mean	3.21	155.14	3.02	9.91	704.12
	(SD)	(0.40)	(6.85)	(0.39)	(0.87)	(66.15)
Other (n = 71)	Mean	3.29	159.82	3.16	10.17	728.41
	(SD)	(0.38)	(6.23)	(0.34)	(0.90)	(61.19)
Total* (N = 2,201)	Mean	3.29	158.74	3.20	10.21	731.76
	(SD)	(0.42)	(7.64)	(0.36)	(0.97)	(63.37)

*Total includes racial/ethnic groups not separately listed in the table.

5.5 Distributions of Z-Scores

In examining changes in group means and SDs across time from the pre-law-school measures to L-GPAs to bar examination scores, it is convenient to have all of the different measures on the same scale. One way to make variables defined in terms of different units or on different scales comparable is to rescale all of the measures to have the same means and SDs in some reference population, and this is commonly done by rescaling all of the variables to what is called a *z-score* scale.

Z-scores are scores that have been rescaled to have a mean of 0.0 and a standard deviation of 1.0 in some reference population. The reference population used here consisted of the school-based sample. The z-scores considered in this section all have a mean of 0.0 and a SD of 1.0 for the school-based sample.[2]

Thus, the mean, or average, z-score for any variable is 0.0 in the reference population (i.e., the school-based sample), and the SD of the z-scores on any of the five

variables under consideration in the reference population is 1.0. So, on any variable, about half the z-scores in the school-based sample will be positive and about half will be negative. Because almost all of the scores in a typical distribution fall between three SDs below the mean and three SDs above the mean, almost all z-scores for any variable fall between -3.0 and 3.0 (with the mean at 0.0). These properties make z-scores easy to interpret. If a z-score is positive, it is above the mean for the reference population. If it is above 1.0 it is moderately high. If it is above 2.0, it is quite high, and if it is above 3.0 it is one of the highest scores on that variable in the reference population. If a z-score is negative, it is below the mean. If it is below -1.0 it is moderately low. If it is below -2.0, it is quite low, and if it is near -3.0 it is one of the lowest scores on that variable in the reference population.

To examine the relative differences between groups of candidates on U-GPA, LSAT, L-GPA, and the NY bar exam scores, z-scores were computed for each candidate, and the group averages were computed by taking the average of these z-scores over all candidates in the group. For particular groups of examinees (e.g., males and females), deviation of the average z-score for the group from zero is an indication of the extent to which groups tend to be below the mean (less than zero) or above the mean (greater than zero) on the variable.

Table 5.11 displays z-scores for U-GPA, LSAT, the two L-GPAs, and NY bar exam by gender for the school-based sample. Note that the average z-scores for the total school-based sample (i.e., the reference population) are necessarily equal to 0.0 for all five variables, because of the definition of z-scores. Because there are only two groups in Table 5.11, and the numbers of candidates in the two groups are approximately equal, the average z-scores for females and males are very close to being mirror images of each other; if one is a certain distance above the mean, the other is the same distance below the mean. Since the overall average is necessarily 0.0, if the average for one of the two groups is positive, the average for the other has to be negative (except possibly as a result of rounding).

In Table 5.11, the average z-scores on the LSAT, the two L-GPAs, and NY bar exam are below zero for females and above zero for males. For U-GPA, however, the average z-score for females is positive, and the average z-score for males is negative. None of these differences are large. The difference (-0.05 to +0.05) between the average scores on the bar examination for males and females is about a tenth of an SD (i.e., about 0.10 on the z-score scale). The larger mean z-scores in Table 5.11 involve about a tenth of an SD favoring females on U-GPA and a tenth of an SD on the LSAT scores favoring males.

As discussed in Sections 3 and 4, the average scores for females and males are influenced by the fact that the different racial/ethnic groups include different numbers of females and males, with the Caucasian/White group including more males than females and all other groups including more females than males. If we adjust for these differences by weighting the average scores for females and males in each racial/ethnic

group (from Tables 5.13 and 5.14) equally, the average scores for females increase relative to those of males on all of the variables in Table 5.11. The 4-pt L-GPA z-scores go from -.03 and .03 to -.01 and .01, the average Index-Based L-GPAs become -.04 and .04, the average bar examination z-scores become -.02 and .02, and the average LSAT scores become -.07 and .08. The gap between the average U-GPAs , which favors females, gets a little bigger (.12 to -.12) when we adjust for the percentages of females in the different racial/ethnic groups.

Table 5.11
Standardized Score Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT, Law-School Grade-Point Average, and Total New York Bar Scores for Males and Females in the School-Based Sample

Gender		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Female (n = 2,187)	Mean	0.11	-0.10	-0.03	-0.06	-0.05
	(SD)	(0.94)	(0.99)	(0.99)	(0.98)	(0.99)
Male (n = 2,201)	Mean	-0.11	0.09	0.03	0.06	0.05
	(SD)	(1.05)	(1.00)	(1.01)	(1.02)	(1.00)
Total (N = 4,388)	Mean	0.00	0.00	0.00	0.00	0.00
	(SD)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)

Table 5.12 displays average z-scores on the U-GPA, LSAT, the two L-GPAs, and NY bar exam by race/ethnicity. The average z-scores for the Caucasian/White group are above zero for all five variables, indicating that the average score for this group is above the average for the school-based sample as a whole on all five of these variables. Average z-scores for the Black/African American group and the Hispanic/Latino group are below zero, and therefore below the overall average for the school-based sample as a whole on all five variables. Basically, this result can be interpreted as saying that the groups with relatively low average scores on U-GPA and LSAT (i.e., measures of previous academic success) also have relatively low average scores on L-GPA and relatively low average scores on the NY bar exam.

Table 5.12
Standardized Score Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT, Law-School Grade-Point Average, and Total New York Bar Scores by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 3,294)	Mean	0.06	0.07	0.14	0.06	0.12
	(SD)	(0.99)	(0.98)	(0.97)	(0.99)	(0.96)
Asian/ Pacific Islander (n = 416)	Mean	-0.04	0.19	-0.25	0.07	-0.13
	(SD)	(0.98)	(1.00)	(0.89)	(1.02)	(0.97)
Black/ African American (n = 284)	Mean	-0.52	-0.77	-0.82	-0.52	-0.76
	(SD)	(1.00)	(0.84)	(0.95)	(0.93)	(0.95)
Hispanic/ Latino (n = 151)	Mean	-0.24	-0.49	-0.46	-0.31	-0.40
	(SD)	(1.03)	(0.88)	(1.04)	(0.94)	(1.06)
Other (n = 167)	Mean	0.02	0.05	-0.16	-0.04	-0.20
	(SD)	(1.01)	(0.95)	(0.91)	(0.93)	(1.01)
Total* (N = 4,388)	Mean	0.00	0.00	0.00	0.00	0.00
	(SD)	(1.00)	(1.00)	(1.00)	(1.00)	(1.00)

*Total includes racial/ethnic groups not separately listed in the table.

The results for Black/African American candidates reported in the third row of Table 5.12 indicate that the average value of their U-GPAs is about half an SD below the mean, and that their average LSAT score is over three quarters of an SD below the mean. To the extent that these two measures reflect readiness for law school, this group starts out at an academic disadvantage. The average 4-pt L-GPA for the Black/African American group is quite low (-0.82), indicating that on average, this group has relatively low GPAs in their law schools (about four-fifths of a standard deviation below the average GPA in the law school). Their average Index-Based L-GPA is about half an SD below the mean, which is still relatively low, but not as low as their average for the 4-pt L-GPA. This difference reflects the fact that the Index-Based L-GPA is adjusted for the selectivity of the law school attended and that the Black/African American candidates tend to graduate from law schools that are more selective than the typical law school in the school-based sample. The results are roughly stable across the three points in time, at entry to law school, in law school, and on the bar examination, with the Black/African American group having average scores on each of these variables of half or more of an SD below the corresponding average scores for the

school-based sample.

The results for Hispanic/Latino candidates reported in the fourth row of Table 5.12 are similar to those for the Black/African American group, but smaller in magnitude. The results for the Hispanic/Latino group are also roughly stable across entry to law school, law school, and the bar exam, with the Hispanic/Latino group having average scores of a quarter to half an SD below the overall mean for the school-based sample.

The Asian/Pacific Islander group has the highest average score on the LSAT and an average U-GPA that is slightly below that of the school-based sample as a whole. Their 4-pt L-GPA is a quarter of an SD below the average for the reference population, but their Index-Based L-GPA is above the mean, indicating that they are graduating from law schools that are more selective than average.

The results for the “Other” group are unusual in that this group scores above average on U-GPA and LSAT, but scores below average on the L-GPAs and on the bar examination.

Tables 5.13 and 5.14 display standardized scores of U-GPA, LSAT, L-GPA, and NY bar exam for females and males by race/ethnicity in the school-based sample. These tables reveal a more complex pattern in the variables.

Table 5.13
Standardized Score Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT, Law-School Grade-Point Average, and Total New York Bar Scores for Females by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,545)	Mean	0.21	0.00	0.14	0.01	0.09
	(SD)	(0.90)	(0.95)	(0.96)	(0.97)	(0.95)
Asian/ Pacific Islander (n = 239)	Mean	0.03	0.13	-0.32	-0.00	-0.17
	(SD)	(0.91)	(0.99)	(0.83)	(0.96)	(0.94)
Black/ African American (n = 186)	Mean	-0.46	-0.90	-0.76	-0.56	-0.74
	(SD)	(0.98)	(0.84)	(0.91)	(0.95)	(0.97)
Hispanic/ Latino (n = 77)	Mean	-0.17	-0.60	-0.45	-0.36	-0.42
	(SD)	(1.05)	(0.86)	(1.01)	(0.96)	(1.08)
Other (n = 96)	Mean	0.10	-0.09	-0.20	-0.08	-0.35
	(SD)	(1.04)	(1.02)	(0.88)	(0.92)	(1.02)
Total* (N = 2,187)	Mean	0.11	-0.10	-0.03	-0.06	-0.05
	(SD)	(0.94)	(0.99)	(0.99)	(0.98)	(0.99)

*Total includes racial/ethnic groups not separately listed in the table.

Table 5.11 indicates that females have higher average U-GPAs than males, and a comparison of the first columns in Tables 5.13 and 5.14 indicates that this difference is consistent across all five of the racial/ethnic groups included in these tables. Females have lower average LSAT scores than males, and a comparison of the second columns in Tables 5.13 and 5.14 indicates that this difference is consistent across all five of the racial/ethnic groups included in these tables.

Table 5.11 indicates that females have slightly lower average 4-pt L-GPAs than males, but a comparison of the third column in Table 5.13 to the third column in Table 5.14 indicates that this difference is not consistent across the racial/ethnic groups included in these tables. Within the White/Caucasian group, males and females have the same 4-pt L-GPAs. For the Asian/Pacific Islander group, the average 4-pt L-GPA is higher for males than for females, but for the Black/African American and Hispanic/Latino groups, the average 4-pt L-GPA is higher for females than for males.

Table 5.14
Standardized Score Means and Standard Deviations of Undergraduate Grade-Point Average, LSAT, Law-School Grade-Point Average, and Total New York Bar Scores for Males by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,749)	Mean	-0.07	0.13	0.14	0.10	0.14
	(SD)	(1.05)	(1.00)	(0.97)	(1.01)	(0.97)
Asian/ Pacific Islander (n = 177)	Mean	-0.15	0.28	-0.14	0.18	-0.08
	(SD)	(1.05)	(1.01)	(0.96)	(1.08)	(1.02)
Black/ African American (n = 98)	Mean	-0.62	-0.51	-0.93	-0.45	-0.80
	(SD)	(1.02)	(0.80)	(1.00)	(0.91)	(0.90)
Hispanic/ Latino (n = 74)	Mean	-0.32	-0.38	-0.47	-0.26	-0.39
	(SD)	(1.00)	(0.90)	(1.08)	(0.92)	(1.05)
Other (n = 71)	Mean	-0.09	0.24	-0.10	0.02	-0.00
	(SD)	(0.96)	(0.82)	(0.96)	(0.95)	(0.97)
Total* (N = 2,201)	Mean	-0.11	0.09	0.03	0.06	0.05
	(SD)	(1.05)	(1.00)	(1.01)	(1.02)	(1.00)

*Total includes racial/ethnic groups not separately listed in the table.

Table 5.11 indicates that females have lower average Index-Based L-GPAs than males, and a comparison of the fourth column in Table 5.13 to the fourth column in Table 5.14 indicates that this difference is consistent across all five of the racial/ethnic groups included in these tables. Females have lower average bar examination scores than males, and a comparison of the last columns in Tables 5.13 and 5.14 indicates that this difference is consistent across the racial/ethnic groups, with the exception of the Black/African American group for which females have a higher average bar examination score than males.

Overall, the results summarized in this section suggest a complex pattern with a few major trends. First, there are major differences between the racial/ethnic groups, which tend to be fairly consistent across all of the measures. Second, the differences between females and males are much smaller in magnitude and not so consistent.

5.6 Correlations

Table 5.15 presents a correlation matrix for the five variables being considered in this section for the school-based sample. As noted earlier, a correlation coefficient between two variables indicates the degree of linear relationship between the two variables. Correlation coefficients have values between -1.0 and +1.0, with a correlation of +1.0 indicating a perfect direct linear relationship between the two variables, and a correlation of -1.0 indicating a perfect inverse linear relationship between the two variables. In either of these two extreme cases, either variable can be predicted perfectly from the other using a simple straight-line relationship. A correlation of 0.0 indicates the complete absence of linear relationship between the two variables.

A correlation matrix, like Table 5.15, presents all of the correlations among a set of variables in a compact format. For example, the first column includes the correlations of the U-GPA with each of the other variables. The 1 in the first entry in the first column indicates that U-GPA is perfectly correlated with itself, which is true for all variables. The second entry in the first column indicates that the correlation between U-GPAs and LSAT scores in the school-based sample is .34, a moderate positive correlation.

Table 5.15
Correlations Among Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores for the School-Based Sample

	U-GPA	LSAT Scores	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
U-GPA	1				
LSAT Scores	.34	1			
4-pt L-GPA	.23	.19	1		
Index-Based L-GPA	.52	.75	.57	1	
Total NY Bar Score	.36	.49	.63	.68	1

N = 4,388

The correlations in Table 5.15 are all positive, indicating that as scores increase on one variable, they tend to increase on the other variables as well. This is to be expected for a set of variables which measure different kinds of cognitive achievement in related areas. The main conclusions drawn from a correlation matrix like that in Table 5.15 are those implied by the pattern of correlations in the table.

The largest correlation in Table 5.15 (.75) is between the Index-Based L-GPAs and LSAT scores. It is to be expected that this correlation would be fairly high, because the Index-Based L-GPA is based in part on the distribution of LSAT scores at the law school attended by each candidate. The high correlation between the Index-Based L-GPA and the LSAT scores reflects the fact that the law schools included in the school-based sample exhibit substantial variability in their mean values for the index (i.e., their selectivity), and therefore, adjusting L-GPAs to match the distribution of the index in each school has a substantial impact on the Index-Based L-GPAs.

The Index-Based L-GPA also has fairly high correlations with the 4-pt L-GPA (.57) and with the U-GPA (0.52), both of which also contribute to its definition. U-GPA is part of the index, and the 4-pt L-GPA is a within-law school measure on which the Index-Based GPA is ultimately based.

The 4-pt L-GPAs were scaled to have the same mean and SD for each school, thereby diminishing the relationship of 4-pt L-GPA to any factors (e.g., difference in grading standards, selectivity of schools) that vary across law schools. The 4-pt L-GPA is essentially a measure of each candidate's relative standing, in terms of GPA, within the law school they attended. Note that the 4-pt L-GPA has a relatively low correlation (.19) with the LSAT scores and a somewhat higher correlation with U-GPA (.23).

In summary, these two L-GPAs are quite different in their interpretations and in the patterns of their correlations. The Index-Based L-GPA uses information about the school distributions of U-GPAs and LSAT scores to adjust the L-GPAs of candidates from that school. These Index-Based L-GPAs, therefore, build information about a law school's average LSAT score and average U-GPA into the computation of Index-Based L-GPAs for the candidates from that school. The 4-pt L-GPA focuses on the candidate's standing within his or her school, and is independent of the law school's selectivity. Each candidate's 4-pt L-GPA (i.e., relative standing within his or her school) may still be related to the candidate's U-GPA and LSAT score, but these relationships are expected to be much weaker than those for the Index-Based L-GPA.

The high correlations between the two versions of the L-GPA and bar examination scores indicate that there is substantial overlap in what is being evaluated on the bar examination and what is being evaluated in law schools. The strong positive correlation (.63) between the 4-pt L-GPA and bar examination scores indicate that relative performance in law school (independent of the selectivity of the law school) is an important determiner of performance on the bar exam; the 4-pt L-GPA accounts for almost 40% of the variance in bar examination scores. The Index-Based L-GPA has a

somewhat higher correlation with bar examination scores (.68) indicating that the strength of the relationship between grades in law school and performance on the bar examination can be enhanced by taking the selectivity of the law school into account; the Index-Based L-GPA accounts for about 47% of the variance in bar examination scores

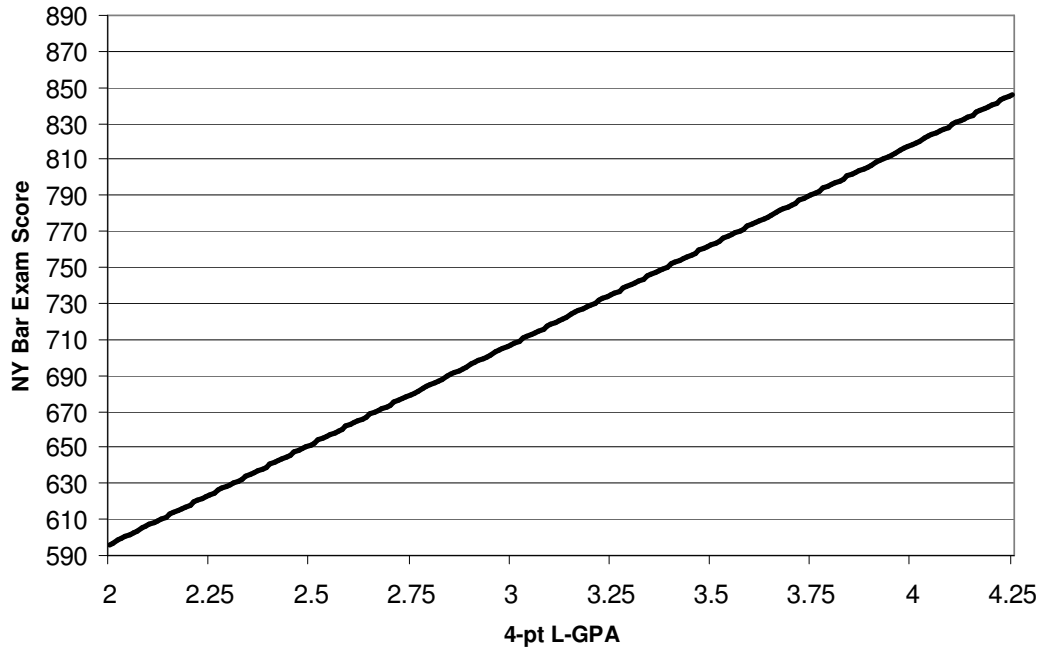
The bar examination scores have their highest correlation with the Index-Based L-GPA and their second-highest correlation with the 4-pt L-GPA. So it is clear that performance on the bar examination is strongly related to performance in law school. The correlation of bar examination scores with LSAT scores is fairly high, and the correlation with U-GPA, which has the lowest value of the four correlations, is also reasonably high. Note that U-GPA has a higher correlation with bar examination scores than it has with the LSAT scores. This is somewhat surprising, because the bar examination is taken three or more years after graduation from college, while the LSAT is generally taken closer to the completion of undergraduate education.

5.7 Linear Regression

Multiple linear regression is a technique used to predict values of one variable using one or more other variables.[3] Linear regression analyses can be used to examine the relationship between measures of achievement before law school, achievement in law school, and performance on the bar examination.

As a first step, we can examine how well L-GPA predicts performance on the bar exam. As indicated above, both the 4-pt L-GPA and the Index-Based L-GPA have high correlations (i.e., strong linear relationships) with bar examination scores; therefore, both do a good job of predicting scores on the bar exam. Figure 5.6 displays the linear regression equation resulting from using 4-pt L-GPA to predict NY bar exam score.

Figure 5.6
Example Linear Regression Line Plotting NY Bar Exam Score with Law-School GPA



A commonly used measure of the strength of the association (or prediction accuracy) between the dependent variable (the variable to be predicted; e.g., NY bar exam scores) and the independent variables (those used to make the prediction; e.g., L-GPA), is the percentage of variance in the dependent variable accounted for (or predicted) by the independent variable. This measure is equal to the squared correlation between the dependent variable and the predicted value of the dependent variable based on the regression equation. It is generally designated as R^2, and will be used in reporting the results for linear regression, logistic regression, and path models reported in this section.[4]

As indicated earlier, the 4-pt L-GPA accounts for about 40% of the variance in the bar examination scores. So, this one variable does a fairly good job of predicting performance on the bar examination. The Index-Based L-GPA does an even better job of predicting performance on the bar examination, accounting for about 47% of the variance in the bar examination scores.

In general, the accuracy of prediction of the dependent variable can be improved (i.e., R^2 can be increased) by using additional variables to predict the dependent variable. Regression analyses can be used to determine a weighted combination of several variables that provides the best prediction of the dependent variable. If the 4-pt

L-GPA, the U-GPA, and the LSAT score are all used to predict the bar examination score, rather than just the 4-pt L-GPA, the percentage of variance accounted for by the regression equation increases from about 40% to about 56%. That is, adding each candidate's U-GPA and LSAT score to the regression equation produces a substantial improvement in the predictive accuracy over what can be achieved with the 4-pt L-GPA alone.

If the Index-Based L-GPA, the U-GPA, and the LSAT score are all used to predict bar examination scores, rather than just the Index-Based L-GPA, the percentage of variance accounted for by the regression equation increases by a very small amount over what can be achieved with the Index-Based L-GPA alone, and the overall variance accounted for by the regression equation is essentially the same, about 47%. That is, adding each candidate's U-GPA and LSAT score to the regression equation based on the Index-Based L-GPA does not significantly improve the prediction based on the Index-Based L-GPA alone. The Index-Based L-GPA already includes information about U-GPAs and LSAT scores (for the law school), and adding the individual values of these variables to the regression equation did not add much to the overall accuracy of the prediction.

5.8 Logistic Regression

Similar to linear regression, logistic regression is used to examine and/or predict values of one variable using one or more other variables. However, in logistic regression the variable being predicted is a binary variable (taking two values; e.g., one or zero, pass or fail) and logistic regression finds a nonlinear equation (a logistic equation) that fits the observed pattern of scores. For example, in this case we are interested in examining the effectiveness of L-GPA, U-GPA, and LSAT scores in predicting whether or not a candidate passes the bar.

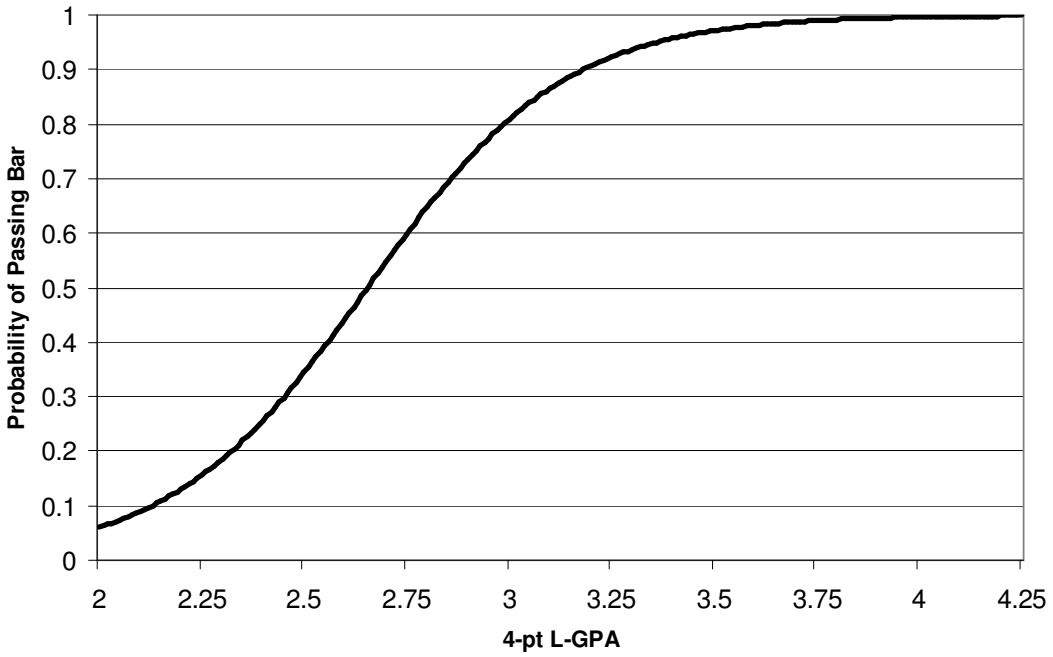
Logistic functions have a characteristic shape, like that of Figure 5.7. They start out near zero for very low values of the independent variable, increase gradually and then more rapidly as the independent variable increases, and then flatten out as they approach a value of one. In this application, the logistic function represents the probability of passing the bar exam, which is necessarily between 0.0 and 1.0.

Using the 4-pt L-GPA to predict the probability of passing the bar examination accounts for about 34% of the variance in the pass/fail outcome. Again, this one variable does a fairly good job of predicting performance on the bar exam. The Index-Based L-GPA does an even better job of predicting pass/fail outcomes on the bar exam, accounting for about 42% of the variance.

Using the 4-pt L-GPA, U-GPA, and LSAT score to predict the probability of passing the NY bar exam, the percentage of variance accounted for increases from about 34% of the variance to about 44% of the variance, a substantial increase. When using the Index-Based L-GPA, U-GPA, and LSAT score to predict the probability of

passing the bar exam, the percentage of variance accounted for is about the same as it is for the Index-Based L-GPA alone. Again, adding the U-GPA and LSAT score to the Index-Based L-GPA does not improve its predictive ability to any significant extent. The best prediction occurs when the 4-pt L-GPA is used in conjunction with LSAT scores and U-GPA.

Figure 5.7
Example Logistic Regression Curve Plotting the Probability of Passing the NY Bar Exam with Law-School GPA



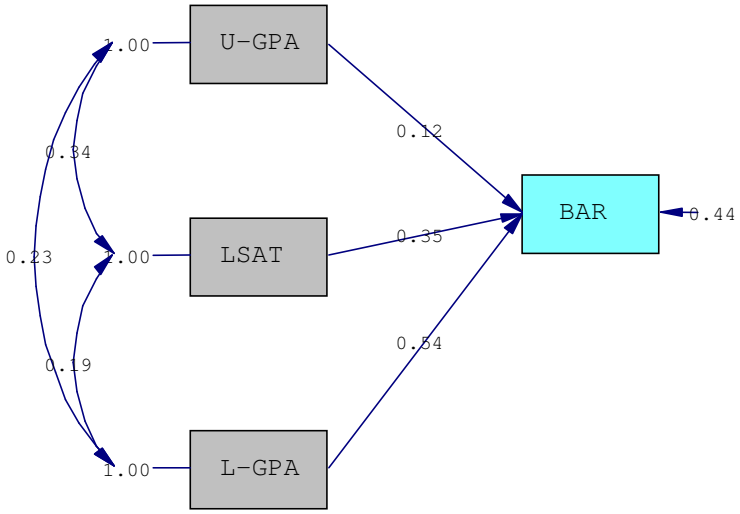
5.9 Path Analysis

Path analysis is an approach to modeling relationships among a set of variables, which aims for an understanding of the direct and indirect effects of certain variables on certain other variables. Path analysis models require explicit specification of the patterns of relationships among variables and incorporate a graphical representation of these relationships in what is called a *path diagram*. The results of a path analysis include estimates of the strength of the relationships between variables and the proportion of variance in specific variable(s) explained by the model. The relationships among variables and the proportion of variance explained are interpreted in ways that are similar to those employed in linear regression models.

For the school-based sample, we are interested in the effects that L-GPA (here,

4-pt L-GPA[5]), LSAT score, and U-GPA have on NY bar exam score. Figure 5.8 displays the path diagram for a simple path analysis model, in which it is assumed that the 4-pt L-GPA, LSAT score, and U-GPA all have direct effects on the bar examination score. In this path diagram, the boxes represent variables in the model. For example, the box labeled "Bar" represents the NY bar exam score. The two-way arrows on the left represent the correlations among variables that are expected to be related, but for which no directional influence (e.g., one of the variables has an effect on the other) is specified. For example, the correlation between U-GPA and LSAT is .34, reflecting a moderate positive correlation. The one-way arrows going from one box to another represent the effects of one variable on another.[6] For example, the arrow from U-GPA to "Bar" is associated with a value of 0.12, reflecting a small effect. The number, "0.44", to the right of the box labeled "Bar" in Figure 5.8 represents the proportion of variance *not* explained by the path model, or the error variance.[7] If we multiply the error variance by 100, we get the percentage of variance not explained in a variable. For example, about 44% of the variance in NY bar exam scores is not explained by the model in Figure 5.8. Since about 44% of the variance is not explained, about 56% is explained by the model as a whole.

Figure 5.8
Path Analysis Model 1 for the School-Based Sample



Note: 55.7% of the variance in NY bar exam scores is explained by the model.

The model in Figure 5.8 is similar to a multiple linear regression model, and the results are the same whether the path analysis or linear regression models are employed. The percentage of variance in bar scores explained by the three variables in this model is about 56% (or 100% - 44%).

However, path analysis is more flexible than linear regression models and allows us to incorporate plausible hypotheses into the specifications of the model and thereby

draw stronger conclusions from the results. In particular, we can examine path models that allow for different patterns of direct and indirect effects of 4-pt L-GPA, LSAT score, and U-GPA on bar examination scores. For example, it seems reasonable to assume that a student's degree of readiness for law school, as measured by U-GPA and LSAT scores, might influence performance on the bar examination directly, but might also have an influence on a candidate's performance in law school and thereby have an indirect effect on bar examination scores. This kind of indirect effect (i.e., from U-GPA and LSAT to 4-pt L-GPA and then from the 4-pt L-GPA to bar examination performance) is not easily examined using simple regression models.

The bar examination does not test candidates on content learned in college, nor does it focus on the kinds of cognitive skills (e.g. critical reading and thinking, writing, analytic skills) developed in college and assessed to varying degrees by U-GPA and LSAT score. These fundamental skills would certainly be needed on a bar exam, but they are not explicitly tested on the bar exam. Rather, both the objective components (the MBE and the NYMC) and the essay component (including the MPT and the essay test) of the NY bar exam evaluate a candidate's skill in applying basic legal principles to various fact situations, a skill that is presumably developed in law school. It seems reasonable therefore to assume that at least some of the effects that the competencies measured by U-GPA and LSAT have on bar examination performance occurs indirectly through their effects on performance in law school.

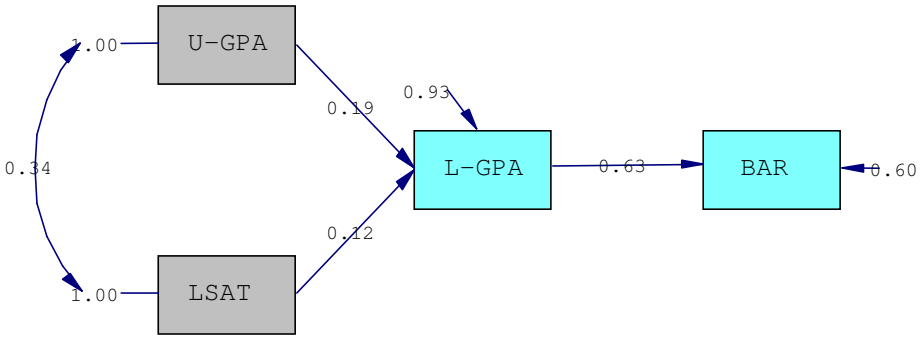
In addition, given that U-GPA and LSAT scores are obtained three to four years before a candidate takes the bar examination and that law school is generally completed a few months before the first-time takers sit for the bar examination in July, it seems likely that performance in law school might have a stronger and more direct effect on bar examination performance than LSAT scores or U-GPA.

Figures 5.9 and 5.10 display two simple path analysis models that incorporate indirect effects of U-GPA and LSAT scores on bar examination scores by modeling the effects of U-GPA and LSAT score on 4-pt L-GPAs. The model in Figure 5.9 removes the hypothesized direct effects of U-GPA and LSAT scores on bar examination scores and specifies that U-GPA and LSAT score operate indirectly through 4-pt L-GPA. That is, the U-GPA and LSAT score are assumed to have an effect on 4-pt L-GPA, which in turn has an effect on bar examination scores. This model accounts for about 40% of the variance in bar examination scores, which is less than that accounted for by the linear regression model with 4-pt L-GPA, U-GPA, and LSAT used to predict bar examination scores.

The third model, which is presented in Figure 5.10, adds the direct effects of U-GPA and LSAT scores on NY bar exam scores to the model in Figure 5.9, such that U-GPA and LSAT scores have direct and indirect effects on NY bar exam scores. In the model in Figure 5.10, it is assumed that performance in law school (as measured by the 4-pt L-GPA) has a direct effect on bar examination scores, and that readiness for law school (as measured by U-GPA and LSAT scores) has both an indirect effect, through

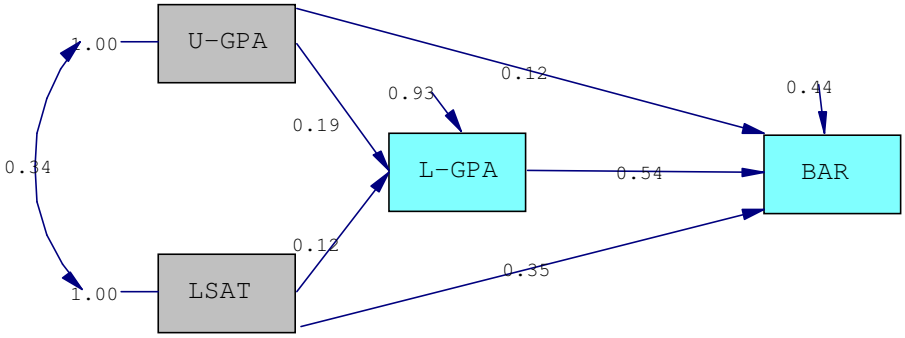
performance in law school, and in addition, a direct effect on performance on the bar exam. This model explains about 56% of the variance in bar examination scores. Of the three variables used to explain performance on the bar exam in this model, the 4-pt L-GPA has the largest effect.

Figure 5.9
Path Analysis Model 2 for the School-Based Sample



Note: 6.7% of the variance in L-GPA scores is explained in the model. 40.1% of the variance in NY bar exam scores is explained in the model.

Figure 5.10
Path Analysis Model 3 for the School-Based Sample



Note: 6.7% of the variance in L-GPA scores is explained in the model. 55.7% of the variance in NY bar exam scores is explained in the model.

Several aspects of the path modeling results are worth mentioning here. First, as was the case for the regression analyses, performance in law school has the largest effect on bar examination scores. This makes sense because we would expect that bar examination performance would be closely related to performance in law school, rather than to earlier measures of aptitude and general academic achievement, such as U-GPA and LSAT score.

Second, while 4-pt L-GPA has the largest effect on NY bar exam score, the effects of U-GPA and LSAT score on bar examination score add some explanatory power to the models. They add about 15% to the percentage of variance in bar examination scores explained by the model.

Third, Models 1 and 3 are statistically equivalent. This means that from a statistical point of view, the models are interchangeable in terms of how well they predict bar examination scores (the percentage of variance explained by these two models is identical). However, from a substantive point of view, the third model is more interesting than the first model, because it exhibits the effects of U-GPA and LSAT scores on 4-pt L-GPA, as well as the direct effects of U-GPA and LSAT scores on bar examination scores.

Note that, although the models explain a substantial part of the variance in bar examination scores, they leave about 44% of the variance in the bar examination scores unexplained. Some of this residual variance is due to a basic difference between the models (which are all very simple) and life (which is very complicated) and to errors of measurement (none of the measures is perfectly reliable), but some of it is also no doubt due to factors not included in the models (e.g., motivation, physical and psychological well-being, ability to spend time preparing to take the bar exam, etc.).

Notes

1. Scaling here means subtracting the group mean from each score and dividing by the group standard deviation.

2. In computing z-scores for a particular variable, the mean and SD of the variable are computed for the reference population. The z-score for a particular candidate on a particular variable is then calculated by subtracting the mean score on that variable in the reference population from the candidate's score on the variable and dividing the result by the SD of the variable in the reference population.

3. Linear regression develops a linear equation (one that corresponds to a straight line) that gives one variable (the dependent variable) as a function of the other variables (the independent variables).

4. Higher values of R^2 mean a stronger association (or better prediction), with the maximum R^2 being 1.0, which corresponds to 100% of the variance in the dependent variable being accounted for (or predicted) by the independent variable.

5. Index-Based L-GPA was not included in the path analysis model results because this variable incorporates much of the U-GPA and LSAT effects. Because of this, path models that include U-GPA, LSAT scores, and Index-Based L-GPA lead to greatly reduced effects of U-GPA and LSAT on bar exam scores.

6. These effects are referred to as *path coefficients*. The path diagrams in this report contain *standardized path coefficients*, which provide an easier interpretation of the relative sizes of the effects in the model.

7. Error variance is also referred to as the *disturbance* and can be thought of as 1 – the proportion of variance in a variable that is explained by the model.

6. Conclusions

The analyses in this study address four main questions and a number of subsidiary questions. The four main questions were:

1. What impact will the current and proposed changes in the passing score have on overall pass rates?

2. What impact will the current and proposed changes in passing score have on pass rates for subgroups defined in terms of gender, race, and age?

3. To what extent does performance in law school predict performance on the New York Bar Examination?

4. To what extent do undergraduate GPA and LSAT scores predict performance in law school and performance on the New York Bar Examination?

The database developed for this study is quite rich in a number of ways. It includes a large number of candidates and a wide range of data on each candidate, and therefore, makes it possible to examine these questions in some detail.

Characteristics of the Candidates

Relationships among the demographic variables (gender, race/ethnicity, age, and origin of legal education) were examined in Section 2.

Most of the candidates in New York are graduates of domestic law schools, but a substantial number of the candidates (over 20%) are graduates of foreign law schools. The graduates of foreign law schools are quite different from the graduates of domestic law schools in a number of ways. The foreign-educated group has relatively high percentages of Asian/Pacific Islanders and relatively low percentages of Caucasian/Whites. The foreign-educated group includes a slightly higher proportion of males (about 53%) than the domestic-educated group (about 50%). Foreign-educated candidates also tend to be a little older than domestic-educated candidates when they take the bar exam. The scores of the foreign-educated candidates are substantially lower than those of the domestic-educated candidates on all three parts of the NY bar exam, and their pass rates are also much lower. Given these differences, we have reported results separately for domestic-educated candidates and foreign-educated candidates.

Candidates taking the bar examination for the first time tend to do much better on the NY bar exam than candidates who are repeating the exam. In addition, candidates who are repeating the examination for the first or second time tend to do better than candidates who have already taken the examination a number of times. Because of the

substantial differences in performance between first-time takers and repeat takers, we also analyzed the results for these two groups separately. So, results are reported separately for domestic-educated candidates and foreign-educated candidates, and within each of these major groups, for first-time takers and repeat takers.

6.1 Impact of Change in Passing Score on Pass Rates

The first two questions posed for this study are addressed in some detail in Sections 3 and 4. Section 3 describes the performance of various groups of candidates on the different components of the NY bar exam and on the examination as a whole. Section 4 reports pass rates as a function of passing score (from 660 to 675) for various groups.

The analyses in Section 3 indicate that the results for different groups tended to be consistent across the different components of the exam. That is, groups that do well on one component (e.g., the essay) also do well on the other two components (e.g., MBE and NYMC), and groups that don't do as well on one component also don't do as well on the other components.

The one noteworthy exception to this result is a consistent tendency for females to do better on the essay component and for males to do better on the MBE; this effect was not very large on average, but it was consistent across racial/ethnic groups, the foreign and domestic-educated groups, and first-time takers and repeat takers. These two tendencies (females doing better on the essay component and males doing better on the MBE) go in opposite directions, and they tend to cancel out. As a result, in most analyses, females and males do about equally well in terms of their total bar examination scores and pass rates.

The domestic-educated candidates do much better on the examination than the foreign-educated candidates, and, within both of these groups, the first-time takers do better than the repeat takers. Candidates who had already failed the examination a number of times had very low pass rates.

Increases in the passing score produce decreases in the passing rates. Given that these analyses were all applied to a fixed data set, this is necessarily the case. The results reported here do not necessarily represent the passing scores that would be associated with a particular passing score on any future test date, but they provide a good general indication of what to expect.

The current and planned increases in the passing score tend to have the largest impact on groups with average scores in or near the range over which the passing score is projected to vary (660 to 675). Among the domestic-educated first-time takers, the Black/African American group and other minority groups tend to suffer sharper declines in pass rates than the Caucasian/White group as the passing score goes up (see Table 4.2). In addition, because the minority groups have lower pass rates to

begin, a decrease of a few percentage points in the pass rate has a larger proportional impact on the pass rates for these groups than it would if the initial pass rates were higher.

The domestic-educated repeat takers tend to have low pass rates (about 23%) for a passing score of 660. The pass rates decline to about 16%, as the passing score increases to 675 (a drop of almost a third). Because an increase in the passing score will yield a different population of repeat takers (one with higher scores on their previous attempts), the actual pass rates for repeat takers are likely to be somewhat higher than those reported in Section 4, especially for passing scores of 670 and 675.

As noted above, the foreign-educated first-time takers have relatively low scores on the bar examination and relatively low pass rates, and these pass rates decline from about 46% to about 40% as the projected passing score increases from 660 to 675. The foreign-educated repeaters have very low pass rates, which decline from about 15% to about 11% as the projected passing score increases from 660 to 675.

6.2 Impact of law-school GPA, undergraduate GPA, and LSAT scores on bar examination performance

Performance on the bar examination is strongly related to performance in law school, as measured by law-school GPA. A strong relationship between law-school GPA and bar examination scores was observed when the GPAs were standardized to have the same mean and standard deviation in all schools (the 4-pt L-GPA), and an even stronger relationship was observed when the law-school GPAs were scaled to reflect differences in selectivity among law schools (the Index-Based L-GPA).

Undergraduate GPA and LSAT scores are indirectly related to bar examination performance through law school performance and through the selectivity of the law school attended. Candidates with relatively high undergraduate GPAs and LSAT scores tend to have higher GPAs in their law schools, and they tend to attend law schools in which students generally had higher undergraduate GPAs and LSAT scores.

In general, law-school GPA is strongly related to performance on the bar examination. The best predictor of performance on the bar examination was achieved using the 4-pt L-GPA (which reflects a candidate's relative standing in terms of GPA within their law school), with the LSAT scores and undergraduate GPA as ancillary predictors.

Glossary

Correlation: An indicator of the strength of the linear relationship between two variables. Correlations range from -1 to +1. The closer the correlation is to -1 and +1, the stronger the linear relationship. Positive correlations mean that an increase in one variable is associated with an increase in the other. Negative correlations mean that an increase in one variable is associated with a decrease in the other.

Histogram: A bar graph containing a distribution of scores that is based on tabulated counts of scores.

Linear regression: A procedure used to predict values of one variable using one or more other variables. Technically, linear regression finds the best fitting linear equation (based on one or more scores) to predict another score.

Logistic regression: A procedure used to predict values of one categorical variable using one or more other variables. Technically, logistic regression finds the best fitting nonlinear equation (logistic equation) on one or more scores to predict a categorical variable (e.g., pass/fail on the bar exam).

Mean: A measure of the central tendency of a set of scores. Technically, the mean is defined as the sum of the scores divided by the number of scores. The mean may also be referred to as the average.

Normal Distribution: A bell shaped curve that is commonly used in statistics. Technically, it is a score distribution defined by a specific equation and has a shape defined by location (mean) and scale (standard deviation) parameters. A common form of the normal distribution is the *standard normal distribution* (see definition below).

Pass rate: The percentage of a group of candidates that would pass at a particular passing score.

Passing score: The total numerical score on an examination that a candidate has to achieve in order to pass the exam.

Path analysis: An approach to modeling relationships among a set of variables and in examining the direct and indirect effects of certain variables on certain other variables. Path analysis models require explicit specification of the patterns of effects among variables and incorporate a graphical representation of these effects. Technically, path analysis finds the best fitting set of equations implied by the specified model.

Path coefficients: A parameter that represents the direct effect of one variable on another in a path analysis.

Path diagram: A graphical representation of a path analysis model.

Reliability: The consistency or repeatability of the scores produced by a measurement procedure; the precision in the scores yielded by a measurement instrument. Reliability is defined as the variance in "true" scores divided by the variance in observed scores. The observed score for an individual is assumed to consist of the true score plus an error component, and therefore, the variance in observed scores is equal to the variance in the true scores plus the error variance. So the reliability is always between 0.0 and 1.0. Reliability can also be interpreted as a correlation coefficient, with values between 0.0 and 1.0. Higher values for reliability reflect greater precision and less random error, and low values for reliability reflect a higher proportion of random error and therefore less precision.

Restriction of range: A phenomenon that occurs when a particular sample or group of interest has scores that represent a more limited range of scores than another sample or group of interest. This difference in score range results in correlation coefficients that are smaller (attenuated), because the full range of scores is not represented by both samples/groups.

Sample size: The number of observations in a data set. A sample is assumed to be drawn from a larger population of possible observations.

Scaling: The process of transforming a set of scores on a test (or other measure) so that they have the same mean (or average) and same standard deviation (or spread) as scores on another test (or other measure). The intent of scaling is to make the scores comparable in the sense that an average or typical score on both tests would be about the same, the highest scores on both tests are about the same, and the lowest scores on both tests are about the same. Scaling is especially useful in cases where scores on very different scales (e.g., scores on a fifty-item test and on a hundred-item test) are to be compared or combined. Scaling does not change the relative values of scores; the highest score remains the highest score, the second highest score remains the second highest score, etc. The methods used to scale scores are the same as those used to change temperatures from one scale (e.g., Centigrade) to another (e.g., Fahrenheit).

Standard deviation (SD): A measure of the spread in a set of scores. Technically, the standard deviation is defined as the square root of the average squared deviation from the mean. About 68% of the scores in a distribution will be within one standard deviation of the mean.

Standard error of the mean (SEM): An indication of the uncertainty in the estimate of the mean over repeated samples from the same population. Technically, it is the standard deviation divided by the square root of the sample size.

Standard normal distribution: A normal distribution with a mean of zero and a standard deviation of one.

Standardized path coefficient: Path coefficients obtained when the original variables in a path model have been scaled to have a mean of zero and a standard deviation of one (see z-score below). Standardized path coefficients allow for examining the relative magnitudes of effects in a path model.

Z-score: A set of scores that have been scaled to have a mean of zero and a standard deviation of one. Technically, the z-score is defined as the original score minus the mean of the original scores divided by the standard deviation of the original scores. Also sometimes called standardized scores.

Appendix A

Authorization for Release of Law-School Information

New York State Board of Law Examiners
Corporate Plaza. Building 3
254 Washington Avenue Extension
Albany, NY 12203

AUTHORIZATION TO PERMIT LAW SCHOOLS
TO PROVIDE DATA TO THE NEW YORK STATE
BOARD OF LAW EXAMINERS FOR THE
BAR EXAMINATION RESEARCH PROJECT

I authorize my law school(s) _____ [fill in U.S. law school name(s)] to provide the New York State Board of Law Examiners (the Board) and its designated researchers, with my law school Grade-point average and class standing (by rank or quartile or however it is tracked by the law school), and a copy of my transcript, with the understanding that the Board will use the data for research in order to enhance the validity of bar examination scores. In so authorizing my law school(s) to provide this data to the Board for research purposes, I specifically waive any confidentiality afforded my educational records under the Family Educational Rights and Privacy Act, Title 20 USCA § 1232g or otherwise.

The Board will maintain the confidentiality of the data, and analyses will be reported only in the aggregate to maintain the anonymity of individuals. (Your consent to the release and use of this information to the Board is essential in ensuring that the data accurately represent the full population of candidates for the New York Bar. Your decision to grant or withhold consent will not affect your scores in any way.)

I hereby release, discharge, and agree to hold harmless my law school(s), its agents, representatives, or appointees from any and all liability arising out of this authorized release of my law school records.

_____ _____
Dated Signature of Applicant

_____ _____
Print Name U.S. Social Security Number

_____
Date of Birth

Appendix B

Authorization for Release of Law School Admissions Council Information

New York State Board of Law Examiners
Corporate Plaza . Building 3
254 Washington Avenue Extension
Albany, NY 12203

AUTHORIZATION TO PERMIT THE
LAW SCHOOL ADMISSION COUNCIL (LSAC)
TO PROVIDE DATA TO THE
NEW YORK STATE BOARD OF LAW EXAMINERS FOR THE
BAR EXAMINATION RESEARCH PROJECT

I authorize the Law School Admission Council (LSAC) to provide the New York State Board of Law Examiners (the Board) and its designated researchers, data from my LSAC file, including but not limited to demographic, academic, and LSAT performance data, with the understanding that the Board will use the data for research in order to enhance the validity of bar examination scores. The Board will maintain the confidentiality of the data, and analyses will be reported only in the aggregate to maintain the anonymity of individuals. (Your consent to the release and use of this information to the Board is essential in ensuring that the data accurately represent the
full population of candidates for the New York Bar. Your decision to grant or withhold consent will not affect your scores in any way.)

_____	_____
Dated	Signature of Applicant
_____	_____
Print Name	U.S. Social Security Number
_____	_____
Date of Birth	LSAC Registration Number (if available)

Appendix C

Expanded Description of Data Sources

Data Sources

Staff at the NYBLE planned and coordinated the transfer of several sources of data to staff at NCBE. These sources of data were catalogued, processed, and combined by NCBE staff to assemble a database to be used to examine several aspects of candidate performance on the NY bar exam. In this appendix, we provide a description of the procedures for assembling the database used for the analysis presented in this report.

Database Elements

The database used in this report was based on five primary data sets which are described briefly below. The descriptions of the data sets include the information contained in each data set and the data elements that were used to link the data sets to each other.

The first data set consisted primarily of demographic information (e.g. age, gender, race/ethnicity, citizenship, and country of legal education) collected by a survey of NY bar exam candidates at the time of application for the July 2005 administration of the NY bar exam. For purposes of matching data sources and quality control, the data also included raw and scaled scores on the July 2005 MBE and was indexed by the New York applicant identification number (i.e., SSN for domestic candidates or a pseudo SSN for international candidates). In total, this data set consisted of unique records for 9,218 of the candidates who tested in July 2005. Responding to this survey was voluntary, and not all of the candidates completed it.

The second data set contained detailed performance information for the full set of candidates who took the NY bar exam in July 2005. These records included raw and scaled scores on each component of the NY bar exam (i.e., individual essays, the Multistate Bar Examination, and New York Multiple Choice) along with the scaled overall essay score and the final reported score for the 10,175 candidates who completed the NY bar exam. This file also provided information regarding the total numbers of attempts for each candidate on the NY bar exam (including the July 2005 administration). The index for this set of files was applicant seat number, which is coded on an answer sheet by candidates who sat for the MBE in New York. Because the files with the demographic data and the bar examination performance data employed different keys for uniquely identifying candidates (seat number vs. applicant identification number), NCBE staff also requested and received a file from the NYBLE that mapped the applicant seat number to the applicant ID. After these two files were combined, the database included performance information on the 10,175 candidates who took the NY bar exam in July 2005 and demographic information on the 9,218 candidates who responded to the demographic survey.

The third data set included birthdates and law school graduation dates for July 2005 New York bar admission respondents (i.e., candidates that volunteered to participate). In a meeting with representatives of the NYBLE, NCBE, and New York law schools, the law-school representatives expressed an interest in the relationships between ages when candidates graduated law school and when they sat for the NY bar exam and the other variables in the study. Subsequently, the NYBLE supplied NCBE with data containing candidate birthdates and law school graduation date (if applicable) for the 10,175 July 2005 NY bar exam respondents. Based on the available information (birthdate information was missing for 5 candidates and law school graduation date was missing for 2,175 candidates), NCBE staff calculated several age-related variables including age at July 2005 bar examination administration, age at law school graduation, and time interval between law school graduation and the bar examination administration. As part of this process, internal consistency checks were implemented to flag potentially illogical or unlikely values (i.e., taking the bar examination before graduation from law school or age at law school graduation less than 20 or greater than 70) for further verification.

The fourth data set was obtained from LSAC and included demographic information (e.g. date of birth, gender, ethnicity, name, SSN, undergraduate institution, undergraduate major) and performance data (e.g., undergraduate grade-point average and average LSAT score from all attempts) for the July 2005 NY bar exam candidates who gave permission for the release of these data (see Appendix A). Candidates were asked for permission to obtain these data from LSAC when they applied to take the NY bar exam. From the list of authentic IDs for the 10,175 candidates who sat for the July 2005 administration of the NY bar exam, LSAC information was available for 7,644 individuals. Not surprisingly, very few of the candidates who had graduated from a foreign law school were included in the LSAC data files. As a result, the foreign-educated candidates did not generally have values for the variables supplied by LSAC (e.g., undergraduate GPA and LSAT scores).

The fifth data set contained candidates' law school performance. Over the course of several months, NYBLE staff collected information from individual law schools regarding the performance of their students who had given permission for the release of this information (see Appendix B). The following information was solicited from law schools for candidates who agreed to release their records: law-school GPA, class rank, and "standing." Law school grade-point average was the information most frequently provided by law schools, but the scale used to report GPA sometimes varied from school to school (e.g. GPA on a 4-point scale vs. GPA on 100-point scale), and sometimes varied even within school if candidates had graduated under different grading policies (which only happened in a few cases; these cases were not included in analyses of GPA). Two law schools did not compute GPAs for their graduates, but agreed to have GPAs computed from the transcripts supplied to the NYBLE. This was done for one school, but could not be completed for the second school in time for this report. Class rank was less frequently reported and tended to consist of a range of types of rank information (e.g., "10 out of 100" or "top 50%"). "Standing" was

infrequently reported in the data obtained from law schools and tended to include a variety of information ranging from a repetition of class rank data to notes about students.

Because the data formats varied by school (paper, ASCII, spreadsheet), the imported data were checked for upload errors and inconsistencies and then re-checked against the original data files from schools, if necessary. For candidates who appeared to have attended more than one school (i.e., same name and/or identification number appearing in data files from more than one school), performance information was used from the law school at which the student spent the most time. For students for whom the length of time or status at each school was unclear, the data for their first submitted record were used for analysis.

In general, no data were available on law-school GPAs for the foreign-educated candidates. Some of these candidates had taken courses at American law schools, but, in all cases, this coursework seemed to relate to supplementary legal education and was not included in the variables describing law-school GPA.

Ultimately, law school data were obtained for 7,055 candidates who had graduated from 125 schools. Of these, 6,602 had reported law-school GPAs.

Database Construction

The database was assembled sequentially as the data became available. First, the New York demographic and bar examination scores were matched using applicant ID/seat number to identify corresponding records. As a check on this matching process, the MBE raw and scaled scores (i.e., information that appeared in both data sets) were compared for discrepancies. All 9,218 records from the New York demographics file (based on responses to the voluntary survey) matched correctly with one of the 10,175 records from the New York bar performance data set.

Next, this combined information was matched by applicant seat number with the corresponding record in the data set that contained the birthdates and law school graduation dates. After resolving a missing data problem for one candidate, comparisons were made between the only additional common information derivable in both data sets, candidate age, to check the integrity of the match. The age (in years) was identical for 8,364 of 10,175 candidates (82.2%). Most of the non-identical cases were only one year apart and the differences seemed explainable by candidates having a birthday between the time they completed the demographic information and sat for the July 2005 administration of the bar exam. Therefore, the match on applicant seat number appeared successful.

As a further quality control step, NCBE records from the July 2005 administration were compared to the file with the consolidated New York demographic and performance information. This process was complicated by the fact that some

candidates (e.g., those applying in more than one state) take the MBE in another state and have their score transferred to New York, and it therefore required a two-stage matching process. First, the consolidated file was matched by the New York applicant seat number; this resulted in matches for 9,823 seat numbers. As a second step, the applicant ID (i.e., SSN) was used to attempt to match the remaining 352 records to candidates who had taken the MBE in another jurisdiction and intended to transfer their MBE score from that jurisdiction to New York. A total of 323 records matched based on applicant ID information. The remaining list of unmatched SSNs was reconciled using MBE scores and birthdate (a value listed in both data sets). In nearly all cases, the candidate incorrectly coded their identification number on the MBE answer sheet (e.g., one number in the nine-digit string was inaccurate). After the two-step process, all 10,175 candidate records had verified MBE scores.

The LSAT data set was matched to this data set, which contained New York demographic and bar examination performance information, including the confirmed MBE scores. By using applicant ID, 7,093 available LSAT records matched to the combined data set of 10,175 candidate records. Because of confidentiality and security concerns, name information was not released to NCBE by NYBLE, nor was it consistently coded on the MBE answer sheet; thus, the options for resolving the remaining unmatched cases were limited. Attempts to use an algorithm to identify "close," but inexact, applicant identification number matches were unsuccessful. Similarly, neither the use of candidate name for the few records where it was available from the MBE answer sheet nor birthdate information yielded additional matches.

Consultation with NYBLE staff regarding the issue of unmatched LSAT data indicated that candidate consent for the release of LSAT information was gathered prior to test administration. The conclusion was that unmatched applicant IDs represented candidates who provided LSAT release at the time of application, but subsequently did not sit for the July 2005 administration of the NY bar exam. Analyses were also implemented for the candidates who sat for the NY bar exam but didn't have a match with the LSAT data. The vast majority of these unmatched candidates provided demographic information indicating that their education was outside of the United States. Thus, it seems reasonable to conclude that most of these remaining candidates were foreign-educated students for whom the LSAT wasn't required and a small percentage of domestic candidates who didn't provide consent for the release of the LSAT data. The rate of candidates not agreeing to release their LSAT data is similar to other LSAT data collection efforts by NCBE.

As mentioned above, school data were received in individual data sets from each school for the graduates from that school who agreed to have the schools supply these data and were combined into a master school data set before matching school data with other data. School data for 7,055 candidates were matched to the database with New York demographic data, NY bar exam performance data, and LSAC data. For the remaining 3,120 candidates (out of 10,175) either the candidate did not give permission for the release of the data by the law school or the law schools could not supply the

data.

Database Finalization

The collection methods used in this study resulted in the availability of the same information from multiple sources for some of the variables (e.g., gender, ethnicity, MBE scores, birthdates, age at law school graduation, age at bar exam). As indicated above, at several points in the matching process, comparisons were made across data sets to verify accuracy using this redundant information. As a final step in the database preparation process, a few additional analyses were implemented to identify and rectify potentially errant or conflicting data.

Two potential sources of gender information were available for the 10,175 candidates who sat for the July 2005 administration, one from the demographic survey data set and one from the LSAC data set. For the majority of candidates, the final assignment of a code for gender was straightforward because the data in the two data sets was consistent (n = 7,625) or gender information was available from only one source (i.e., 2,544 candidates with missing gender information in one data set but not the other). Only six records had conflicting information (e.g., a person was listed as male in one data set and female in the other). For these six records, examination of candidate names provided clear guidance as to the likely gender. Implementing these decision rules yielded counts of 4,557 females, 4,771 males, and 847 candidates with a value of “Omitted.”

A similar situation occurred with racial/ethnic information. The data reconciliation process was also aided by the NYBLE decision to use the same race/ethnicity categories as the LSAT in its demographic survey. Once again, the race/ethnicity of the vast majority of candidates (n = 7,178) was consistent in the two data sets (including candidates with “omitted” racial/ethnic information in both data sets) or had a specific racial/ethnic information coded in one data set and no racial/ethnic information in the other (n = 2,915). For the 82 candidates with conflicting specific racial/ethnic information, the race/ethnicity code in the New York survey-based demographic data set was used for the analyses.

The MBE scores appeared in several data sets. As mentioned above, these values were checked to verify the matching process. The only differences appeared as a result of score transfers. The information in data sets received from the NYBLE was all consistent. Because the data set with MBE scores had information reported to one decimal place for all candidates, these data differed slightly from NYBLE for those candidates who transferred scores from a jurisdiction that had a MBE score reporting rule different from New York. The MBE scores used for the analyses were the ones provided by the NYBLE.

Candidate birthdate was also available from several data sets (i.e., New York data set with date of birth, MBE score data set, and LSAC data set). For 10,029 of the

candidates, the birthdate was consistent across the three data sets (or missing in one data set and consistent across the other two). For 86 of the remaining 146 records where birthdate was inconsistently reported, the birthdate included in the database was the value that was consistent across two of the three sources. For the remaining 60 records, one date was missing (usually the LSAT birthdate) and the two existing dates were inconsistent. If one of the birthdates was illogical or unreasonable (e.g., was listed as 1/1/2005), the other date was the final coded value. If both birthdate values were reasonable and less than one year apart, the birthdate from the New York date data set was included in the database. If the birthdates were more than a year apart and an age was available from the New York demographic data set, the birthdate that provided the closest match to the candidate's reported age was used in the database. For any remaining mismatches, the New York date data set information was used as the final value.

The value that represented age at the time of the bar examination was calculated by taking the difference between date of the July 2005 administration and birthdate values as described above. This newly calculated age value was compared to self-reported age from the New York demographics data set to verify that the values were reasonable. As noted previously, nearly all of the candidates had a calculated age that was within a year of self-reported ages. The age value for the nine examinees where the difference was greater than one year was verified by checking that the calculated age was more reasonable than the self-reported value.

Age at law school graduation was calculated by taking the difference between graduation date and the birthdate. Once again, this calculated age was compared to self-reported ages to verify reasonableness. Seven unusual ages at law school graduation were identified – all of these calculated ages were less than 16 and four were negative. For these seven records, the law school graduation age was treated as missing because the birthdate information was not in question. In addition, two other ages at law school graduation were treated as missing data because the calculated values were more than one year greater than age at bar attempt.

As a final step in the data processing, a generic identification number was created to eliminate the need to carry any specific identifying information (e.g., candidate name, SSN, or seat number) forward into the database used for purposes of analysis.

Appendix D

Standard Errors of Measurement for Variables in the School-Based Sample

D.1

Standard Errors of the Mean of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores by Race/Ethnicity for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 3,294)	SEM	0.01	0.13	0.01	0.02	1.06
Asian/ Pacific Islander (n = 416)	SEM	0.02	0.37	0.02	0.05	3.02
Black/ African American (n = 284)	SEM	0.02	0.38	0.02	0.05	3.54
Hispanic/ Latino (n = 151)	SEM	0.03	0.54	0.03	0.07	5.45
Puerto Rican (n = 54)	SEM	0.05	1.03	0.05	0.13	9.27
Other (n = 167)	SEM	0.03	0.56	0.03	0.07	4.93
Total* (N = 4,388)	SEM	0.01	0.12	0.01	0.01	0.95

*Total includes racial/ethnic groups not separately listed in the table.

D.2

Standard Errors of the Mean of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores for Females by Race/Ethnicity and Gender for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,545)	SEM	0.01	0.18	0.01	0.02	1.53
Asian/ Pacific Islander (n = 239)	SEM	0.02	0.49	0.02	0.06	3.82
Black/ African American (n = 186)	SEM	0.03	0.47	0.02	0.07	4.50
Hispanic/ Latino (n = 77)	SEM	0.05	0.74	0.04	0.10	7.76
Other (n = 96)	SEM	0.04	0.80	0.03	0.09	6.56
Total* (N = 2,187)	SEM	0.01	0.16	0.01	0.02	1.34

*Total includes racial/ethnic groups not separately listed in the table.

D.3
Standard Errors of the Mean of Undergraduate Grade-Point Average, LSAT Scores, Law-School Grade-Point Average, and Total New York Bar Scores for Males by Race/Ethnicity and Gender for the School-Based Sample

Race/Ethnicity		U-GPA	LSAT Score	4-pt L-GPA	Index-Based L-GPA	Total NY Bar Score
Caucasian/ White (n = 1,749)	SEM	0.01	0.18	0.01	0.02	1.47
Asian/ Pacific Islander (n = 177)	SEM	0.03	0.58	0.03	0.08	4.86
Black/ African American (n = 98)	SEM	0.04	0.62	0.04	0.09	5.74
Hispanic/ Latino (n = 74)	SEM	0.05	0.80	0.05	0.11	7.69
Other (n = 71)	SEM	0.05	0.74	0.04	0.11	7.26
Total* (N = 2,201)	SEM	0.01	0.16	0.01	0.02	1.35

*Total includes racial/ethnic groups not separately listed in the table.