The Size and Source of Differences in Bar Exam Passing Rates Among Racial and Ethnic Groups

by Stephen P. Klein, Ph.D. and Roger Bolus, Ph.D.

Overview
Non-Hispanic whites (hereinafter referred to as "Whites") are generally more likely to pass the bar exam than their law school classmates. In this article, we discuss the size of the differences in passing rates among racial/ethnic groups and summarize the findings of studies that have examined why some groups do better on the exam than others. These studies have investigated whether the differences in passing rates among groups are related to several factors, including: the types of essay and multiple-choice questions that are asked, the subject matter areas covered by the exam, the racial/ethnic background of the readers who grade essay answers, the general academic ability of the applicants taking the exam, and their law school grades. As we discuss below, this last factor explains virtually all the differences in bar exam passing rates among groups (for previous reviews of this topic, see Klein, 1980, 1991, and 1993; and Klein & Bolus, 1987).

How Large Are the Differences?
The size of the difference in bar passage rates between Whites and minority applicants depends on several factors. These factors include: (1) which racial/ethnic groups are studied, (2) whether initial (first-timer) or eventual passing rates are examined, (3) the relative stringency of the state's pass/fail standard, and (4) the reliability of the state's pass/fail decisions. All these factors make a difference. For example, African-Americans (hereinafter referred to as "Blacks") are less likely to pass on their first attempt than Hispanics who in turn are less likely than Asians, but the latter two groups have nearly identical eventual passing rates. In general, first-timer passing rates tend to show wider gaps among groups than eventual rates. States that have relatively high passing rates tend to have smaller differences among groups than other states (because all groups have high rates when standards are low). In addition, the more reliable the exam scores, the larger the gap (if bar exam scores were due entirely to chance, then the passing rate would be the same in all groups). The remainder of this section presents data regarding the size of the disparities in passing rates among groups that have been reported by various studies.

All the studies that we know about report large disparities in passing rates among groups (see Table 1). On average, the passing rate for White first-timers is about 30 percentage points higher than the rate for Blacks. The rates for Asians and Hispanics generally fall in between those for Whites and Blacks. A study by Millman, Mehrens, and Sackett (1991) of all takers (first-timers plus repeaters) on the July 1992 New York exam found that the rate for Whites was more than double the rate for Blacks.

"Eventual" passing rates refer to the percentage of applicants in a group who ultimately pass; i.e., regardless of how often they take the exam. These rates usually
show smaller differences among groups than first-timer rates. There are two basic ways to measure eventual rates. The cross-sectional or “pipeline” method involves computing the total number of applicants in a group who pass over several years (regardless of how many attempts they made) and then dividing this sum by the number of first-timers in that group who took the exam during this same period of time. This procedure works well provided there are no major fluctuations across years in either the number of applicants per group or in pass/fail standards (both of these requirements are reasonably well satisfied in the California data).

The longitudinal method for measuring eventual passing rates involves following a specific cohort of first-timers (such as those who took the July 1991 exam) over several subsequent administrations to determine how many of the first-timers in the initial cohort ultimately passed. Previous research (Klein, 1987) suggests that over 90% of those who eventually pass will do so by their fourth attempt, but we know of at least one applicant who took the exam over 50 times before passing.

<table>
<thead>
<tr>
<th>Group</th>
<th>California</th>
<th>Colorado</th>
<th>New Mexico</th>
<th>New Jersey</th>
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<td>—</td>
<td>—</td>
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<td>71</td>
<td>52</td>
<td>—</td>
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<tr>
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<td>47</td>
<td>54</td>
<td>—</td>
<td>53</td>
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<td>46</td>
</tr>
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</table>

The California data are for first-timers on the July 1994-96 exams (over 75% of these applicants are graduates of ABA schools). The Colorado results are for first-timers on all exams given between July 1990 and February 1997. The New Mexico data are for graduates from the University of New Mexico who took that state’s bar exam between February 1976 and July 1980 (Klein, 1981c). The New Jersey data are for July 1988 and through July 1989 first-timers. The New York results were reported by Millman et al. (1993) and include first-timers and repeaters on the July 1992 exam. The Florida results are for July 1991 and were reported by Swaminathan and Rogers (1991).

<table>
<thead>
<tr>
<th>Group</th>
<th>CA Cross-sectional Pipeline Analysis</th>
<th>Longitudinal Cohort Analyses</th>
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<tr>
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The pipeline analysis divides the total number of applicants in a racial/ethnic group who passed the California Bar Exam between July 1994 and February 1997 by the number of first-timers in that group who took these six exams. The California longitudinal analyses tracked all of the July 1990 and 1991 first-timers in that state over as many as seven subsequent exams to determine how many of them eventually passed (Klein, 1994). The last column of data is derived from Table 8 in the LSAC study (Wightman, 1997). To be consistent with the other results presented above, Mexican Americans and Puerto Ricans in the LSAC study were combined with other Hispanic applicants.

Both methods of measuring eventual passing rates tell similar stories, namely: the large differences among racial/ethnic groups in first-timer passing rates are substantially reduced (but not eliminated) when the analysis considers eventual rates (Table 2). For example, the 31 percentage point difference in passing rates between
White and Black California first-timers shrinks to about 20 points when eventual rates are compared.

The last column in Table 2 shows the results of the recently published Law School Admission Council (LSAC) Bar Passage Study (Wightman, 1997). This study followed a national sample of 27,135 Fall 1991 first-year students who agreed to the release of their law school and bar performance data. According to Wightman, this group represents about “70% of the Fall 1991 entering class” and “the students from this sample remain in the active bar passage study file for three years after graduation (six bar examination administrations) or until they pass a bar exam, whichever comes first” (footnote #8, p. 5). Wightman’s analysis of the 22,239 students in this longitudinal cohort who were known to have graduated and taken a bar exam indicated that 96% of the Whites passed compared to only a 75% pass rate for Blacks; i.e., a 21 percentage point disparity between groups.

Several concerns have been raised about the methodology in the LSAC study, such as the aggregation of data across states that vary significantly in both bar exam pass/fail standards and proportions of minority applicants (Heriot, 1997). Nevertheless, the differences among groups in eventual passing rates in the LSAC study corresponds fairly well to the differences among these groups in the California data. Readers also should remember that the eventual rates in the LSAC study are not the kinds of rates that are traditionally reported for bar exams. For example, an applicant who fails in one state but passes in another is counted as a “pass” in the LSAC study.

**What Does Not Produce the Differences?**

Over the past 25 years, many studies have explored possible sources of the large differences in bar exam scores and passing rates among groups. This section summarizes the major findings from this research with respect to the factors that were thought to be related to the differences between groups but which turned out to have little or no effect. These studies investigated such issues as whether one group is favored over another as a result of the inclusion of certain questions or types of questions, the subject matter areas covered by the exam, test format (multiple-choice, essay, performance, or oral), and the racial/ethnic backgrounds of the readers.

**Question Characteristics.** A multiple-choice or essay question that is relatively difficult (or easy) for one racial/ethnic group generally behaves the same way in the other groups. In fact, the rank ordering of questions from hard to easy in one group corresponds almost exactly to their ranks in each of the other groups. Certain questions within an exam do not consistently favor one group over another. For example, the difference in correct response rates between Whites and Blacks on one Multistate Bar Examination (MBE) item corresponds very closely to the differences among groups on other items. Thus, the large disparities among groups are not due to a few aberrant questions. Consequently, replacing some questions in favor of others will not really affect the disparities in scores and passing rates among groups (see Klein, Bell, & Bolus, 1992a for technical details of the “Differential Item Functioning” study of the MBE using the Mantel-Haenzel procedure and Klein, 1976 and 1982a for earlier studies of MBE and essay questions).

Minority group experts have not been able to accurately predict which questions tend to widen or narrow the differences in scores among groups (Klein, Bell, & Bolus, 1992b). In addition, a question that may slightly narrow or widen the difference between Whites and Blacks may have the opposite effect for Whites and Hispanics or Whites and Asians; and, an item that reduces the differences between groups on one administration of the exam may behave in the opposite way the next time that same question is used.

**Subject Matter Area.** There is no systematic relationship between content coverage and the differences in
mean bar exam scores among groups. Thus, emphasizing one area over another is unlikely to widen or narrow the differences among groups. For example, on the July 1991 MBE, White first-timers in California answered an average of 77% of the Constitutional Law items correctly compared to a 73% rate for Hispanics; i.e., a 4 percentage point difference. The difference between these two groups on the Contracts, Criminal Law, Evidence, Real Property, and Torts sections on this exam were: 4.3, 4.3, and 5 points, respectively. In short, the gap between Hispanics and Whites on one section was almost identical to the gap between them on every other section. In addition, the differences among groups across MBE test sections in July 1991 were not consistent with the differences among them on subsequent exams. For example, the largest difference between Whites and Blacks on the July 1991 exam was on Real Property, but the largest difference between them on the July 1992 exam was on Evidence (see Klein, 1993, Table 4.1 for details).

Test Format. A given racial/ethnic group earns about the same scale score on the essay portion of the exam as it does on the MBE (multiple-choice) portion. Figure 1 illustrates this trend with data from the July 1996 California bar exam. Note that the ranking of racial/ethnic groups is the same regardless of the type of test used. In contrast, there is a small gender effect: women score slightly higher than men on the essay section while the reverse is true on the MBE. Thus, giving more weight to one section over another is unlikely to affect differences in passing rates among racial/ethnic groups, but it may have a very small effect on the differences in rates between men and women.

Previous research has found that the differences among such racial/ethnic groups on the MBE and essay correspond to the differences among groups on performance tests (Klein, 1981b and 1989) and even on oral exams (Klein, 1982). In short, changing test types or the weights attached to different sections in computing an applicant’s total bar exam score is unlikely to have an appreciable effect on the differences in passing rates among groups.

Essay Reader Characteristics. On the average, minority graders rank order essay answers about the same way as non-minority graders (Klein, 1976). For example, the difference in average essay scores between Black, Hispanic, and White applicants is about the same regardless of whether the readers who grade those answers are Black, Hispanic, or White. In technical terms, there is no statistically significant interaction between an applicant’s and a reader’s racial/ethnic group.

Time Limits. Increasing the amount of time applicants are given to answer MBE and essay questions generally leads to higher scores on these sections. However,
all groups benefit to the same degree from the extra time. It is not especially helpful to minority applicants, repeaters, women, etc. (Klein, 1981a).

**Law School Quality.**
At least in California, minority applicants are just as likely to come from American Bar Association (ABA) approved law schools as White applicants. The percentage of White, Asian, Hispanic, and Black first-timers from ABA schools on the July 1994-96 California exams were 76%, 86%, 78%, and 76%, respectively. Previous research found that within the ABA schools, minority applicants are more likely than Whites to come from the most prestigious schools; i.e., the ones with the highest admission standards as indicated by their Whites’ mean LSAT score (Klein, 1991). Thus, the relatively low passing rates of minority graduates in California cannot be attributed to their being denied admission to the best schools. Of course, this may not be true in other states and even in California, the picture may change with the dismantling of affirmative action programs in that state’s public universities.

**What Does Matter?**
Bar exam scores are highly related to an applicant’s law school grade point average (LGPA). In fact, this relationship is about three times stronger than the one between Law School Admission Test (LSAT) scores and LGPAs (or between LSAT and bar scores). The grades applicants earn in law school are highly predictive of how well they will do on the bar exam. This is true for all racial/ethnic groups. Applicants with the same LGPAs from the same law school have about the same probability of passing regardless of their racial/ethnic group. The exam does not favor one group over another. Minority applicants generally have lower passing rates because they usually have lower (and sometimes substantially lower) LGPAs than their classmates; i.e., they apparently have different average levels of mastery of the law. The bar exam itself is not the source of the differences. It merely reflects the disparities that were present when the students graduated from law school.

The remainder of this section illustrates these findings with analyses of recent bar exam data (see Bernstine, 1989; Klein, 1993; and Millman, et al., 1993 for previous studies). Specifically, we investigated the relationship of bar scores and passing rates to LSAT scores and LGPAs for first-timers from four ABA schools (see Table 3). Schools A and B are public universities. Schools C and D are private institutions. These schools vary in size and admissions standards (e.g., the mean scores of their White graduates during the last ten years on the LSAT’s current scale ranged from 158 to 164). All four schools have strong affirmative action programs as indicated by their relatively large percentages of minority graduates and the large difference in mean LSAT scores between their

<table>
<thead>
<tr>
<th></th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
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</table>

Table 3
Correlation of Total Bar Exam Score with LSAT and LGPA

The correlation between LSAT scores and LGPAs at Schools A-D was .55, .44, .28, and .27, respectively. The standard deviations of the LSAT scores were 6.0, 6.8, 5.4, and 6.0. Two digit LSAT scores were converted to the current 120-180 scale using equipercentile scaling on national data. The corresponding number of first-timers from each school across the four racial/ethnic groups studied over the 20 exams were 2243, 2861, 1561, and 3121. The first-timer passing rates at the four schools ranged from 82% to 85%.
White and minority students. We used ten years (20 exams) worth of data (February 1987 through July 1996) to insure we would have enough first-timers in each group to produce reliable results. The percentage of White first-timers at the four schools (as a percentage of the number of Whites+Asians+Hispanics+Blacks) ranged from 66% to 82%.

The average correlation between LSAT scores and LGPAs across the four schools was .40. This means that LSAT scores "explained" about 16% of the variance in LGPAs (the square of the correlation coefficient indicates the percentage of variance in one test that can be accounted for by another test). LSAT scores explained an average of 15% of the variance in "total" (essay plus MBE) bar exam scores at these schools. Thus, LSAT scores predict LGPAs to about the same degree as they predict bar scores. In contrast, LGPAs explain almost 50% of the variance in bar scores. Consequently, LGPAs are about a three times better predictor of bar exam scores than are LSAT scores.1

Within a law school, the correlation between bar exam scores and LSAT scores is very similar across groups. So is the correlation between bar exam scores and LGPAs. In other words, the relationships among these scores do not vary as a function of racial/ethnic group. The only truly aberrant value in Table 3 is the zero correlation between bar exam and LSAT scores for Hispanics at School C (scatter plots and other diagnostic indicators did not reveal the source of this anomaly).

A minority applicant with a given LGPA has about the same likelihood of passing the bar exam as a White classmate with that same LGPA. Figure 2 illustrates this equivalency with data from School A. The vertical (y-axis) shows the percent passing. The x-axis shows the percentile of LGPA within the law school; i.e., lowest 10%, next 10%, and so on. These data show that White and minority applicants with similar LGPAs have similar probabilities of passing. The data also show that virtually all the students in the top half of their class on LGPA at this school pass on their first attempt, regardless of their racial/ethnic group. Studies in California (Klein & Bolus, 1987) and New York (Millman, et al. 1993) have found that almost all of the relationship between bar scores and racial/ethnic group disappears once there is control on the applicant's LGPA and law school (the latter control adjusts for differences in grading standards across schools).

Although the relationship between LGPAs and bar scores is essentially the same for all groups, minority applicants generally tend to have substantially lower
LGPAs than their classmates. This is what leads to their lower bar exam passing rates. Figure 3 displays these trends for the applicants from School B. This figure has two bars for each group (the top one for LGPA and the bottom one for total bar exam score). Each bar has three vertical lines. Reading from left to right, these lines correspond to the 25th, 50th, and 75th percentile points within a group. Thus, the bar represents the middle 50% of all the applicants in a group.

The bottom 25% of a group fall to the left of its bar and the top 25% fall to the right of its bar. For example, about 75% of the Whites have LGPAs that are above the 50th percentile (i.e., the median LGPA) for Asians.

The x-axis shows the percentile at the law school for all applicants combined. For example, the 25th percentile for Blacks on LGPA (i.e., the left-hand side of their top bar) is at the 5th percentile of LGPA among all students at School B, and the 75th percentile for Blacks (the right-hand side of their top bar) is at the 40th percentile among all students.

Figure 3 shows that the distribution of a group’s LGPAs parallels the distribution of its bar exam scores. For example, half the Black first-timers from School B have LGPAs and bar scores that are below the 15th percentile of all first-timers from this school. The 25th percentile for Hispanics on LGPA and bar scores is in the bottom 10% of all of School B’s first-timers. Only about 20% of School B’s Hispanics have LGPAs and bar scores that are over the school’s median (50th percentile) value.

The median value for a minority group tends to fall toward the left-hand (shaded) side of its bar. In other words, a minority group’s LGPAs and bar scores tend to be concentrated toward the bottom end of its distribution. As a result of this situation, slightly more than 75% of the Blacks have LGPAs that fall in the lowest 40% of all of School B’s first-timers. Only about half of the Asians (and less than one third of the Blacks and Hispanics) have LGPAs that are above the bottom quarter for Whites.

The large differences in LGPAs among groups can be traced back to differences in admissions standards. The median LSAT scores for Whites, Asians, Hispanics, and Blacks at School B were 162, 157, 153, and 150, respectively. To put these values in perspective, 75% of School B’s Blacks had LSAT scores that were below the 10th percentile for its Whites. This huge disparity is typical of the results at other schools.

The large differences among groups in LGPAs and LSAT scores translate into large differences in their bar exam passing rates. For example, the percentage of White, Asian, Hispanic, and Black first-timers from School B with LGPAs of 2.33 or higher (out of a possible 4.00) are 90%, 70%, 60%, and 50%, respectively. The
corresponding percent passing from this school in these groups are 89%, 69%, 60%, and 44%. Thus, there is almost a perfect match between the percentage of applicants in a group with LGPAs of 2.33 or higher and the percent passing in that group. The small differences that occur are not statistically significant.

CONCLUSIONS
On the average, members of racial/ethnic minority groups do less well on the bar exam than their classmates. This finding has held up in every jurisdiction that has examined the passing rates of different groups. The size of these disparities varies from state to state as a function of several factors (such as whether first-timer or eventual passing rates are studied). Nevertheless, it is clear that no matter how the computations are made, minority applicants and especially Blacks, have significantly lower passing rates than Whites.

Over the past 25 years, several studies have investigated many potential sources of the differences in passing rates among racial/ethnic groups. These studies have found that the disparities are not a function of certain questions or types of questions, subject matter areas covered by the exam, test format (essay, multiple-choice, or performance), the racial or ethnic group of the lawyers who grade the essay answers, the time limits imposed, or even the types of law schools from which the applicants graduate. None of these factors have a significant effect on the differences in passing rates between groups.

What does matter is the applicant’s mastery of the law as indicated by the knowledge and abilities that are needed to do well in law school. As we demonstrated with the tables and figures above, an applicant’s likelihood of passing the bar exam is tied very closely to that applicant’s law school grades. Figure 2 shows that two applicants with about the same LGPA from the same school have about the same probability of passing regardless of their racial/ethnic group. This finding is consistent with the results of previous studies done in California and New York. In short, the differences in passing rates among racial/ethnic groups stem from differences in their legal skills and abilities rather than from some unique feature of the test. The exam works about the same way for everyone.

It also is evident from the large disparities in mean LSAT scores among groups that on the average, minority applicants are generally less well prepared for law school than their classmates. Nevertheless, even in jurisdictions with very high standards for passing the bar exam, over 80% of the minority applicants eventually pass. It may take them several tries, but they ultimately succeed, most likely as a result of further studying, preparation, and other factors (Millman, 1989). One interpretation of these trends is that many minority students simply need more time than their classmates to make up for shortcomings in their educational backgrounds before entering college or law school. The data certainly show that most minority applicants can pass if they are given enough opportunities to demonstrate their abilities.

ENDNOTES
1. Among the graduates of a law school (as distinct from among those who apply or attend), there is often a very low or even negative correlation between undergraduate grades (UGPAs) and LSAT scores. This stems in part from a school allowing a high LSAT score to offset a low UGPA (and vice versa) in the admissions process. UGPAs also generally have very low correlations with LGPAs and bar exam scores among bar exam applicants (e.g., UGPAs usually explain only about 4% of the variance in the students’ LGPAs and only 1% of the variance in their bar exam scores). Moreover, among a school’s first-timers, the combination of LSAT scores and UGPAs is generally not much better than LSAT alone in predicting bar exam scores.

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