

PR-88-8

**RELIABILITY AND VALIDITY OF THE FIRST YEAR  
LAW STUDENTS EXAM**

**Stephen P. Klein, Ph.D.**

**Roger Bolus, Ph.D.**

**GANSK & Associates**

**December 27, 1988**



## RELIABILITY AND VALIDITY OF THE FIRST YEAR LAW STUDENTS EXAM

### BACKGROUND

Students at unaccredited (but not ABA or California accredited) law schools must pass the First Year Law Students Exam (FYLX) to receive state bar credit for their first year of law studies. And, receipt of this credit is a prerequisite for taking the General Bar Examination (GBX) if the applicant graduates from an unaccredited school. However, some graduates of unaccredited schools are exempt from this requirement because they successfully completed their first year at an accredited or ABA school. Conversely, some applicants may have taken the FYLX and later transferred to an ABA or California accredited school.

The FYLX is a one day exam that is given twice per year (in June and October). It consists of 100 multiple choice questions and four essay questions, hereafter referred to as the FYLX-MC and FYLX-Essay. FYLX-MC raw scores (the number of questions answered correctly) are equated so that a given FYLX-MC scale score indicates the same level of proficiency regardless of the exam on which it was earned. Each essay answer is graded on a 0 to 100 scale so that the maximum possible total essay score is 400 points. The total FYLX score is the sum of the FYLX-MC scale and FYLX-Essay scores.

### FYLX TEST CHARACTERISTICS

Table 1 shows the mean, standard deviation, and reliability of each of the FYLX's three scores on the June 1988 administration of this test. This exam was taken by 481 applicants, 36 percent of whom passed it (i.e., received a score of 560 or higher after reappraisal).

Table 1

SUMMARY STATISTICS ON THE JUNE 1988 FYLX

FYLX Score	Mean	Standard deviation	Reliability
Multiple Choice	256.04	44.53	.864
Essay	267.30	26.55	.665
Total	523.34	63.35	.874

There was a .56 correlation between the FYLX multiple choice and essay scores on this exam. Standard statistical formulas estimate that this correlation would be about .74 if both measures were perfectly reliable. These statistics indicate that the applicants who earn relatively high scores on the FYLX-MC also tend to earn high FYLX-Essay scores, but this relationship is far from perfect even when both measures are corrected for reliability.

The reliability of the FYLX-MC, .864, compares favorably with the reliability of the 200-item multiple choice section on the GBX; i.e., the Multistate Bar Examination (MBE). For instance, the MBE usually has a reliability of about .88. If the FYLX-MC section was expanded to 200 items, its reliability would be about .93.

The reliability of the FYLX-Essay section, .665, is somewhat better than what would be expected given the reliability of the six-question essay section on the GBX. For example, if the FYLX-Essay section was expanded to six questions, its projected reliability (.75) would be higher than the .67 that is typically found with six GBX essay questions.

The reliability of the total FYLX score (.874) is comparable to that of the total GBX score (.849 in July 1985 and .871 in July 1986). And, it is high enough for the purposes of making pass/fail decisions about individual applicants.

The reason the total score is so reliable is that the FYLX-MC section is more reliable than the FYLX-Essay and the FYLX-MC carries substantially

more weight than the essay in determining whether one applicant has a higher FYLX total score than another applicant. This occurs because the FYLX-MC's standard deviation is 1.68 times as large as the essay's standard deviation (and when scores are simply added together to form a total score, their relative weights are affected by the relative sizes of their standard deviations).

One consequence of the FYLX-MC carrying more weight than the essay is that the FYLX-MC accounts for 88 percent of the variance in total FYLX scores whereas the essay accounts for only 66 percent. In short, an applicant's FYLX-MC score is an extremely good predictor of that applicant's total FYLX score.

This strong relationship between FYLX-MC and total scores is illustrated by the fact that if the passing score on the FYLX-MC was set so that it passed the same number of applicants as actually passed the FYLX (i.e., 36 percent), then the two measures would agree on the pass/fail status for 85 percent of the applicants.

#### RELATIONSHIP BETWEEN FYLX AND GBX SCORES

State bar records were searched back to 1980 to find all the applicants who had an FYLX score and who also took the GBX for the first time in either July 1985 or July 1986. This search found 244 applicants (130 from the 1985 exam and 114 from the 1986 exam). If an applicant took the FYLX more than once, we used the last and thereby the highest score earned. Only 7 of the 244 applicants (3%) took the FYLX in 1980. Thus, it appears our search went back far enough in time to capture virtually all of the July 1985 and 1986 first timers who had an FYLX score.

#### Sample Characteristics

Only 123 of the 244 applicants (50 percent) graduated from an unaccredited school. The percent graduating from ABA and California accredited schools were 7 percent and 36 percent, respectively. The

remaining 7 percent were not assigned to a school (primarily because they took the GBX more than one year after graduation).

These data suggest that passing the FYLX may encourage some applicants to apply (or reapply) to accredited schools. It also may increase their chances of being admitted to these schools. However, the 89 applicants who graduated from California accredited schools tended to have slightly lower FYLX scores than the other 155 applicants in the sample (there was a -.19 biserial correlation between FYLX total score and graduating from a California Accredited school).

Table 2 presents summary statistical data on the 244 applicants for whom we could find both FYLX and GBX scores (the GBX-Written score was before scaling to MBE score distribution).

Table 2

SUMMARY STATISTICAL DATA FOR APPLICANTS WHO HAD BOTH FYLX AND GBX SCORES (N = 244)

Score	Mean	Standard deviation
FYLX-MC	297.39	25.86
FYLX-Essay	284.36	17.74
FYLX-Total	581.76	32.26
GBX-MC (MBE)	143.23	14.68
GBX-Written	673.36	50.38
GBX-Total	1425.65	138.79

Unaccredited School Graduates Without FYLX Scores

There were 54 applicants who did not take the FYLX but did take the GBX for the first time in July 1985 or July 1986. These applicants may have been exempted from the FYLX requirement because they successfully completed their first year of law studies at an ABA or California accredited school and then transferred to an unaccredited school.

The mean total GBX score in this group of 54 applicants (1224) was 200 points lower than the mean for the 224 applicants who were found (1426). And, only 9 of the 54 applicants (17%) passed the GBX. Thus, the current policies for exempting applicants from the FYLX requirement err on the side of leniency. Moreover, these policies benefitted a large share of the unaccredited school graduates (the 54 applicants without FYLX scores constituted 31 percent of all the 177 unaccredited school first timers from the July 1985 and 1986 cohorts).

#### Prediction of First Timer Scores

Table 3-A shows that the FYLX is a good predictor of GBX scores. It also shows that the combination of FYLX-MC and FYLX-Essay scores (i.e., FYLX-Total) is a better predictor of GBX-Total than is either measure by itself. We found that giving the FYLX-MC substantially more or less weight than it now carries relative to the FYLX-Essay did not improve the FYLX-Total's ability to predict total GBX scores.

Table 3-B shows what these correlations would have been if all the applicants who took the FYLX also took the GBX (rather than just the ones who passed the FYLX). Thus, the values in Table 3-B are estimates of the FYLX's ability to predict GBX scores.

The .70 validity coefficient for the FYLX total score would be considered quite high relative to the validity coefficients of other tests (such as the LSAT); and, it is comparable to how well law school grade point average predicts GBX scores. However, as with grade point average, there is no single FYLX score that clearly distinguishes between those who will versus will not pass the GBX.

Table 3-A

OBSERVED CORRELATIONS BETWEEN FYLX AND GBX SCORES

	FYLX-MC	FYLX-Essay	FYLX-Total
GBX-MC (MBE)	.46	.17	.46
GBX-Written	.25	.32	.38
GBX-Total	.35	.30	.45

Table 3-B

CORRELATIONS BETWEEN FYLX AND GBX SCORES AFTER  
ADJUSTING FYLX SCORES FOR RESTRICTION IN RANGE

	FYLX-MC	FYLX-Essay	FYLX-Total
GBX-MC (MBE)	.67	.25	.71
GBX-Written	.40	.45	.63
GBX-Total	.54	.43	.70

The correction procedure used the standard deviations from tables 1 and 2 to estimate the variance in the unrestricted and restricted samples, respectively.

Initial versus Eventual Pass/Fail Status

Overall, 43.4 percent of the sample of 244 applicants passed the GBX on their first attempt. Another 25.4 percent passed after as many as five subsequent attempts, which brought the total eventually passing to 68.8 percent. In short, an applicant who passes the FYLX has a slightly less than a 50/50 chance of passing the GBX on the first try, but about a two-thirds chance of eventually passing the GBX.

Table 4 shows that in general, the higher the FYLX score, the higher the initial and eventual passing rates. The initial passing rate was more closely associated with the FYLX score than was the eventual rate. And, although 50 of the 51 applicants with an FYLX score over 607 eventually passed the GBX, there were many applicants with scores below 607 who



also passed the GBX. Similarly, there was no minimum FYLX score that distinguished well between the applicants who did versus did not pass the GBX either on their first attempt or eventually.

Table 4

MEAN GBX SCORES AND PASSING RATES AS A FUNCTION OF FYLX SCORE

FYLX Total	Number of applicants	Initial mean GBX total	Percent Passing GBX	
			Initially	Eventually
< 559	44	1380	25	48
559-569	47	1375	28	64
570-579	27	1375	26	56
580-589	32	1419	44	72
590-599	26	1419	42	65
600-609	20	1437	45	75
610-619	18	1544	89	100
> 619	30	1554	83	96
Total	244	1426	43	69

Correlations with Sex

Research on the GBX has shown that men tend to earn relatively higher MBE than essay scores whereas the reverse is true for women. The same trends were present for both the FYLX and GBX scores in the sample of 244 applicants (49 percent of whom were men). The biserial correlations between being male and FYLX-MC and FYLX-Essay scores were .15 and -.11, respectively. The corresponding correlations with MBE and GBX written scores were .14 and -.10.

Correlations with Race

Past research also has shown that Anglos tend to earn higher GBX scores than non-Anglos. This trend also was found for GBX scores in the sample of 244 applicants (89 percent of whom were Anglos). The correlation between being Anglo and MBE, Written, and GBX total scores were .25, .15,

and .20, respectively. All of these coefficients were statistically significantly different than what would be expected by chance.

In contrast, race was not significantly correlated with any of the three FYLX scores (the correlations between race and FYLX-MC, FYLX-Essay, and FYLX-total scores were .06, .09, and .09, respectively).

It is not evident why in our sample of 244 applicants the FYLX scores were less sensitive to race than were the GBX scores. FYLX and GBX scores have comparable reliabilities and the disparity in race effects between the two exams was observed on both their essay and multiple choice sections.

Because of the potential importance of this finding for developing a better understanding of the source of racial disparities in bar scores, we also computed the correlations between FYLX scores and race for the 226 applicants who had such scores and who also had taken the GBX at least once before July 1985. In this group of repeaters (27% of whom were minority group members), the correlation between race and FYLX-MC, FYLX-Essay, and FYLX-total scores were .27, .01, and .23, respectively. Thus, only the FYLX-Essay remained racially neutral. However, the correlations of GBX scores with race in this sample did not follow the normal pattern (e.g., it was only .06 with the GBX written score).

The number of minority group members in the sample of 244 applicants (27) and in the latter sample (61) were too small to conduct analyses separately by racial group. Indeed, these small sample sizes, the potential selection effects in the repeater sample, and the differences in the mix of minority applicants across samples may have influenced the observed pattern of correlations. Thus, it is premature to draw any conclusions about the relationship of race to FYLX scores.