



The Thurgood Marshall School of Law Empirical Findings: A Report of the 2012 Friday Academy Attendance and Statistical Comparisons of 1L GPA (Predicted and Actual)

September 9, 2010

Kadhi, T., Rudley, D., Holley, D., Krishna, K., Ogolla, C., Rene, E., & T. Green



Texas Southern University
Thurgood Marshall School of Law
3100 Cleburne Avenue ~ Houston, Texas 77004

Tau Kadhi, PhD
Assessment
Office: (713) 313-1184; Fax: (713) 313-1049
E-mail: kadhi2@tsu.edu

Executive Summary

The following report of descriptive statistics addresses the attendance of the 2012 class and the average Actual and Predicted 1L Grade Point Averages (GPAs). Correlational and Inferential statistics are also run on the variables of Attendance (Y/N), Attendance Number of Times, Actual GPA, and Predictive GPA (Predictive GPA is defined as the Index Scores reported from the Law School Academic Council). Explicative summaries are written throughout this report.

Procedures

Step 1) Student data was collected from the TMSL Registrar, Asst. Dean of Admissions, Academic Support, and Associate Deans, producing a collective database that contains pertinent student. That database is maintained by the Assessment Department.
Step 2) The Program Coordinator was given instructions as per Executive Director to perform a statistical analysis of attendance of students targeted by the Friday Academy and their GPAs.
Step 3) A statistical analysis was done using the Statistical Package for the Social Sciences (SPSS version 18) and all information is reported in its original format.

Fundamentally, findings of this report/study may be used to address the following research question(s)?

1. What are the Attendance and GPA statistical characteristics of the students whom were targeted by the Friday Academy at TMSL for the class of 2012?
2. What are the relationships between Attendance in the Friday Academy at TMSL and their GPAs?
3. Is there a statistically significant difference between the targeted 2012 class students who attended and those who did not?
4. What is the relationship between Attendance of the Friday Academy at TMSL and their GPAs concerning students whom attended at least half the time vs. those who did not?

There are narrative reports given at the end of each statistical analysis (see appendices) for the appropriate research questions, but these same summaries are given in the findings below.

Findings

Research Question 1: What are the Attendance and GPA statistical characteristics of the students whom were targeted by the Friday Academy at TMSL for the class of 2012? SPSS was able to calculate 54 of the 55 case summaries due to the fact that the student R. Natividad has no reported GPA. Hence, he is reported as a missing case for Actual GPA even though he has a Predictive GPA (based on admission data). Also note that the median Actual GPA was increased for 3 groups of attendees; specifically, attended 7 times (2.75 to 3.00), 5 times (2.26 to 2.40), and 2 times (2.61 to 2.63). Further investigation is required as to ascertain why. (See Appendix A for statistical details.)

Research Question 2: What are the relationships between Attendance in the Friday Academy at TMSL and their GPAs?

Note that there is a small and yet statistically insignificant negative relationship between attendance in the Friday Academy at TMSL and both Predictive and Actual GPAs. The Attendance to Predictive GPA is $-.025$ and the Attendance to Actual GPA is $-.096$. As expected, the Predictive to Actual GPA has a Statistically Significant correlation ($.319$) since the predictive equation is based off of the 2009 LSAT report that uses an Actual GPA in the model. More specifically, the equation $Y = \text{LSAT}*(.047) + \text{LGPA}*(.368) - 5.415$ was employed to receive the Predictive GPA until the actual report is produced (Actual report from LSAC does not come out until fall of 2010 and this report was done using the 2009 equation. The researcher noted there were minimal changes over the last 10 years to the equation). (See Appendix B for statistical details.)

Research Question 3: Is there a statistically significant difference between the targeted 2012 class students who attended and those who did not?

There is no statistically significant difference between those who attended the Friday Academy and those who did not. But it is interesting to see that there is a notably small effect size (Eta Squared) in the Predictive 1L LGPA of those whom attended and those who did not. As a rule of thumb $.01$ is small, $.06$ is medium, and $.14$ is large for effect size. The predictive factors of the Predictive 1L LGPA are obviously more affected by the Friday Academy than the Actual 1L LGPA. This could support a theory that the happenings in the Friday Academy academically support a more objective outcome. More research into this area and a larger data set could better address these questions. (See Appendix C for statistical details.)

Research Question 4: What is the relationship between Attendance of the Friday Academy at TMSL and their GPS concerning students whom attended at least half the time vs. those who did not?

A small positive correlation on both Pred ($.124$) and 1L LGPAs ($.218$) for students who attended more than 50% of the time was found. Also, there was a small positive correlation of the students whom attended less than 50% ($.012$), and a negative correlation between Attendance below 50% and Actual 1L GPA ($-.122$). Although not

statistically significant, this finding also supports the theory that the Friday Academy teaching focus was more effective with more objective measures than the Actual GPA, which is a more subjective measure. Clearly a larger sample is necessary to clarify findings. It was assumed that an ANOVA would not find any statistical significance within this data set. (See Appendix D for statistical details.)

Appendix A

Research Question 1: What are the Attendance and GPA statistical characteristics of the students whom were targeted by the Friday Academy at TMSL for the class of 2012?

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Pred 1L LGPA * ATTEND (#)	55	100.0%	0	.0%	55	100.0%
1L LGPA * ATTEND (#)	54	98.2%	1	1.8%	55	100.0%

Case Summaries

ATTEND (#)	Pred 1L LGPA	1L LGPA
.0		
N	14	14
Mean	2.4251714	2.2785714357
Median	2.4230400	2.3596666000
Minimum	1.89048	1.43333330
Maximum	2.85644	3.27600000
% of Total N	25.5%	25.9%
1.0		
N	12	12
Mean	2.3894467	2.3854999917
Median	2.4578400	2.2383333500
Minimum	1.49400	1.91033330
Maximum	2.91448	3.21200000
% of Total N	21.8%	22.2%
2.0		
N	2	2
Mean	2.6080400	2.6331667000
Median	2.6080400	2.6331667000
Minimum	2.55552	2.09833340
Maximum	2.66056	3.16800000
% of Total N	3.6%	3.7%
3.0		
N	10	10
Mean	2.4134080	2.1013000100
Median	2.4390200	2.1983333500
Minimum	1.71416	1.24400000

	Maximum	2.91680	2.87766670
	% of Total N	18.2%	18.5%
4.0	N	8	8
	Mean	2.3738450	2.2019166500
	Median	2.4339200	2.1100000000
	Minimum	1.98848	1.96600000
	Maximum	2.64016	2.71133330
	% of Total N	14.5%	14.8%
5.0	N	6	5
	Mean	2.3177533	2.2384666600
	Median	2.2636400	2.3990000000
	Minimum	2.01392	1.59933330
	Maximum	2.68096	3.08700000
	% of Total N	10.9%	9.3%
6.0	N	2	2
	Mean	2.3924400	1.7761666500
	Median	2.3924400	1.7761666500
	Minimum	2.36868	1.73066660
	Maximum	2.41620	1.82166670
	% of Total N	3.6%	3.7%
7.0	N	1	1
	Mean	2.7463600	3.0000000000
	Median	2.7463600	3.0000000000
	Minimum	2.74636	3.00000000
	Maximum	2.74636	3.00000000
	% of Total N	1.8%	1.9%
Total	N	55	54
	Mean	2.4073535	2.2623209870
	Median	2.4377600	2.2156666500
	Minimum	1.49400	1.24400000
	Maximum	2.91680	3.27600000
	% of Total N	100.0%	100.0%

Summary: SPSS was able to calculate 54 of the 55 case summaries due to the fact that the student R. Natividad has no reported GPA. Hence, he is reported as a missing case for Actual GPA even though he has a Predictive GPA (based on admission data). Also note that the median Actual GPA was increased for 3 groups of attendees (7, 5, and 2). Further investigation is required as to ascertain why.

Appendix B

Research Question 2: What are the relationships between Attendance in the Friday Academy at TMSL and their GPAs?

Correlations

		Pred 1L LGPA	1L LGPA	ATTEND (#)
Pred 1L LGPA	Pearson Correlation	1	.319*	-.025
	Sig. (2-tailed)		.019	.856
	N	55	54	55
1L LGPA	Pearson Correlation	.319*	1	-.096
	Sig. (2-tailed)	.019		.490
	N	54	54	54
ATTEND (#)	Pearson Correlation	-.025	-.096	1
	Sig. (2-tailed)	.856	.490	
	N	55	54	55

*. Correlation is significant at the 0.05 level (2-tailed).

Summary: Note that there is a small and yet statistically insignificant negative relationship between attendance in the Friday Academy at TMSL and both Predictive and Actual GPAs. The Attendance to Predictive GPA is -.025 and the Attendance to Actual GPA is -.096. As expected, the Predictive to Actual GPA has a Statistically Significant correlation since the predictive equation is based off of the 2009 LSAT report. More specifically, the equation $Y = \text{LSAT}*(.047) + \text{LGPA}*(.368) - 5.415$ was employed to receive the Predictive GPA until the actual report is produced.

Appendix C

Research Question 3: Is there a statistically significant difference between the targeted 2012 class students who attended and those who did not?

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Pred 1L LGPA * ATTEND (1,0)	55	100.0%	0	.0%	55	100.0%
1L LGPA * ATTEND (1,0)	54	98.2%	1	1.8%	55	100.0%

Report

ATTEND (Y,N)		Pred 1L LGPA	1L LGPA
N	Mean	2.4251714	2.2785714357
	N	14	14
	Std. Deviation	.25348807	.58284419090
	Median	2.4230400	2.3596666000
Y	Mean	2.4012693	2.2566333300
	N	41	40
	Std. Deviation	.30987392	.48024939364
	Median	2.4448000	2.1271667000
Total	Mean	2.4073535	2.2623209870
	N	55	54
	Std. Deviation	.29446018	.50312469556
	Median	2.4377600	2.2156666500

ANOVA Table^{a,b}

			Sum of Squares	df	Mean Square	F	Sig.
Pred 1L LGPA * ATTEND (Y,N)	Between Groups	(Combined)	.006	1	.006	.068	.796
	Within Groups		4.676	53	.088		
	Total		4.682	54			
1L LGPA * ATTEND (Y,N)	Between Groups	(Combined)	.005	1	.005	.019	.890
	Within Groups		13.411	52	.258		
	Total		13.416	53			

a. With fewer than three groups, linearity measures for Pred 1L LGPA * ATTEND (1,0) cannot be computed.

b. With fewer than three groups, linearity measures for 1L LGPA * ATTEND (1,0) cannot be computed.

Measures of Association

	Eta	Eta Squared
Pred 1L LGPA * ATTEND (Y,N)	.036	.001
1L LGPA * ATTEND (Y,N)	.019	.000

Summary: There is no statistically significant difference between those who attended the Friday Academy and those who did not. But it is interesting to see that there is a notably small effect size (Eta Squared) in the Predictive 1L LGPA of those whom attended and those who did not. As a rule of thumb .01 is small, .06 is medium, and .14 is large for effect size. The predictive factors of the Predictive 1L LGPA are obviously more affected by the Friday Academy than the Actual 1L LGPA. This could support a theory that the happenings in the Friday Academy academically support a more objective outcome. More research into this area and a larger data set could better address these questions.

Appendix D

Research Question 4: What is the relationship between Attendance of the Friday Academy at TMSL and their GPS concerning students whom attended at least half the time vs. those who did not?

Correlations Above 50% Attendance				
		1L LGPA	Pred 1L LGPA	ATTEND (Above 50%)
1L LGPA	Pearson Correlation	1	.452	.124
	Sig. (2-tailed)		.079	.648
	N	16	16	16
Pred 1L LGPA	Pearson Correlation	.452	1	.218
	Sig. (2-tailed)	.079		.400
	N	16	17	17
ATTEND (Above 50%)	Pearson Correlation	.124	.218	1
	Sig. (2-tailed)	.648	.400	
	N	16	17	17

Correlations Below 50% Attendance				
		1L LGPA	Pred 1L LGPA	ATTEND (Below 50%)
1L LGPA	Pearson Correlation	1	.282	-.122
	Sig. (2-tailed)		.086	.466
	N	38	38	38
Pred 1L LGPA	Pearson Correlation	.282	1	.012
	Sig. (2-tailed)	.086		.943
	N	38	38	38
ATTEND (Below 50%)	Pearson Correlation	-.122	.012	1
	Sig. (2-tailed)	.466	.943	
	N	38	38	38

Summary: A small positive correlation on both Pred (.124) and 1L LGPAs (.218) for students who attended more than 50% of the time was found. Also, there was a small positive correlation of the students whom attended less than 50% (.012), and a negative correlation between Attendance below 50% and Actual 1L GPA (-.122). Although not statistically significant, it can theoretically be assumed that the Friday Academy teaching focus was more effective with more objective measures than the Actual GPA. Clearly a larger sample is necessary to clarify findings. It was assumed that an ANOVA would not find any statistical significance within this data set.