

Optometry Admission Test (OAT)

Validity Study

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Introduction

Validity is a critical consideration for any testing program. Validity refers to the degree to which logic and evidence support the use of test scores for making critical decisions (e.g., pass/fail, admission, placement, grouping) concerning examinees.

The OAT Validity Study 2020-2022 reports the relationship among OAT scores, pre-optometry grade point averages (GPAs), and the academic and clinical achievements of a sample of students during their first and second year in United States optometry schools. Correlation coefficients were used to understand the relationship between admission selection criteria (such as GPAs and OAT scores) and success in students' first two years of optometry education.

The Optometry Admission Test Program recognizes the importance placed upon the validity of the Optometry Admission Test. The value of a report of this nature is enhanced when participation is representative of the population under study. In contrast, the value is diminished by low participation and low representativeness. In past reports, participating schools were identified by name. Beginning with the 2009 report, each school is identified by a code number that is only revealed to the individual school. It is hoped that this measure of anonymity will increase participation. The goal is always 100% participation.

Data

A total of 11 of the 24 United States optometry schools participated in this study. This represents a decrease of two schools, as compared to the number (13) obtained in the prior report (2018 to 2020).

This report involves first- and second-year data on the same group of students. When viewing the data presented the number of students listed may not correspond with the number actually enrolled. This is because some students' OAT scores were not available. Student data were included in the analyses only when OAT scores were also provided. Additionally, due to curriculum differences, some schools could not provide information in every area requested.

Data collection occurred during students' third year in optometry school, when data associated with first and second year school performance were complete. Thus, the following applies:

- Student GPA data reflect the 2020-2021 and 2021-2022 school years
- Student OAT data reflect test administrations occurring prior to the 2020-2021 school year)¹.

Multiple regression was used to analyze the data and produce a multiple correlation coefficient (R). Predictor variables in place across schools included the following:

- OAT scores (i.e., the scores achieved by students prior to admission to optometry school)
- Undergraduate GPA
- Undergraduate Math and Science GPA

Criterion variables included overall optometry GPAs in Year 1 and Year 2, as well as optometry grades in seven subject areas referred to as Tracks. The Tracks were as follows:

¹ The OAT underwent a change in scale metric in May of 2009. The present study is based on test data after the implementation of this change.

Track I Optics: geometric, visual, physical, ophthalmic.

Track II Biomedical Sciences: human anatomy, histology, neuroanatomy, human physiology, microbiology, general pathology, systemic pathology, general pharmacology, general biochemistry.

Track III Vision Science: ocular anatomy, ocular biochemistry, psychophysics, perception, color vision, vegetative physiology of the eye, normal binocular vision, ocular motility.

Track IV Ocular Health Science: ocular disease, ocular pharmacology.

Track V Clinical Science: clinic methods, environmental vision, anomalies of binocular vision, contact lenses, pediatric optometry, developmental vision, sports vision, low vision, geriatric optometry, clinical management.

Track VI Clinic: all clinics.

Track VII Other: epidemiology, practice management, professional communications, ethics.

School specific predictors. Several schools provided additional predictor measures that were specific to their programs. These were correspondingly labeled Other GPA, Option 1, and Option 2. Given that these predictors are exclusive to these schools, they are reported upon in tables that present school specific results, but are omitted from tables involving analyses conducted across schools. While these predictors are useful when looking at findings within a given school, their interpretation across schools is problematic due to the differences in meanings for these measures.

Methods

In previous OAT validity study reports, large tables containing Pearson product-moment correlation coefficients (r) and squared multiple correlation coefficients (R^2 or R-Square) by school were presented to indicate the relationship between various predictors and criteria measures. Predictive information included students' pre-optometry GPAs and OAT scores. Criteria information included student performance in their first two years of optometry education. As expected, results from these analyses varied from school to school given the large number of participating schools. The meta-analytic approach developed by Hunter and Schmidt (1990) was adopted in this report, to summarize the relationship and integrate findings across the participating optometry schools.

The specific meta-analytic approach adopted for this study involved two steps. First, multiple regression analyses were conducted within each school. These involved adding predictors separately into a regression, to better understand the incremental gain in validity associated with the addition of each predictor (or set of predictors). With respect to this OAT validity study, this occurred in the following sequence:

Across School Predictors

1. OAT Subscale Scores (reading comprehension, quantitative reasoning, biology, general chemistry, organic chemistry, and physics)

2. Undergraduate Math & Science GPA
3. Overall Undergraduate GPA

School Specific Predictors

4. Other GPA (if available)
5. Option 1 and Option 2 (if available)

For each school, two sets of regressions were conducted: one with first year optometry school GPA serving as the criterion, and the second with second year optometry school GPA serving as the criterion.

Having conducted these regressions, the second step involved focusing on the results obtained for the across-school-predictors, in essence using the correlational and multiple R values obtained from the regressions as input into the meta-analysis.

Since optometry schools use OAT scores to make admission decisions, applicants who were accepted into optometry schools tend to have higher OAT scores than those who were not admitted. Consequently, the range of OAT scores found in an enrolled optometry student sample is restricted relative to the OAT score range that would be found in the full population of applicants to optometry schools. Additionally, OAT scores and GPAs are not perfectly reliable. Research has shown that statistical artifacts such as range restriction and unreliability of measures can reduce the size of observed correlation coefficients. Given this, the observed relationship found within the current dataset is considered an underestimate of what would have been found had the entire pool of applicants been admitted to optometry school, and if OAT scores and GPAs had been perfectly reliable. The use of the meta-analytic approach helps address these issues by providing the option to implement statistical corrections for range restriction and the unreliability of operational measures (predictor and/or criterion). Because optometry schools must base their decisions on actual OAT scores, it would be inappropriate in this situation to correct for predictor unreliability in OAT scores. Thus, the present meta-analyses simply included corrections to address unreliability in optometry school GPAs (i.e., the performance criterion), and where possible corrections for range restriction in OAT scores (i.e., bivariate correlations but not multiple correlations). These adjustments provide a more accurate understanding of the true relationship between the OAT as an admission tool, and general performance in optometry school (if the latter had been perfectly measured).

More specifically, the corrections employed use standard formulas involving the ratio of the restricted and unrestricted standard deviation of students' scores on the predictor variables (e.g., OAT scores) and reliability coefficients associated with optometry school GPAs. The restricted standard deviation is the standard deviation found in the observed sample, while the unrestricted standard deviation is the corresponding standard deviation associated with the pool of all applicants in a given year (i.e., all OAT examinations in 2019-2020 or 2020-2021, for first and second year students, respectively). Corrected validity coefficient estimates indicate the anticipated level of association that would have been obtained if students had NOT been selected on the aforementioned predictors and if optometry school GPAs were perfectly reliable criterion measures. In accordance with meta-analytic procedures, artifact distribution information used for all range restriction corrections and unreliability corrections is presented in Tables 1a and 1b. The mean and variance for the reliability of optometry school GPAs (Table 1b) were based on reported values from five studies on the reliability of college grades (Barritt, 1966; Bendig, 1953; Etaugh et al., 1972; Millman et al., 1983; Reilly & Warech, 1993).

Table 1a: Artifact Distribution Used in the Meta-Analysis: Predictor Range Restriction

Predictor	k_U	Mean U	Variance U
Academic Average	11	0.66	0.0040
Total Science	11	0.67	0.0020
Quantitative Reasoning	11	0.82	0.0011
Reading Comprehension	11	0.86	0.0067
Biology	11	0.76	0.0040
General Chemistry	11	0.75	0.0033
Organic Chemistry	11	0.77	0.0025
Physics	11	0.75	0.0031

Note: U = ratio for range restriction; k_U = number of ratios in the distribution (number of schools);

Table 1b: Artifact Distribution Used in the Meta-Analysis: Criterion Unreliability

Optometry School Criterion	Mean Reliability	Variance Reliability
GPA: First-year classes	0.82	0.00026
GPA: Second-year classes	0.82	0.00026
Track I Grades: Optics	0.82	0.00026
Track II Biomedical Sciences	0.82	0.00026
Track III Vision Science	0.82	0.00026
Track IV Ocular Health Science	0.82	0.00026
Track V Clinical Science	0.82	0.00026
Track VI Clinic	0.82	0.00026
Track VII Other	0.82	0.00026

Results and Discussion

Part I: Bivariate Correlations between Optometry School Grades and Predictors (OAT scores, Undergraduate GPAs, and Options)

Tables 2 through 11 provide the results of the meta-analysis. The top section of Tables 2 through 10 present bivariate (i.e., two variable) correlations between optometry school grades and various individual predictors. These predictors are either OAT scores or undergraduate GPAs. OAT scores include two OAT composite scores (i.e., total science and academic average) and six individual OAT subscale scores (i.e., quantitative reasoning, reading comprehension, biology, general chemistry, organic chemistry and physics). Undergraduate GPAs consist of math & science GPA and overall undergraduate GPA. Tables 2 and 3 present bivariate correlations between first- and second-year optometry school grades, respectively, and the aforementioned predictors. Similarly, Tables 4 through 10 present bivariate correlations between optometry school grades in seven subject areas (Tracks I through VII) and the aforementioned predictors. Table 11 summarizes the ρ values obtained in Tables 2 through 10. In interpreting the results, the following should be noted:

- The observed weighted mean correlation coefficient (r_{obs}) is the average correlation coefficients of all participating schools weighted by the sample size of each school and calculated following the meta-analytic approach introduced by Hunter & Schmidt (1990, p. 100).
- If the correlation coefficient of one school does not appear to be consistent with those of other schools, this coefficient is considered an outlier in the meta-analytic framework. Inclusion of outliers in the analysis will typically lead to a possible shift in the mean coefficient. In some cases the presence of an outlier can yield an apparent stronger relationship, whereas in other cases an outlier's presence can yield an apparent weaker relationship. This study employed the sample-adjusted meta-analytic deviance (SAMD) statistic developed by Huffcutt & Arthur (1995) to detect the presence of outliers. Corrected correlation coefficients with any identified outlier(s) present ($\rho_{\text{with outlier}}$) and with any identified outlier(s) removed (ρ) were then calculated and shared in this report.
- The corrected correlation coefficients (ρ) reported in Tables 2 through 10 show the relationships between optometry school performance and students' prior achievement as indicated by OAT scores and undergraduate GPAs. **DTS recommends focusing on ρ as the best available estimate of the relationship.** To facilitate overall interpretations, Table 11 provides a summary of ρ values obtained across Tables 2 through 10. A 95% credibility interval around each corrected correlation coefficient was constructed and reported. Credibility intervals help in understanding the generalizability of the corrected correlation coefficients. Credibility intervals that do not include zero indicate statistical significance with respect to corrected correlation coefficients.
- Tables 2 through 10 contain a column indicating the standard deviation of ρ . The standard deviation of ρ is equal to the square root of the variance of ρ . Under certain circumstances, negative values can be obtained with respect to the variance of ρ , due to how these values are calculated. Hunter and Schmidt (1990) have indicated that when this occurs, the corresponding values associated with the variance of ρ should be set to zero. Within Tables 2 through 10, in situations where this circumstance has been encountered an emdash (“—”) is placed in the corresponding cell within the table associated with the standard deviation of ρ , to represent this special situation. Due to the fact that the standard deviation of ρ is used to calculate the 95% credibility interval, an emdash is correspondingly placed in the 95% credibility interval column as well.

Table 2. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and First Year Optometry School Overall GPA

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	11	1045	0.47	0.09	N/A	0.64	0.03	0.58 - 0.70
Total Science	10	986	0.48	0.12	0.65	0.67	0.06	0.55 - 0.78
Quantitative Reasoning	11	1045	0.26	0.09	N/A	0.35	—	—
Reading Comprehension	11	1045	0.23	0.12	N/A	0.30	0.08	0.14 - 0.46
Biology	11	1045	0.43	0.07	N/A	0.59	—	—
General Chemistry	11	1045	0.40	0.12	N/A	0.48	0.13	0.22 - 0.74
Organic Chemistry	10	986	0.36	0.12	0.50	0.52	—	—
Physics	10	986	0.35	0.13	0.49	0.52	—	—
Overall Undergraduate GPA*	10	978	0.31	0.17	0.37	0.40	0.14	0.13 - 0.67
Math and Science GPA*	9	785	0.26	0.12	N/A	0.32	0.07	0.17 - 0.46
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	11	1045	0.54	0.08	N/A	0.59	0.04	0.52 - 0.67
All OAT Subscale Scores**; Math/Science GPAs	9	784	0.57	0.07	N/A	0.62	—	—
All OAT Subscale Scores**; Math/Science & Overall GPAs	9	784	0.59	0.06	N/A	0.65	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 3. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and Second Year Optometry School Overall GPA

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	10	986	0.42	0.13	0.59	0.61	0.09	0.43 - 0.78
Total Science	10	986	0.41	0.14	0.58	0.60	0.10	0.42 - 0.79
Quantitative Reasoning	11	1045	0.25	0.10	N/A	0.34	0.02	0.29 - 0.39
Reading Comprehension	11	1045	0.22	0.10	N/A	0.28	0.03	0.22 - 0.36
Biology	11	1045	0.38	0.10	N/A	0.53	0.06	0.42 - 0.65
General Chemistry	10	986	0.30	0.13	0.44	0.47	0.07	0.34 - 0.60
Organic Chemistry	10	986	0.31	0.15	0.43	0.46	—	—
Physics	10	986	0.31	0.12	0.44	0.47	—	—
Overall Undergraduate GPA*	9	918	0.35	0.18	0.43	0.50	0.06	0.37 - 0.62
Math and Science GPA*	7	616	0.30	0.15	0.37	0.36	0.03	0.31 - 0.41
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	10	895	0.49	0.10	0.54	0.57	0.05	0.48 - 0.67
All OAT Subscale Scores**; Math/Science GPAs	8	725	0.54	0.11	0.59	0.61	0.04	0.54 - 0.69
All OAT Subscale Scores**; Math/Science & Overall GPAs	9	784	0.56	0.08	N/A	0.62	0.02	0.57 - 0.67

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 4. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and
Track I: Optics

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	6	550	0.49	0.12	0.66	0.70	—	—
Total Science	6	550	0.47	0.16	0.64	0.69	—	—
Quantitative Reasoning	7	609	0.32	0.09	N/A	0.42	—	—
Reading Comprehension	7	609	0.29	0.11	N/A	0.38	0.05	0.28 - 0.47
Biology	6	550	0.41	0.12	0.56	0.60	—	—
General Chemistry	6	550	0.39	0.11	0.56	0.60	—	—
Organic Chemistry	6	550	0.35	0.18	0.49	0.55	0.03	0.48 - 0.62
Physics	6	550	0.32	0.13	0.45	0.50	—	—
Overall Undergraduate GPA*	6	541	0.31	0.19	0.37	0.43	0.13	0.16 - 0.69
Math and Science GPA*	4	251	0.25	0.17	0.30	0.19	—	—
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	7	609	0.55	0.08	N/A	0.61	0.03	0.55 - 0.67
All OAT Subscale Scores**; Math/Science GPAs	4	289	0.61	0.09	0.67	0.71	—	—
All OAT Subscale Scores**; Math/Science & Overall GPAs	5	348	0.63	0.06	N/A	0.70	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 5. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and
Track II: Biomedical Sciences

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	6	550	0.43	0.10	0.59	0.56	—	—
Total Science	6	550	0.43	0.14	0.59	0.63	0.04	0.56 - 0.70
Quantitative Reasoning	7	609	0.24	0.11	N/A	0.31	0.03	0.25 - 0.38
Reading Comprehension	7	609	0.23	0.11	N/A	0.30	0.04	0.22 - 0.38
Biology	7	609	0.37	0.09	N/A	0.52	—	—
General Chemistry	7	609	0.33	0.13	N/A	0.48	0.13	0.24 - 0.73
Organic Chemistry	7	609	0.33	0.12	N/A	0.46	0.10	0.26 - 0.66
Physics	6	550	0.32	0.14	0.45	0.50	—	—
Overall Undergraduate GPA*	6	550	0.32	0.20	0.39	0.39	0.13	0.13 - 0.64
Math and Science GPA*	5	348	0.21	0.14	N/A	0.26	0.10	0.05 - 0.46
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	6	550	0.51	0.12	0.56	0.59	0.05	0.50 - 0.69
All OAT Subscale Scores**; Math/Science GPAs	4	289	0.54	0.14	0.60	0.65	0.07	0.52 - 0.78
All OAT Subscale Scores**; Math/Science & Overall GPAs	5	348	0.56	0.11	N/A	0.62	0.09	0.45 - 0.79

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 6. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and Track III: Vision Science

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	6	550	0.42	0.13	0.59	0.63	—	—
Total Science	6	550	0.41	0.18	0.57	0.63	0.03	0.58 - 0.69
Quantitative Reasoning	6	473	0.27	0.12	0.36	0.43	—	—
Reading Comprehension	7	609	0.25	0.15	N/A	0.33	0.14	0.06 - 0.59
Biology	7	609	0.38	0.12	N/A	0.52	—	—
General Chemistry	7	609	0.32	0.13	N/A	0.54	—	—
Organic Chemistry	6	550	0.33	0.13	0.46	0.51	—	—
Physics	6	550	0.29	0.19	0.41	0.49	—	—
Overall Undergraduate GPA*	6	473	0.32	0.20	0.39	0.40	0.11	0.20 - 0.61
Math and Science GPA*	4	280	0.21	0.18	0.25	0.34	0.02	0.29 - 0.39
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	7	609	0.52	0.08	N/A	0.58	—	—
All OAT Subscale Scores**; Math/Science GPAs	5	348	0.57	0.09	N/A	0.63	0.03	0.57 - 0.69
All OAT Subscale Scores**; Math/Science & Overall GPAs	5	348	0.59	0.07	N/A	0.65	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 7. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and
Track IV: Ocular Health Science

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	7	609	0.29	0.10	N/A	0.43	—	—
Total Science	6	550	0.29	0.13	0.41	0.47	—	—
Quantitative Reasoning	7	609	0.14	0.05	N/A	0.19	—	—
Reading Comprehension	7	609	0.19	0.09	N/A	0.24	—	—
Biology	7	609	0.25	0.11	N/A	0.36	0.04	0.27 - 0.44
General Chemistry	7	609	0.23	0.12	N/A	0.34	0.08	0.18 - 0.50
Organic Chemistry	7	609	0.23	0.08	N/A	0.33	—	—
Physics	6	550	0.24	0.13	0.34	0.39	—	—
Overall Undergraduate GPA*	4	357	0.26	0.21	0.32	0.36	—	—
Math and Science GPA*	5	348	0.14	0.13	N/A	0.17	0.07	0.03 - 0.31
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	7	609	0.39	0.08	N/A	0.43	—	—
All OAT Subscale Scores**; Math/Science GPAs	5	348	0.40	0.10	N/A	0.44	0.02	0.39 - 0.48
All OAT Subscale Scores**; Math/Science & Overall GPAs	5	348	0.43	0.07	N/A	0.48	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 8. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and
Track V: Clinical Science

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	7	609	0.37	0.16	N/A	0.52	0.18	0.18 - 0.87
Total Science	6	550	0.34	0.17	0.49	0.55	0.08	0.40 - 0.70
Quantitative Reasoning	7	609	0.25	0.12	N/A	0.34	0.07	0.19 - 0.48
Reading Comprehension	7	609	0.21	0.13	N/A	0.27	0.11	0.06 - 0.48
Biology	7	609	0.34	0.14	N/A	0.47	0.14	0.20 - 0.75
General Chemistry	6	550	0.27	0.16	0.38	0.43	0.12	0.05 - 0.51
Organic Chemistry	7	609	0.29	0.08	N/A	0.40	—	—
Physics	6	550	0.24	0.16	0.34	0.41	—	—
Overall Undergraduate GPA*	6	484	0.32	0.19	0.38	0.33	0.19	-0.03 - 0.70
Math and Science GPA*	4	251	0.21	0.17	0.26	0.15	—	—
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	7	609	0.47	0.09	N/A	0.52	0.03	0.46 - 0.57
All OAT Subscale Scores**; Math/Science GPAs	5	348	0.48	0.12	N/A	0.53	0.09	0.36 - 0.70
All OAT Subscale Scores**; Math/Science & Overall GPAs	5	348	0.51	0.10	N/A	0.56	0.06	0.44 - 0.68

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 9. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and Track VI: Clinic

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	2	127	0.16	0.06	N/A	0.25	—	—
Total Science	2	127	0.10	0.01	N/A	0.15	—	—
Quantitative Reasoning	2	127	0.19	0.04	N/A	0.26	—	—
Reading Comprehension	2	127	0.20	0.10	N/A	0.26	—	—
Biology	2	127	0.10	0.002	N/A	0.14	—	—
General Chemistry	2	127	0.17	0.003	N/A	0.25	—	—
Organic Chemistry	2	127	0.03	0.05	N/A	0.04	—	—
Physics	2	127	0.03	0.02	N/A	0.05	—	—
Overall Undergraduate GPA*	2	127	0.002	0.05	N/A	0.003	—	—
Math and Science GPA*	2	127	0.04	0.07	N/A	0.05	—	—
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	2	127	0.29	0.06	N/A	0.32	—	—
All OAT Subscale Scores**, Math/Science GPAs	2	127	0.32	0.09	N/A	0.35	—	—
All OAT Subscale Scores**, Math/Science & Overall GPAs	2	127	0.34	0.11	N/A	0.37	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 10. Correlations between Predictors (OAT Scores and Undergraduate GPAs) and Track VII: Other

Pearson Bivariate Correlation (ρ corrects for unreliability in criterion as well as range restriction)								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
Academic Average	5	454	0.26	0.09	N/A	0.39	—	—
Total Science	5	454	0.21	0.10	N/A	0.31	—	—
Quantitative Reasoning	5	454	0.16	0.13	N/A	0.21	0.11	-0.01 - 0.43
Reading Comprehension	5	454	0.22	0.11	N/A	0.28	0.06	0.16 - 0.40
Biology	5	454	0.19	0.12	N/A	0.27	0.09	0.09 - 0.46
General Chemistry	5	454	0.19	0.06	N/A	0.29	—	—
Organic Chemistry	5	454	0.11	0.12	N/A	0.16	0.09	-0.01 - 0.33
Physics	5	454	0.18	0.08	N/A	0.26	—	—
Overall Undergraduate GPA [†]	5	454	0.14	0.08	N/A	0.18	—	—
Math and Science GPA [†]	3	193	0.04	0.09	N/A	0.05	—	—
Multiple Correlation (ρ corrects for unreliability in criterion only)*								
Variable	k	N	r_{obs}	SD_{obs}	$\rho_{with\ outlier}$	ρ	SD_{ρ}	95% Credibility Interval
All OAT Subscale Scores**	5	454	0.36	0.11	N/A	0.40	0.06	0.29 - 0.51
All OAT Subscale Scores**; Math/Science GPAs	3	193	0.40	0.10	N/A	0.44	—	—
All OAT Subscale Scores**; Math/Science & Overall GPAs	3	193	0.45	0.07	N/A	0.50	—	—

Note. k = number of schools; r_{obs} = observed sample-size-weighted average correlation; SD_{obs} = standard deviation of observed correlations; $\rho_{with\ outlier}$ = corrected correlation coefficients with any identified outlier(s) included in the data; ρ = corrected correlation coefficient with any identified outlier(s) removed; SD_{ρ} = standard deviation of corrected correlation coefficient; * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Table 11. Summary of ρ Values Obtained

ρ Associated with Bivariate Correlations (corrects for unreliability in criterion as well as range restriction)[†]									
Variable	1st Year GPA	2nd Year GPA	Optics	Biomedical Sciences	Vision Science	Ocular Health Science	Clinical Science	Clinic	Other
Academic Average	.64	.61	.70	.56	.63	.43	.52	.25	.39
Total Science	.67	.60	.69	.63	.63	.47	.55	.15	.31
Quantitative Reasoning	.35	.34	.42	.31	.43	.19	.34	.26	.21
Reading Comprehension	.30	.28	.38	.30	.33	.24	.27	.26	.28
Biology	.59	.53	.60	.52	.52	.36	.47	.14	.27
General Chemistry	.48	.47	.60	.48	.54	.34	.43	.25	.29
Organic Chemistry	.52	.46	.55	.46	.51	.33	.40	.04	.16
Physics	.52	.47	.50	.50	.49	.39	.41	.05	.26
Overall Undergraduate GPA*	.40	.50	.43	.39	.40	.36	.33	.003	.18
Math and Science GPA*	.32	.36	.19	.26	.34	.17	.15	.05	.05
ρ Associated with Multiple Correlations (ρ corrects for unreliability in criterion only)*									
Variable	1st Year GPA	2nd Year GPA	Optics	Biomedical Sciences	Vision Science	Ocular Health Science	Clinical Science	Clinic	Other
All OAT Subscale Scores**	.59	.57	.61	.59	.58	.43	.52	.32	.40
All OAT Subscale Scores**; Math/Science GPAs	.62	.61	.71	.65	.63	.44	.53	.35	.44
All OAT Subscale Scores**; Math/Science & Overall GPAs	.65	.62	.70	.62	.65	.48	.56	.37	.50

[†]Top three obtained ρ values are highlighted. * Not corrected for range restriction; ** OAT Subscale Scores include the following: Quantitative Reasoning, Reading Comprehension, Biology, General Chemistry, Organic Chemistry, and Physics.

Key findings are summarized below.

- Taken as a whole, Tables 2 through 11 provide strong empirical evidence that OAT scores and undergraduate GPAs are strongly related to the various student performance criteria in optometry school.
- **First-Year Optometry School GPA.** The OAT total science score ($\rho=0.67$), OAT academic average score ($\rho=0.64$), biology score ($\rho=0.59$), organic chemistry score ($\rho=0.52$), and physics score ($\rho=0.52$) appear to have the highest level of association with overall GPAs in the first-year of optometry school (Table 2). Between the two pre-optometry GPA predictors, overall undergraduate GPA demonstrated the stronger relationship ($\rho=0.40$) with first-year optometry school GPA..
- **Second-Year Optometry School GPA.** Among the eight OAT scores, the OAT academic average score ($\rho=0.61$), OAT total science score ($\rho=0.60$), and biology score ($\rho=0.53$) appear to have the highest level of association with overall GPAs in the second-year of optometry school (Table 3). The general chemistry score ($\rho=0.47$), physics score ($\rho=0.47$), and organic chemistry score ($\rho=0.46$) are also strongly related to second-year overall GPAs. Overall undergraduate GPA ($\rho=0.50$) was also strongly related to second-year overall GPA.

It should also be noted that because the distributions of undergraduate GPA and math & science GPA for all applicants were not known, it was not possible to correct for range restriction for these predictors. The true relationship (ρ) between these predictors and general performance in optometry school is likely to be higher than the values currently being reported (i.e., due to the inability to correct for this statistical artifact).

Part II: Multiple Correlations between Optometry School Grades and Sets of Predictors (OAT Scores, Undergraduate GPAs, and Options)

The bottom section of Tables 2 through 10 present multiple correlations between optometry school grades and three sets of predictors (i.e., various combinations of undergraduate GPAs and OAT scores). Across these tables, the criterion measure (i.e., optometry school grades) changes for each table, while the sets of predictors included in separate multiple regressions remains the same. Additionally, it should be recognized that the schools involved change across predictor sets. For example, in Table 2 a total of 11 schools were involved for the predictor set “All OAT Subscale Scores,” while only 9 schools were involved for the predictor sets involving overall and math/science GPAs.

Tables 2 and 3 present multiple correlations involving first- and second-year optometry school grades, respectively, and the aforementioned sets of predictors. Tables 4 through 10 present multiple correlations involving optometry school grades in Tracks I through VII, respectively, and the aforementioned sets of predictors. Due to the fact that some schools could not provide data in every area requested, the number of schools involved in the calculation of the corrected correlation coefficients may change each time when more predictors are added to the standard multiple regressions (i.e., within a given performance criterion (e.g., Track V grades), the schools utilized to calculate the corrected correlation coefficient for “All OAT Subscale scores” may not be the same schools utilized to calculate the corrected correlation coefficient for “All OAT Subscale Scores; Math/Science & Overall GPAs”). Given this situation, it is possible to obtain a non-intuitive finding that the corrected correlation coefficient has decreased even though more predictors have been added to the standard multiple regression. Such outcomes are evident in most of the tables.

Key findings involving multiple correlations are summarized below.

- The predictor set “All OAT Subscale Scores” is strongly related to both first-year overall GPA ($\rho=0.59$) and second year overall GPA ($\rho=0.57$), as shown in Tables 2 and 3, respectively.
- The addition of overall undergraduate GPA and math & science GPA results in stronger obtained relationships to first-year overall GPA ($\rho=0.65$) and second-year overall GPA ($\rho=0.62$).
- The pattern of multiple correlations involving optometry school grades in Tracks I through VII (Tables 4 to 10) and different sets of predictors is similar to that involving first-year overall GPAs (Table 2) and second-year overall GPAs (Table 3). All OAT Subscale Scores are strongly related to optometry school grades in Tracks I through VII, with ρ values ranging from 0.32 (Table 9) to 0.61 (Table 4). All OAT scores, overall undergraduate GPA, and math and science GPA are more strongly related to optometry school grades in Tracks I through VII, with ρ values ranging from 0.37 (Table 9) to 0.70 (Table 4).
- At an overall level, the predictor set that included OAT subscale scores and undergraduate GPAs revealed a strong and consistent prediction of optometry school performance.

It should be noted that the multiple correlations could not be corrected for range restriction. Given this, the true relationships involving these predictors is likely to be even higher than that currently reported.

Limitations

The data in this report are based on a sample consisting of optometry students from eleven (46%) of the 24 optometry schools in the United States. A limitation of this study is that not all schools reported data in all areas. To the degree that the present sample is not representative of the full population, this would limit the ability to generalize conclusions from this sample to the entire optometry school population. Having noted this, it should also be recognized that results reported for individual schools provide extremely valuable information for those participating schools. This information can be used to help optimize school admissions practices.

Although the corrected bivariate correlation coefficients accounted for range restriction in the OAT scores, it should be noted that other predictors (i.e., undergraduate GPA and math & science GPA) and criteria (i.e., biomedical grades, optics grades, and grade point average) also likely suffer from range restriction. In other words, since higher OAT scores and higher undergraduate GPAs are associated with higher first- and second-year grades, optometry student samples (which consist of these higher scoring individuals) likely contain fewer students with poor optometry grades than would be the case had these predictors not been utilized in admission decisions. Range restriction reduces the magnitude of obtained correlation coefficients. The net impact of these statistical artifacts is that reported correlations likely underestimate the true magnitude of the relationship between the predictors and true optometry performance. In short, the true correlation between OAT scores and optometry performance is likely to be even larger than the values that are currently being reported.

Conclusions

This study found that OAT scores and undergraduate GPAs were strong individual predictors of student performance in optometry school. When these predictors were taken as a set, the total contribution of the set represented a more powerful predictor than that obtained when looking at each predictor individually. The criterion-related validity evidence presented in this report is consistent with the results of numerous prior OAT validity studies, and should reassure optometry programs of the continued value of including OAT scores as part of their admission criteria.

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Appendix 1. Pearson Product-Moment Correlation Coefficients and Multiple Correlations between First-Year and Second-Year Optometry School Grades and Predictors (OAT Scores, Undergraduate GPAs and Options).

In interpreting the tables presented in this appendix, the following should be noted:

- Tables 1 through 9 present bivariate (i.e., two variable) correlations involving optometry school grades and various individual predictors, including undergraduate GPAs and OAT scores, and optional predictors. The nature of some of these predictors is specific to particular schools, and therefore interpretation of these is left to the individual schools.
- Tables 10 through 18 present multiple correlations involving optometry school grades and various sets of predictors (i.e., various combinations of undergraduate GPAs, optional predictors, and OAT scores). Again, the nature of some of these predictors is specific to particular schools.
- Correlations which are significant at the 0.05 level are indicated by asterisks in Tables 1 through 9. At this level, there is a 95% probability that the obtained results are not attributable to chance.
- “# of Significant Correlations” represent the number of schools for which the computed coefficient was significant at the 0.05 level, and “Percent Significant” is a ratio representing the number of significant coefficients (the first row) divided by the total number of coefficients (the second row) in Tables 1 through 9.
- In Tables 10 through 18, R^2 represents the squared multiple correlation between a dependent variable and a set of independent variables. R^2 is the proportion of variance in first- or second-year GPAs that can be predicted by a linear combination of the independent variables.

Table 1: First-Year Optometry School Overall GPAs Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI-TATIVE	READING-COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	0.072	0.178	N/AV	N/AV	N/AV	0.128	0.236	0.205	0.250	-0.055	0.242	0.090	0.000
SCHOOL 002	125	0.452*	N/AV	0.493*	N/AV	N/AV	0.472*	0.514*	0.419*	0.429*	0.400*	0.437*	0.389*	0.357*
SCHOOL 003	49	0.048	0.152	N/AV	N/AV	N/AV	0.227	0.264	0.130	0.074	0.300*	0.205	0.025	0.082
SCHOOL 004	137	0.460*	0.344*	N/AV	N/AV	N/AV	0.567*	0.525*	0.239*	0.141	0.447*	0.462*	0.353*	0.430*
SCHOOL 005	96	0.312*	0.250*	N/AV	0.502*	0.531*	0.653*	0.580*	0.344*	0.082	0.480*	0.518*	0.507*	0.475*
SCHOOL 006	68	-0.040	0.009	N/AV	N/AV	N/AV	0.505*	0.470*	0.345*	0.206	0.354*	0.443*	0.266*	0.531*
SCHOOL 007	28	0.338	0.380*	0.094	0.425*	0.557*	0.617*	0.543*	0.193	0.092	0.304	0.462*	0.618*	0.396*
SCHOOL 008	97	0.295*	0.340*	0.355*	N/AV	N/AV	0.514*	0.533*	0.371*	0.415*	0.400*	0.459*	0.455*	0.418*
SCHOOL 009	150	0.159	0.190*	0.131	0.304*	-0.096	0.474*	0.440*	0.206*	0.144	0.335*	0.434*	0.344*	0.339*
SCHOOL 010	136	0.498*	N/AV	0.007	N/AV	N/AV	0.486*	0.476*	0.146	0.273*	0.318*	0.468*	0.342*	0.359*
SCHOOL 011	100	0.375*	0.429*	0.375*	N/AV	N/AV	0.409*	0.415*	0.193	0.252*	0.290*	0.398*	0.179	0.361*
# OF SIGNIFICANT COEFFICIENTS		6	6	3	3	2	9	9	6	4	9	9	8	9
VALID N		11	9	6	3	3	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		55%	67%	50%	100%	67%	82%	82%	55%	36%	82%	82%	73%	82%
MEDIAN		0.312	0.250	0.243	0.425	0.531	0.486	0.476	0.206	0.206	0.335	0.443	0.344	0.361

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 2: Second-Year Optometry School Overall GPAs Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTITATIVE	READING-COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	-0.044	0.063	N/AV	N/AV	N/AV	0.040	0.116	0.066	0.157	-0.079	0.132	-0.032	0.096
SCHOOL 002	125	0.502*	N/AV	0.514*	N/AV	N/AV	0.400*	0.451*	0.358*	0.390*	0.377*	0.343*	0.330*	0.329*
SCHOOL 003	49	0.225	0.179	N/AV	N/AV	N/AV	0.108	0.092	0.079	-0.005	0.236	0.300*	0.065	-0.275
SCHOOL 004	137	0.467*	0.371*	N/AV	N/AV	N/AV	0.439*	0.444*	0.259*	0.201*	0.369*	0.355*	0.285*	0.332*
SCHOOL 005	96	0.312*	0.254*	N/AV	0.537*	0.535*	0.647*	0.605*	0.391*	0.143	0.491*	0.523*	0.526*	0.437*
SCHOOL 006	68	-0.061	-0.017	N/AV	N/AV	N/AV	0.460*	0.414*	0.278*	0.179	0.349*	0.410*	0.239	0.450*
SCHOOL 007	28	0.372	0.405*	0.114	0.449*	0.493*	0.465*	0.412*	0.159	0.047	0.224	0.269	0.510*	0.362
SCHOOL 008	97	0.395*	0.397*	0.391*	N/AV	N/AV	0.477*	0.471*	0.239*	0.309*	0.337*	0.438*	0.417*	0.424*
SCHOOL 009	150	0.276*	0.311*	0.261*	0.351*	-0.058	0.337*	0.335*	0.206*	0.133	0.235*	0.290*	0.265*	0.231*
SCHOOL 010	136	0.486*	N/AV	0.017	N/AV	N/AV	0.469*	0.474*	0.174*	0.311*	0.312*	0.447*	0.332*	0.341*
SCHOOL 011	100	0.519*	0.538*	0.531*	N/AV	N/AV	0.474*	0.529*	0.392*	0.269*	0.346*	0.516*	0.271*	0.353*
# OF SIGNIFICANT COEFFICIENTS		7	6	4	3	2	9	9	8	5	8	9	8	8
VALID N		11	9	6	3	3	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		64%	67%	67%	100%	67%	82%	82%	73%	45%	73%	82%	73%	73%
MEDIAN		0.372	0.311	0.326	0.449	0.493	0.460	0.444	0.239	0.179	0.337	0.355	0.285	0.341

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 3: Optometry School Track I Grades: Optics Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	0.001	0.121	N/AV	N/AV	N/AV	0.036	0.146	0.102	0.301*	-0.038	0.103	0.091	-0.130
SCHOOL 002	125	0.467*	N/AV	0.491*	N/AV	N/AV	0.424*	0.484*	0.397*	0.367*	0.323*	0.370*	0.373*	0.350*
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.269*	0.231*	N/AV	0.484*	0.450*	0.614*	0.572*	0.354*	0.121	0.446*	0.477*	0.488*	0.449*
SCHOOL 006	68	-0.051	0.023	N/AV	N/AV	N/AV	0.580*	0.544*	0.399*	0.227	0.432*	0.492*	0.375*	0.556*
SCHOOL 007	28	0.235	0.315	0.089	0.408*	0.431*	0.446*	0.451*	0.352	0.030	0.321	0.281	0.507*	0.184
SCHOOL 008	97	0.457*	0.474*	0.455*	N/AV	N/AV	0.538*	0.544*	0.311*	0.391*	0.327*	0.500*	0.464*	0.487*
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.400*	N/AV	-0.023	N/AV	N/AV	0.485*	0.519*	0.263*	0.350*	0.330*	0.443*	0.392*	0.334*
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		4	2	2	2	2	6	6	5	4	5	5	6	5
VALID N		7	5	4	2	2	7	7	7	7	7	7	7	7
PERCENT SIGNIFICANT		57%	40%	50%	100%	100%	86%	86%	71%	57%	71%	71%	86%	71%
MEDIAN		0.269	0.231	0.272	0.446	0.441	0.485	0.519	0.352	0.301	0.327	0.443	0.392	0.350

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 4: Optometry School Track II Grades: Biomedical Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	0.035	0.118	N/AV	N/AV	N/AV	0.101	0.200	0.192	0.160	-0.050	0.179	0.086	0.048
SCHOOL 002	125	0.485*	N/AV	0.512*	N/AV	N/AV	0.391*	0.427*	0.301*	0.388*	0.392*	0.323*	0.318*	0.302*
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.289*	0.259*	N/AV	0.569*	0.508*	0.616*	0.590*	0.377*	0.071	0.479*	0.488*	0.512*	0.445*
SCHOOL 006	68	-0.058	-0.025	N/AV	N/AV	N/AV	0.442*	0.393*	0.275*	0.136	0.306*	0.370*	0.202	0.489*
SCHOOL 007	28	0.406*	0.446*	0.158	0.458*	0.615*	0.645*	0.553*	0.140	0.131	0.198	0.510*	0.613*	0.532*
SCHOOL 008	97	0.275*	0.318*	0.313*	N/AV	N/AV	0.403*	0.407*	0.272*	0.291*	0.336*	0.355*	0.374*	0.313*
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.521*	N/AV	0.039	N/AV	N/AV	0.432*	0.413*	0.071	0.255*	0.323*	0.407*	0.297*	0.301*
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		5	3	2	2	2	6	6	4	3	5	6	5	6
VALID N		7	5	4	2	2	7	7	7	7	7	7	7	7
PERCENT SIGNIFICANT		71%	60%	50%	100%	100%	86%	86%	57%	43%	71%	86%	71%	86%
MEDIAN		0.289	0.259	0.236	0.514	0.562	0.432	0.413	0.272	0.160	0.323	0.370	0.318	0.313

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 5: Optometry School Track III Grades: Vision Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	0.024	0.081	N/AV	N/AV	N/AV	-0.062	0.105	0.222	0.166	-0.242	0.123	0.031	-0.029
SCHOOL 002	125	0.508*	N/AV	0.530*	N/AV	N/AV	0.420*	0.481*	0.365*	0.402*	0.371*	0.368*	0.319*	0.366*
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.365*	0.278*	N/AV	0.436*	0.431*	0.600*	0.506*	0.305*	0.036	0.430*	0.496*	0.446*	0.437*
SCHOOL 006	68	-0.122	-0.106	N/AV	N/AV	N/AV	0.397*	0.358*	0.298*	0.185	0.309*	0.383*	0.190	0.361*
SCHOOL 007	28	0.317	0.363	0.102	0.379*	0.341	0.323	0.309	0.159	0.044	0.198	0.150	0.458*	0.198
SCHOOL 008	97	0.349*	0.383*	0.363*	N/AV	N/AV	0.551*	0.583*	0.430*	0.455*	0.427*	0.514*	0.479*	0.433*
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.435*	N/AV	0.003	N/AV	N/AV	0.400*	0.388*	0.094	0.237*	0.257*	0.376*	0.290*	0.328*
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		4	2	2	2	1	5	5	4	3	5	5	5	5
VALID N		7	5	4	2	2	7	7	7	7	7	7	7	7
PERCENT SIGNIFICANT		57%	40%	50%	100%	50%	71%	71%	57%	43%	71%	71%	71%	71%
MEDIAN		0.349	0.278	0.232	0.408	0.386	0.400	0.388	0.298	0.185	0.309	0.376	0.319	0.361

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 6: Optometry School Track IV Grades: Ocular Health Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	-0.093	-0.010	N/AV	N/AV	N/AV	-0.059	0.056	0.052	0.091	-0.116	0.069	-0.090	0.070
SCHOOL 002	125	0.524*	N/AV	0.511*	N/AV	N/AV	0.263*	0.295*	0.164	0.323*	0.286*	0.206*	0.242*	0.225*
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.255*	0.234*	N/AV	0.438*	0.453*	0.446*	0.405*	0.202	0.115	0.328*	0.404*	0.332*	0.281*
SCHOOL 006	68	-0.088	-0.042	N/AV	N/AV	N/AV	0.262*	0.233	0.193	0.128	0.230	0.200	0.140	0.222
SCHOOL 007	28	0.374	0.342	0.124	0.336	0.373	0.220	0.173	0.005	0.035	0.022	0.015	0.237	0.408*
SCHOOL 008	97	0.185	0.207	0.186	N/AV	N/AV	0.286*	0.280*	0.139	0.127	0.350*	0.254*	0.283*	0.166
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.388*	N/AV	-0.042	N/AV	N/AV	0.371*	0.374*	0.105	0.259*	0.255*	0.328*	0.286*	0.284*
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		3	1	1	1	1	5	4	0	2	4	4	4	4
VALID N		7	5	4	2	2	7	7	7	7	7	7	7	7
PERCENT SIGNIFICANT		43%	20%	25%	50%	50%	71%	57%	0%	29%	57%	57%	57%	57%
MEDIAN		0.255	0.207	0.155	0.387	0.413	0.263	0.280	0.139	0.127	0.255	0.206	0.242	0.225

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 7: Optometry School Track V Grades: Clinical Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	-0.051	0.024	N/AV	N/AV	N/AV	-0.086	0.020	0.027	0.082	-0.195	0.087	-0.101	0.089
SCHOOL 002	125	0.486*	N/AV	0.464*	N/AV	N/AV	0.321*	0.377*	0.316*	0.351*	0.335*	0.282*	0.232*	0.281*
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.281*	0.241*	N/AV	0.525*	0.503*	0.489*	0.467*	0.389*	0.076	0.346*	0.445*	0.383*	0.287*
SCHOOL 006	68	0.019	0.025	N/AV	N/AV	N/AV	0.234	0.219	0.220	0.078	0.163	0.240	0.102	0.242
SCHOOL 007	28	0.185	0.160	-0.033	0.182	0.289	0.146	0.088	-0.052	-0.101	0.067	0.002	0.167	0.219
SCHOOL 008	97	0.441*	0.454*	0.399*	N/AV	N/AV	0.492*	0.504*	0.286*	0.269*	0.362*	0.463*	0.478*	0.365*
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.432*	N/AV	0.022	N/AV	N/AV	0.440*	0.464*	0.256*	0.312*	0.247*	0.441*	0.284*	0.339*
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		4	2	2	1	1	4	4	4	3	4	4	4	4
VALID N		7	5	4	2	2	7	7	7	7	7	7	7	7
PERCENT SIGNIFICANT		57%	40%	50%	50%	50%	57%	57%	57%	43%	57%	57%	57%	57%
MEDIAN		0.281	0.160	0.211	0.354	0.396	0.321	0.377	0.256	0.082	0.247	0.282	0.232	0.281

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 8: Optometry School Track VI Grades: Clinic Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	0.053	0.109	N/AV	N/AV	N/AV	0.090	0.213	0.233	0.303*	-0.051	0.092	0.162	-0.074
SCHOOL 002	125	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	68	-0.041	-0.023	N/AV	N/AV	N/AV	0.104	0.120	0.159	0.104	0.019	0.098	0.172	0.017
SCHOOL 007	28	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 008	97	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		0	0	0	0	0	0	0	0	1	0	0	0	0
VALID N		2	2	0	0	0	2	2	2	2	2	2	2	2
PERCENT SIGNIFICANT		0%	0%	0%	0%	0%	0%	0%	0%	50%	0%	0%	0%	0%
MEDIAN		0.006	0.043	N/AV	N/AV	N/AV	0.097	0.166	0.196	0.204	-0.016	0.095	0.167	-0.029

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 9: Optometry School Track VII Grades: Other Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

SCHOOL	NUMBER OF STUDENTS	UNDER GRAD GPA	MATH & SCIENCE GPA	OTHER GPA	OPTION 1	OPTION 2	OPTOMETRY ADMISSION TEST							
							TS	ACAD AVG	QUANTI- TATIVE	READING- COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	59	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 002	125	0.159	N/AV	0.161	N/AV	N/AV	0.089	0.204*	0.129	0.136	0.111	0.036	0.126	-0.013
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	68	-0.023	-0.080	N/AV	N/AV	N/AV	0.356*	0.398*	0.442*	0.300*	0.228	0.369*	0.257*	0.318*
SCHOOL 007	28	0.093	0.065	0.016	0.043	0.233	0.070	0.064	0.092	-0.072	-0.001	0.066	0.267	-0.095
SCHOOL 008	97	0.146	0.124	0.201	N/AV	N/AV	0.210	0.206	0.004	0.174	0.165	0.166	0.255*	0.188
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.224*	N/AV	-0.060	N/AV	N/AV	0.270*	0.331*	0.157	0.338*	0.262*	0.279*	0.168	0.121
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
# OF SIGNIFICANT COEFFICIENTS		1	0	0	0	0	2	3	1	2	1	2	2	1
VALID N		5	3	4	1	1	5	5	5	5	5	5	5	5
PERCENT SIGNIFICANT		20%	0%	0%	0%	0%	40%	60%	20%	40%	20%	40%	40%	20%
MEDIAN		0.146	0.065	0.089	0.043	0.233	0.210	0.206	0.129	0.174	0.165	0.166	0.255	0.121

N/AV - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 10: First-Year Optometry School Overall GPAs Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.342	0.436	0.536	N/AV	N/AV
SCHOOL 002	125	0.571	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	0.407	0.452	0.498	N/AV	N/AV
SCHOOL 004	137	0.554	0.572	0.608	N/AV	N/AV
SCHOOL 005	96	0.662	0.669	0.673	N/AV	N/AV
SCHOOL 006	68	0.615	0.616	0.638	N/AV	N/AV
SCHOOL 007	28	0.701	0.721	0.733	0.736	0.799
SCHOOL 008	97	0.570	0.604	0.609	0.630	N/AV
SCHOOL 009	150	0.478	0.504	0.504	0.507	0.514
SCHOOL 010	136	0.557	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	0.491	0.563	0.565	0.569	N/AV
MEDIAN R		0.557	0.572	0.608	0.600	0.657
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		31.0%	32.7%	36.9%	36.0%	43.1%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 11: Second-Year Optometry School Overall GPAs Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.262	0.290	0.494	N/AV	N/AV
SCHOOL 002	125	0.506	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	0.480	0.488	0.510	N/AV	N/AV
SCHOOL 004	137	0.459	0.505	0.542	N/AV	N/AV
SCHOOL 005	96	0.666	0.674	0.679	N/AV	N/AV
SCHOOL 006	68	0.544	0.547	0.563	N/AV	N/AV
SCHOOL 007	28	0.597	0.652	0.658	0.680	0.758
SCHOOL 008	97	0.514	0.579	0.585	0.593	N/AV
SCHOOL 009	150	0.337	0.459	0.460	0.460	0.462
SCHOOL 010	136	0.552	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	0.573	0.661	0.661	0.661	N/AV
MEDIAN R		0.514	0.547	0.563	0.627	0.610
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		26.4%	29.9%	31.7%	39.3%	37.2%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 12: Optometry School Track I Grades: Optics Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.345	0.415	0.519	N/AV	N/AV
SCHOOL 002	125	0.512	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.624	0.628	0.629	N/AV	N/AV
SCHOOL 006	68	0.638	0.638	0.670	N/AV	N/AV
SCHOOL 007	28	0.565	0.616	0.616	0.630	0.719
SCHOOL 008	97	0.594	0.681	0.681	0.689	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.565	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.565	0.628	0.629	0.660	0.719
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		31.9%	39.5%	39.6%	43.5%	51.7%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 13: Optometry School Track II Grades: Biomedical Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.259	0.310	0.413	N/AV	N/AV
SCHOOL 002	125	0.493	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.650	0.657	0.658	N/AV	N/AV
SCHOOL 006	68	0.561	0.566	0.581	N/AV	N/AV
SCHOOL 007	28	0.779	0.796	0.808	0.808	0.860
SCHOOL 008	97	0.440	0.481	0.483	0.496	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.517	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.517	0.566	0.581	0.652	0.860
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		26.7%	32.0%	33.7%	42.5%	73.9%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 14: Optometry School Track III Grades: Vision Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.357	0.419	0.494	N/AV	N/AV
SCHOOL 002	125	0.525	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.609	0.623	0.642	N/AV	N/AV
SCHOOL 006	68	0.492	0.513	0.520	N/AV	N/AV
SCHOOL 007	28	0.501	0.553	0.553	0.590	0.628
SCHOOL 008	97	0.623	0.658	0.658	0.664	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.482	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.501	0.553	0.553	0.627	0.628
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		25.1%	30.5%	30.6%	39.3%	39.4%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 15: Optometry School Track IV Grades: Ocular Health Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.232	0.243	0.436	N/AV	N/AV
SCHOOL 002	125	0.388	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.460	0.485	0.487	N/AV	N/AV
SCHOOL 006	68	0.301	0.308	0.336	N/AV	N/AV
SCHOOL 007	28	0.544	0.589	0.599	0.630	0.697
SCHOOL 008	97	0.385	0.414	0.415	0.422	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.448	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.388	0.414	0.436	0.526	0.697
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		15.1%	17.1%	19.1%	27.7%	48.6%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 16: Optometry School Track V Grades: Clinical Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.310	0.338	0.476	N/AV	N/AV
SCHOOL 002	125	0.448	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	0.539	0.548	0.555	N/AV	N/AV
SCHOOL 006	68	0.335	0.335	0.336	N/AV	N/AV
SCHOOL 007	28	0.372	0.419	0.427	0.491	0.621
SCHOOL 008	97	0.530	0.623	0.626	0.626	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.546	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.448	0.419	0.476	0.558	0.621
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		20.1%	17.6%	22.7%	31.2%	38.6%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 17: Optometry School Track VI Grades: Clinic Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	0.360	0.416	0.453	N/AV	N/AV
SCHOOL 002	125	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	68	0.238	0.238	0.241	N/AV	N/AV
SCHOOL 007	28	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 008	97	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.299	0.327	0.347	N/AV	N/AV
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		8.9%	10.7%	12.1%	N/AV	N/AV

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

Table 18: Optometry School Track VII Grades: Other Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs

School	Number of Students	OAT Subscales ONLY*	OAT Subscales; Math/Science GPA	OAT Subscales; Math/Science & Overall GPAs	OAT Subscales; Math/Science, Overall, & Other GPAs	OAT Subscales; Math/Science, Overall & Other GPAs; Options
SCHOOL 001	59	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 002	125	0.225	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	49	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	137	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	96	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	68	0.523	0.531	0.539	N/AV	N/AV
SCHOOL 007	28	0.379	0.381	0.427	0.427	0.533
SCHOOL 008	97	0.313	0.314	0.394	0.412	N/AV
SCHOOL 009	150	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.432	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	100	N/AV	N/AV	N/AV	N/AV	N/AV
MEDIAN R		0.379	0.381	0.427	0.419	0.533
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		14.4%	14.6%	18.2%	17.6%	28.4%

N/AV - GRADES NOT AVAILABLE

*OAT subscales include quantitative reasoning, reading comprehension, biology, general and organic chemistry, and physics.

OAT Optometry Admission Test

Optometry Admission Test Program
Department of Testing Services
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