

OAT Optometry Admission Test



OAT Validity Study 2014-2016 Data



Any suggestions concerning other ways in which these validation studies can better serve the optometry education community are most welcome. Please send your comments and/or suggestions to:

Optometry Admission Test Program
211 East Chicago Avenue
Chicago, IL 60611-2637

Copyright © 2018. All rights reserved. This report contains copyrighted material. Any copying, reproducing, or republishing of this report, in whole or in part, is strictly prohibited.

Printed in U.S.A.

Table of Contents

Introduction	1
Data	1
Methods	2
Results and Discussion.....	4
Part I: Bivariate Correlations between Optometry School Grades and Predictors (OAT scores, Undergraduate GPAs).....	4
Part II: Multiple Correlations between Optometry School Grades and Sets of Predictors (Undergraduate GPAs, OAT Scores).....	5
Part III: Summary	6
Limitations	6
Conclusions	6
Table 1: First-Year Optometry School Overall GPAs Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	7
Table 2: Second-Year Optometry School Overall GPAs Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	8
Table 3: Optometry School Track I Grades: Optics Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	9
Table 4: Optometry School Track II Grades: Biomedical Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	100
Table 5: Optometry School Track III Grades: Vision Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	111
Table 6: Optometry School Track IV Grades: Ocular Health Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	122
Table 7: Optometry School Track V Grades: Clinical Science Correlated with OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	133
Table 8: Optometry School Track VI Grades: Clinic Correlated on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	144
Table 9: Optometry School Track VII Grades: Other Correlated on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	155
Table 10: First-Year Optometry School Overall GPAs Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	166

Table 11: Second-Year Optometry School Overall GPAs Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	177
Table 12: Optometry School Track I Grades: Optics Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	188
Table 13: Optometry School Track II Grades: Biomedical Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	19
Table 14: Optometry School Track III Grades: Vision Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	200
Table 15: Optometry School Track IV Grades: Ocular Health Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	211
Table 16: Optometry School Track V Grades: Clinical Science Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs	222
Table 17: Optometry School Track VI Grades: Clinic Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	233
Table 18: Optometry School Track VII Grades: Other Regressed on OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.....	244
Table 19: Median Correlations, Corrected (and Observed) for Range Restriction, between OAT scores and First- and Second-Year Optometry School Overall GPAs.....	25

Introduction

Validity is the most important 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 concerning examinees (e.g., pass/fail, admission, placement, grouping).

The OAT Validity Study 2014-2016 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 pre-optometry 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 will only be 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 12 of the 23 United States optometry schools participated in this study. This matches the participation rate obtained for the prior report involving data from 2011 to 2013. However, because of curriculum differences, some schools could not provide information in every area requested.

This report involves first- and second-year data on the same group of students. When viewing the data in these tables the number of students listed might not correspond with the number actually enrolled because some students' OAT test scores were not available. Student data were included in the analyses only when OAT scores were provided.

Data collection occurred during students' third year in optometry school, when data associated with first- and second-year school performance were complete. Student GPA data reflect the 2014-2015 and 2015-2016 school years, while student OAT data reflect test administrations occurring prior to the 2014-2015 school year¹. Data consisted of course grades, averages for several courses, or subject-matter averages. Multiple regression was used to analyze the data and produce a multiple correlation coefficient (R). The predictor variables included in the regression were Undergraduate GPA, Math and Science GPA, Other GPA, Options 1 and 2 (i.e., other optional criteria for admission considered by each optometry school), and OAT scores achieved by the students prior to admission to optometry school. Only three schools reported data for Option 1 and three schools reported data for Option 2. Option 1 represented SAT math scores and Option 2 represented SAT verbal scores. The criterion variables included in separate

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.

multiple regressions were overall optometry GPA and optometry grades in seven subject areas (also called tracks). The tracks can be described as follows:

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.

Of the seven schools reporting a value for the predictor variable 'Other GPA,' three schools specified what was included. For these three schools, 'Other GPA' signified one or more of the following: (1) practice management course, (2) last year's GPA, and (3) all prerequisite courses. This generally includes a one semester course with a laboratory component in the following science courses: general biology or zoology, general chemistry, organic chemistry, general physics, microbiology or bacteriology. In addition, it includes courses in English composition or English literature, mathematics or calculus, psychology, and statistics.

Methods

Pearson bivariate correlation coefficients and multiple regression findings were used to understand the relationship between optometry school performance and students' pre-optometry GPAs and OAT scores.

Since optometry schools use OAT scores and undergraduate GPAs to make admission decisions, applicants who were accepted into optometry schools would have higher OAT scores and undergraduate GPAs than those who were not admitted. In other words, the range of OAT scores and undergraduate GPAs in an optometry student sample would be restricted, relative to the score range found in the full population of applicants to optometry schools. Research has shown that range restriction is a statistical artifact that can reduce the size of observed correlation coefficients. Given this, the observed relationship found within the current dataset would underestimate the relationship found if the entire spectrum of applicants had been admitted to optometry school. To address this issue, corrections for range restriction were also implemented.

These corrections involved using standard formulas that utilize the ratio of the restricted and unrestricted standard deviation of students' scores on the predictor variables (e.g., OAT scores). The restricted standard deviation would be the standard deviation found in the observed sample, while the unrestricted standard deviation would be the corresponding standard deviation associated with the pool of all potential applicants in a given year (i.e., all OAT examinations in 2013-2014 or 2012-2013, for first and second year students, respectively). The corrected validity coefficient estimates the level of association that would have been obtained if students had not been selected on the aforementioned predictors.

Multiple regression was used to produce multiple R and R² statistical coefficients. The R² is the squared multiple correlation between a dependent variable and a set of independent variables. The R² is interpreted as the percentage of the total variability in the criteria that can be accounted for by the set of predictors. R² ranges from zero to one, with 0 indicating the absence of a relationship and 1 indicating a perfect relationship. In the context of this report, R² is the squared multiple correlation between optometry school grade/GPA (i.e., the dependent variable) and undergraduate GPAs and OAT scores (i.e., the set of independent variables). Separate multiple correlations were obtained for first- and second-year grade/GPA. R² thus provides an index of how well first- or second-year grades or GPAs can be predicted from undergraduate GPAs and OAT scores. More specifically, R² is the proportion of the variance in first- or second-year optometry school grades or GPAs that can be predicted by a linear combination of OAT Scores, undergraduate GPAs, Math & Science GPAs, and Other GPAs.

Caution is warranted in interpreting the 'Other GPA' predictor, due to the fact that this predictor meant different things for different schools. While this predictor is useful for schools when looking at findings within a given school, its interpretation across schools is problematic due to the differences in meanings. For this reason, findings pertaining to 'Other GPA' are presented in this report, but interpretation is left to the specific schools involved (i.e., the pertinent findings are not specifically discussed within this report).

In this report, generally only one set of tables are used for each criteria because data for any track is only reported for the total student group. Data is not divided into first- and second-year reports except for Tables 1, 2, 10, and 11, which report GPA's for the first- and second-year. These data were reported as two distinct numbers, therefore there are separate tables for each one. 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.

The first set of findings (Part I) presents bivariate correlations between specific variables. Tables 1 and 2 presents correlation coefficients among undergraduate GPAs, OAT scores, first-year optometry school overall GPA, and second-year optometry school overall GPA. Tables 3 through 9 provide correlation coefficients among undergraduate GPAs, OAT scores, and grade point average on Tracks I through VII, respectively.

The second set of findings (Part II) presents information obtained from the multiple regressions. Multiple correlations involving undergraduate GPAs, math & science GPAs, other GPAs, OAT academic scores (quantitative reasoning, reading comprehension, biology, general chemistry,

organic chemistry), all OAT scores (OAT academic scores plus the physics score), and all predictors (combining of undergraduate GPAs, math & science GPAs, other GPAs, OAT academic scores, and all OAT scores) are presented in Tables 10 through 18.

Results and Discussion

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

Tables 1 through 9 present bivariate (i.e., two variable) correlations involving optometry school grades and various individual predictors. These predictors represent either undergraduate GPAs or OAT scores. Undergraduate GPA measures included math & science GPA, other GPA, and overall undergraduate GPA. OAT scores included two OAT composite scores: total science and academic average, and six individual OAT scores: quantitative reasoning, reading comprehension, biology, general chemistry, organic chemistry and physics. Tables 1 and 2 present bivariate correlations between first- and second-year optometry school grades, respectively, and the aforementioned predictors. Similarly, Tables 3 through 9 present bivariate correlations between optometry school grades on Tracks I through VII and the aforementioned predictors. The results are summarized below:

- Taken as a whole, Tables 1 through 9 provide strong empirical evidence that the various predictors (OAT scores and undergraduate GPAs) are strongly related to the various student performance criteria (first- and second-year grades, and the 7 separate tracks of optometry school performance).
- Overall undergraduate GPA, other GPA, math & science GPA, the OAT academic average score and biology score appear to have the highest level of association with overall GPAs in the first-year of optometry school (Table 1). The other five individual OAT scores and the total science score are also strongly related to first-year overall GPAs.
- Overall undergraduate GPA and other GPA appear to have the highest level of association with overall GPAs in the second year of optometry school (Table 2). The math & science GPA, OAT academic average and total science scores appear to be more strongly related to second-year overall GPAs than the remaining individual OAT scores.
- Of the six individual OAT scores, the quantitative score is comparatively the weakest in predicting first-year overall GPAs (Table 1), while all six perform similarly in predicting second-year overall GPAs (Table 2).
- Undergraduate GPA, other GPA, the OAT academic average score, the OAT total science score, biology score and the quantitative reasoning score are the most important common predictors in their level of association with optometry school Track I grades (Table 3).
- Undergraduate GPA, other GPA, the OAT academic average score and the biology score are the most important common predictors in their level of association with optometry school Track II grades (Table 4).
- Undergraduate GPA, other GPA, the OAT academic average score and biology score are the most important common predictors in their level of association with optometry school Track III grades (Table 5).
- Undergraduate GPA and other GPA are the most important predictors in their level of association with optometry school Track IV grades (Table 6).
- Undergraduate GPA, other GPA and biology score are the most important predictors in their level of association with optometry school Track V grades (Table 7).

- Due to the fact that only three schools' data are available for optometry school Track VI grades, no clear conclusions can be reached concerning relationships across schools (Table 8).
- Undergraduate GPA, Option 2 (only two schools reported this data), general chemistry score and reading comprehension score are the most important predictors in their level of association with optometry school Track VII grades (Table 9).

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

Tables 10 through 18 present multiple correlations involving optometry school grades and various 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 utilized remains the same. Additionally, it should be recognized that the schools involved change across predictor sets (e.g., 12 schools are involved for the predictor set involving 'OAT scales only', while just 3 schools are involved when looking at the full set of predictors - the combination of OAT scores and all undergraduate GPAs).

Tables 10 and 11 present multiple correlations involving first- and second-year optometry school grades, respectively, and the aforementioned sets of predictors. Tables 12 through 18 present multiple correlations involving optometry school grades in Tracks I through VII, respectively, and the aforementioned sets of predictors. The median R and corresponding variance accounted for (i.e., the median r-squared) are presented at the bottom of these tables and are focused upon for discussion purposes.² The results are summarized below. As noted previously, results involving 'Other GPA' are not discussed due to the interpretational difficulties noted previously.

- Overall, the predictor set that included OAT scores, math/science GPA, overall GPA, other GPA, and options resulted in the greatest amount of explained variance in first-year overall GPA (39%) (Table 10).
- The predictor set that included OAT scores, math/science GPA and overall GPA resulted in the greatest amount of explained variance in second-year overall GPA (33%) (Table 11).
- In Table 10, the percent of variance in first-year overall GPA that is explained by the OAT scores alone and the combination of OAT scores & math and science GPA is 30% and 34%, respectively. The addition of the overall GPA increased the amount of the explained variance by about 2%.
- In Table 11, the percent of variance in second-year overall GPA that could be explained by OAT scores alone and the combination of OAT scores & math and science GPA is 21% and 29%, respectively. About thirty-three percent of the variance can be explained by the combination of OAT scores, math/science GPA, & overall GPA.
- In Tables 12, 13, 14, 15, 16, and 18, the multiple correlation using the full predictor set (OAT scores, math/science GPA, overall GPA, other GPA, and options) results in the greatest amount of explained variance in Track I grades (47%), Track II grades (43%), Track III grades (56%), Track IV grades (37%), Track V grades (41%), and Track VII grades (50%).

² It should be noted that the school associated with the median R presented may change as predictors are added within the table (i.e., the school associated with the median R for "OAT scores only" may not be the same school that is associated with the median R for "OAT& Math/Science GPA"). Given this, and given the fact that all schools did not provide all predictor measures, it is possible for the median R to decrease as predictors are added (e.g., see Table 11).

- Since one school's data are available for optometry school Track VI (Table 17), no clear conclusions can be reached.
- At an overall level, the predictor set that included OAT scores, math/science GPA, and overall GPA demonstrated strong and consistent prediction of student performance.

Part III: Summary

Table 19 presents the median observed and corrected correlation coefficients between OAT scores and the first- and second-year optometry school overall grades. As shown in Table 19, the corrected correlation coefficients indicate that OAT scores have higher levels of association with first and second year optometry school grades when the impact of range restriction is considered. This is particularly true for the two OAT composite scores.

Limitations

The data in this report are based on a sample consisting of twelve (52%) of the 23 United States optometry schools. 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. This is particularly the case for variables involving minimal data. 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 validity coefficients were generated to correct the range restriction pertaining to 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, then optometry student samples (which consist of these higher scoring individuals) would likely contain fewer students with poor optometry grades than would be present had these predictor measures not been utilized in admissions decisions.

Range restriction reduces the magnitude of obtained correlation coefficients. Similarly any unreliability that is present in criterion measures would further reduce 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 previous OAT Validity Study reports, and should reassure admission committees of the continued value of using OAT scores as part of their selection process.

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	53	0.574*	0.527*	N/AV	N/AV	N/AV	0.167	0.154	0.129	0.084	0.111	0.110	0.077	0.142
SCHOOL 002	100	0.385*	N/AV	N/AV	N/AV	N/AV	0.619*	0.610*	0.389*	0.095	0.470*	0.511*	0.479*	0.419*
SCHOOL 003	164	0.392*	N/AV	0.409*	N/AV	N/AV	0.460*	0.504*	0.323*	0.393*	0.335*	0.375*	0.401*	0.312*
SCHOOL 004	38	0.448*	0.321	N/AV	N/AV	N/AV	0.125	-0.007	0.171	0.180	0.342*	0.333*	0.075	0.203
SCHOOL 005	98	0.335*	0.238*	N/AV	N/AV	N/AV	0.435*	0.511*	0.334*	0.260*	0.190	0.436*	0.442*	0.268*
SCHOOL 006	66	0.498*	0.523*	N/AV	N/AV	N/AV	0.412*	0.534*	0.322*	0.277*	0.282*	0.323*	0.295*	0.295*
SCHOOL 007	28	0.595*	0.531*	0.661*	0.188	0.343	0.485*	0.546*	0.100	0.399*	0.466*	0.187	0.190	0.330
SCHOOL 008	91	0.353*	0.295*	0.364*	N/AV	N/AV	0.424*	0.314*	0.522*	0.386*	0.167	0.393*	0.470*	0.444*
SCHOOL 009	155	0.194*	0.208*	0.192*	0.384*	0.183*	0.308*	0.365*	0.077	0.171*	0.219*	0.211*	0.300*	0.185*
SCHOOL 010	136	0.524*	N/AV	0.477*	N/AV	N/AV	0.539*	0.524*	0.274*	0.094	0.388*	0.375*	0.446*	0.395*
SCHOOL 011	104	0.337*	0.223*	0.268*	N/AV	N/AV	0.173	0.401*	0.587*	0.360*	0.342*	0.392*	0.470*	0.527*
SCHOOL 012	67	0.240	0.061	0.209	0.242	0.189	0.214	0.271*	0.194	0.284*	0.180	0.235	0.117	0.092
# OF SIGNIFICANT COEFFICIENTS		11	7	6	1	1	8	10	7	8	8	9	8	8
VALID N		12	9	7	3	3	12	12	12	12	12	12	12	12
PERCENT SIGNIFICANT		92%	78%	86%	33%	33%	67%	83%	58%	67%	67%	75%	67%	67%
MEDIAN		0.385	0.295	0.364	0.242	0.189	0.418	0.453	0.298	0.269	0.309	0.354	0.350	0.303

N/A - 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	QUANTI-TATIVE	READING-COMP.	PHYSICS	BIOLOGY	GENERAL CHEM.	ORGANIC CHEM.
SCHOOL 001	53	0.451*	0.407*	N/AV	N/AV	N/AV	0.092	0.178	0.209	0.155	0.140	0.024	0.045	0.032
SCHOOL 002	100	0.123	N/AV	N/AV	N/AV	N/AV	0.256*	0.305*	0.261*	0.174	0.195	0.264*	0.143	0.156
SCHOOL 003	164	0.430*	N/AV	0.444*	N/AV	N/AV	0.444*	0.521*	0.387*	0.438*	0.292*	0.351*	0.406*	0.318*
SCHOOL 004	38	0.268	0.287	N/AV	N/AV	N/AV	0.157	-0.086	0.203	0.159	0.395*	0.430*	0.132	0.271
SCHOOL 005	98	0.383*	0.333*	N/AV	N/AV	N/AV	0.420*	0.469*	0.256*	0.221*	0.221*	0.414*	0.428*	0.218*
SCHOOL 006	66	0.569*	0.517*	N/AV	N/AV	N/AV	0.310*	0.396*	0.221	0.067	0.184	0.211	0.223	0.297*
SCHOOL 007	28	0.590*	0.501*	0.601*	0.102	0.289	0.414*	0.465*	0.026	0.315	0.384*	0.181	0.137	0.309
SCHOOL 008	91	0.327*	0.206	0.378*	N/AV	N/AV	0.337*	0.161	0.361*	0.320*	0.017	0.353*	0.317*	0.274*
SCHOOL 009	155	0.299*	0.257*	0.223*	0.380*	0.244*	0.189*	0.273*	0.060	0.244*	0.068	0.121	0.168*	0.132
SCHOOL 010	136	0.570*	N/AV	0.504*	N/AV	N/AV	0.454*	0.450*	0.266*	0.088	0.342*	0.266*	0.360*	0.344*
SCHOOL 011	104	0.339*	0.239*	0.266*	N/AV	N/AV	0.115	0.342*	0.506*	0.294*	0.267*	0.377*	0.426*	0.444*
SCHOOL 012	67	0.212	0.101	0.192	0.043	0.174	0.062	0.149	0.038	0.304*	0.175	0.220	0.000	0.041
# OF SIGNIFICANT COEFFICIENTS		9	6	6	1	1	8	8	6	6	6	7	6	6
VALID N		12	9	7	3	3	12	12	12	12	12	12	12	12
PERCENT SIGNIFICANT		75%	67%	86%	33%	33%	67%	67%	50%	50%	50%	58%	50%	50%
MEDIAN		0.361	0.287	0.378	0.102	0.244	0.283	0.323	0.238	0.232	0.208	0.265	0.196	0.272

N/A - 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	53	0.303*	0.203	N/AV	N/AV	N/AV	0.496*	0.471*	0.456*	0.002	0.380*	0.483*	0.269	0.188
SCHOOL 002	100	0.339*	N/AV	N/AV	N/AV	N/AV	0.636*	0.609*	0.368*	0.054	0.521*	0.500*	0.495*	0.411*
SCHOOL 003	164	0.381*	N/AV	0.412*	N/AV	N/AV	0.466*	0.541*	0.447*	0.364*	0.309*	0.419*	0.442*	0.273*
SCHOOL 004	38	0.259	0.287	N/AV	N/AV	N/AV	0.214	0.166	0.194	0.249	0.451*	0.339*	0.169	0.180
SCHOOL 005	98	0.356*	0.260*	N/AV	N/AV	N/AV	0.372*	0.444*	0.294*	0.225*	0.101	0.384*	0.418*	0.262*
SCHOOL 006	66	0.474*	0.494*	N/AV	N/AV	N/AV	0.418*	0.538*	0.437*	0.211	0.223	0.337*	0.344*	0.281*
SCHOOL 007	28	0.544*	0.417*	0.575*	0.196	0.292	0.362	0.484*	0.108	0.346	0.368	0.200	0.110	0.247
SCHOOL 008	91	0.278*	0.173	0.346*	N/AV	N/AV	0.396*	0.216*	0.509*	0.526*	0.088	0.332*	0.497*	0.414*
SCHOOL 009	155	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	0.520*	N/AV	0.476*	N/AV	N/AV	0.506*	0.501*	0.320*	0.055	0.373*	0.333*	0.425*	0.362*
SCHOOL 011	104	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 012	67	0.199	0.043	0.169	0.205	0.228	0.137	0.204	0.230	0.247*	0.107	0.224	0.116	0.080
# OF SIGNIFICANT COEFFICIENTS		8	3	4	0	0	7	8	7	4	5	8	6	6
VALID N		10	7	5	2	2	10	10	10	10	10	10	10	10
PERCENT SIGNIFICANT		80%	43%	80%	0%	0%	70%	80%	70%	40%	50%	80%	60%	60%
MEDIAN		0.347	0.260	0.412	0.201	0.260	0.407	0.478	0.344	0.236	0.339	0.338	0.381	0.268

N/A - 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	53	0.490*	0.531*	N/AV	N/AV	N/AV	-0.094	-0.269	-0.158	-0.300	-0.074	-0.035	-0.178	-0.092
SCHOOL 002	100	0.277*	N/AV	N/AV	N/AV	N/AV	0.442*	0.434*	0.277*	0.117	0.364*	0.359*	0.274*	0.310*
SCHOOL 003	164	0.405*	N/AV	0.402*	N/AV	N/AV	0.459*	0.497*	0.283*	0.402*	0.357*	0.359*	0.385*	0.310*
SCHOOL 004	38	0.102	0.286	N/AV	N/AV	N/AV	0.146	-0.233	0.211	0.052	0.329	0.427*	0.098	0.309
SCHOOL 005	98	0.333*	0.214*	N/AV	N/AV	N/AV	0.458*	0.500*	0.242*	0.293*	0.302*	0.416*	0.381*	0.276*
SCHOOL 006	66	0.495*	0.516*	N/AV	N/AV	N/AV	0.395*	0.485*	0.233	0.210	0.285*	0.280*	0.257*	0.332*
SCHOOL 007	28	0.566*	0.545*	0.666*	0.206	0.374	0.510*	0.531*	0.112	0.370	0.505*	0.150	0.229	0.322
SCHOOL 008	91	0.391*	0.276*	0.396*	N/AV	N/AV	0.360*	0.283*	0.424*	0.262*	0.128	0.342*	0.361*	0.351*
SCHOOL 009	155	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	0.527*	N/AV	0.485*	N/AV	N/AV	0.498*	0.474*	0.226*	0.053	0.396*	0.312*	0.406*	0.382*
SCHOOL 011	104	0.236*	0.102	0.166	N/AV	N/AV	0.120	0.284*	0.378*	0.127	0.291*	0.217*	0.337*	0.399*
SCHOOL 012	67	0.325*	0.158	0.300*	0.046	0.222	0.119	0.187	0.102	0.235	0.229	0.233	0.014	0.021
# OF SIGNIFICANT COEFFICIENTS		10	5	5	0	0	7	8	6	3	7	8	7	7
VALID N		11	8	6	2	2	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		91%	63%	83%	0%	0%	64%	73%	55%	27%	64%	73%	64%	64%
MEDIAN		0.391	0.281	0.399	0.126	0.298	0.395	0.434	0.233	0.210	0.302	0.312	0.274	0.310

N/A - 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	53	0.424*	0.402*	N/AV	N/AV	N/AV	0.115	0.028	-0.007	-0.064	0.225	0.008	-0.048	0.035
SCHOOL 002	100	0.378*	N/AV	N/AV	N/AV	N/AV	0.561*	0.547*	0.313*	0.100	0.448*	0.453*	0.453*	0.360*
SCHOOL 003	164	0.371*	N/AV	0.374*	N/AV	N/AV	0.436*	0.480*	0.282*	0.363*	0.337*	0.343*	0.393*	0.293*
SCHOOL 004	38	0.087	0.167	N/AV	N/AV	N/AV	0.142	0.007	0.139	0.222	0.395*	0.464*	0.165	0.221
SCHOOL 005	98	0.383*	0.224*	N/AV	N/AV	N/AV	0.301*	0.342*	0.226*	0.191	0.133	0.271*	0.353*	0.182
SCHOOL 006	66	0.521*	0.517*	N/AV	N/AV	N/AV	0.374*	0.489*	0.302*	0.192	0.253*	0.283*	0.251*	0.306*
SCHOOL 007	28	0.445*	0.360	0.434*	0.055	0.183	0.276	0.327	-0.023	0.246	0.187	0.244	0.032	0.257
SCHOOL 008	91	0.357*	0.248*	0.353*	N/AV	N/AV	0.354*	0.212*	0.388*	0.341*	0.083	0.285*	0.316*	0.304*
SCHOOL 009	155	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	0.522*	N/AV	0.469*	N/AV	N/AV	0.492*	0.469*	0.240*	0.075	0.347*	0.341*	0.346*	0.398*
SCHOOL 011	104	0.335*	0.195*	0.290*	N/AV	N/AV	0.129	0.297*	0.409*	0.212*	0.262*	0.272*	0.332*	0.401*
SCHOOL 012	67	0.255*	0.153	0.180	0.177	0.140	0.317*	0.344*	0.164	0.277*	0.207	0.302*	0.151	0.162
# OF SIGNIFICANT COEFFICIENTS		10	5	5	0	0	7	8	7	4	6	9	7	6
VALID N		11	8	6	2	2	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		91%	63%	83%	0%	0%	64%	73%	64%	36%	55%	82%	64%	55%
MEDIAN		0.378	0.236	0.363	0.116	0.162	0.317	0.342	0.240	0.212	0.253	0.285	0.316	0.293

N/A - 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	53	0.362*	0.324*	N/AV	N/AV	N/AV	-0.059	-0.045	-0.049	0.134	0.129	-0.112	-0.188	-0.098
SCHOOL 002	100	0.277*	N/AV	N/AV	N/AV	N/AV	0.381*	0.375*	0.176	0.193	0.311*	0.299*	0.235*	0.265*
SCHOOL 003	164	0.478*	N/AV	0.456*	N/AV	N/AV	0.335*	0.397*	0.247*	0.388*	0.264*	0.225*	0.306*	0.250*
SCHOOL 004	38	0.023	0.129	N/AV	N/AV	N/AV	0.185	-0.262	0.102	-0.082	0.136	0.276	0.005	0.051
SCHOOL 005	98	0.255*	0.237*	N/AV	N/AV	N/AV	0.316*	0.293*	0.063	0.048	0.161	0.282*	0.265*	0.218*
SCHOOL 006	66	0.521*	0.466*	N/AV	N/AV	N/AV	0.252*	0.311*	0.061	0.053	0.193	0.136	0.192	0.244*
SCHOOL 007	28	0.508*	0.514*	0.504*	0.338	0.271	0.438*	0.392	-0.124	0.200	0.279	0.152	0.244	0.406
SCHOOL 008	91	0.370*	0.237*	0.333*	N/AV	N/AV	0.174	0.097	0.152	0.130	0.000	0.172	0.117	0.096
SCHOOL 009	155	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	0.505*	N/AV	0.450*	N/AV	N/AV	0.347*	0.317*	0.181*	0.001	0.317*	0.186*	0.259*	0.240*
SCHOOL 011	104	0.249*	0.119	0.225*	N/AV	N/AV	0.043	0.192	0.331*	0.190	0.109	0.277*	0.336*	0.280*
SCHOOL 012	67	0.253*	0.144	0.232	-0.002	0.138	0.039	0.159	-0.017	0.339*	0.170	0.161	-0.011	0.055
# OF SIGNIFICANT COEFFICIENTS		10	5	5	0	0	6	5	3	2	3	5	5	6
VALID N		11	8	6	2	2	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		91%	63%	83%	0%	0%	55%	45%	27%	18%	27%	45%	45%	55%
MEDIAN		0.362	0.237	0.392	0.168	0.204	0.252	0.293	0.102	0.134	0.170	0.186	0.235	0.240

N/A - 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	53	0.473*	0.349*	N/AV	N/AV	N/AV	0.121	0.204	0.207	0.203	0.187	0.163	0.095	-0.121
SCHOOL 002	100	0.310*	N/AV	N/AV	N/AV	N/AV	0.452*	0.495*	0.290*	0.203*	0.321*	0.394*	0.391*	0.294*
SCHOOL 003	164	0.400*	N/AV	0.421*	N/AV	N/AV	0.347*	0.419*	0.335*	0.391*	0.222*	0.310*	0.315*	0.210*
SCHOOL 004	38	0.004	0.132	N/AV	N/AV	N/AV	0.143	0.050	0.120	0.276	0.408*	0.462*	0.155	0.202
SCHOOL 005	98	0.335*	0.326*	N/AV	N/AV	N/AV	0.277*	0.359*	0.273*	0.158	0.080	0.349*	0.355*	0.107
SCHOOL 006	66	0.491*	0.409*	N/AV	N/AV	N/AV	0.234	0.334*	0.276*	0.111	0.081	0.198	0.195	0.193
SCHOOL 007	28	0.553*	0.405*	0.487*	-0.029	0.196	0.302	0.356	-0.066	0.259	0.310	0.088	0.067	0.233
SCHOOL 008	91	0.337*	0.248*	0.321*	N/AV	N/AV	0.301*	0.118	0.316*	0.326*	0.028	0.261*	0.302*	0.230*
SCHOOL 009	155	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	0.564*	N/AV	0.490*	N/AV	N/AV	0.401*	0.409*	0.251*	0.121	0.271*	0.243*	0.365*	0.263*
SCHOOL 011	104	0.208*	0.125	0.195*	N/AV	N/AV	0.145	0.239*	0.405*	0.276*	0.157	0.326*	0.327*	0.329*
SCHOOL 012	67	0.138	0.002	0.112	0.139	0.153	0.123	0.250*	0.174	0.416*	0.108	0.285*	0.053	0.002
# OF SIGNIFICANT COEFFICIENTS		9	5	5	0	0	5	7	7	5	4	8	6	5
VALID N		11	8	6	2	2	11	11	11	11	11	11	11	11
PERCENT SIGNIFICANT		82%	63%	83%	0%	0%	45%	64%	64%	45%	36%	73%	55%	45%
MEDIAN		0.337	0.287	0.371	0.055	0.174	0.277	0.334	0.273	0.259	0.187	0.285	0.302	0.210

N/A - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 8: Optometry School Track VI Grades: Clinic Correlated on 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	53	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	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
SCHOOL 003	164	0.208*	N/AV	0.198*	N/AV	N/AV	0.040	-0.002	-0.108	0.061	0.085	0.049	-0.063	-0.022
SCHOOL 004	38	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	98	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	66	0.271*	0.221	N/AV	N/AV	N/AV	0.000	0.085	0.105	0.180	-0.053	0.087	-0.124	0.034
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	91	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	155	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	104	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 012	67	-0.146	0.020	-0.197	0.082	0.142	-0.132	-0.058	0.005	0.022	-0.012	-0.047	-0.134	-0.125
# OF SIGNIFICANT COEFFICIENTS		2	0	1	0	0	0	0	0	0	0	0	0	0
VALID N		3	2	2	1	1	3	3	3	3	3	3	3	3
PERCENT SIGNIFICANT		67%	0%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MEDIAN		0.208	0.120	0.001	0.082	0.142	0.000	-0.002	0.005	0.061	-0.012	0.049	-0.124	-0.022

N/A - GRADES NOT AVAILABLE

* Significant coefficient (p<.05).

Table 9: Optometry School Track VII Grades: Other Correlated on 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	53	0.520*	0.485*	N/AV	N/AV	N/AV	0.126	0.106	0.087	0.039	0.226	0.069	-0.008	0.007
SCHOOL 002	100	0.168	N/AV	N/AV	N/AV	N/AV	0.411*	0.441*	0.179	0.297*	0.315*	0.349*	0.325*	0.250*
SCHOOL 003	164	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	38	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	98	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	66	0.279*	0.212	N/AV	N/AV	N/AV	-0.112	0.054	0.023	0.242*	-0.047	0.080	-0.055	-0.172
SCHOOL 007	28	-0.100	-0.086	0.251	-0.115	0.049	0.128	0.189	0.057	0.446*	0.264	0.074	0.025	-0.075
SCHOOL 008	91	0.206	0.070	0.140	N/AV	N/AV	-0.036	-0.051	0.020	0.114	0.042	0.042	-0.002	-0.027
SCHOOL 009	155	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	0.315*	N/AV	0.230*	N/AV	N/AV	0.177*	0.204*	0.135	0.096	0.134	0.115	0.194*	0.059
SCHOOL 011	104	0.109	-0.011	0.101	N/AV	N/AV	-0.037	0.099	0.174	0.033	0.044	0.228*	0.204*	0.119
SCHOOL 012	67	0.153	-0.073	0.183	0.186	0.259*	-0.028	0.101	0.209	0.172	0.343*	0.030	0.074	-0.050
# OF SIGNIFICANT COEFFICIENTS		3	1	1	0	1	2	2	0	3	2	2	3	1
VALID N		8	6	5	2	2	8	8	8	8	8	8	8	8
PERCENT SIGNIFICANT		38%	17%	20%	0%	50%	25%	25%	0%	38%	25%	25%	38%	13%
MEDIAN		0.187	0.029	0.183	0.036	0.154	0.049	0.104	0.111	0.143	0.180	0.077	0.049	-0.010

N/A - 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.200	0.584	0.636	N/AV	N/AV
SCHOOL 002	100	0.635	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.549	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.447	0.566	0.591	N/AV	N/AV
SCHOOL 005	98	0.549	0.547	0.599	N/AV	N/AV
SCHOOL 006	66	0.517	0.695	0.704	N/AV	N/AV
SCHOOL 007	28	0.580	0.666	0.705	0.789	0.818
SCHOOL 008	91	0.560	0.587	0.604	0.605	N/AV
SCHOOL 009	155	0.342	0.376	0.377	0.384	0.422
SCHOOL 010	136	0.556	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.603	0.621	0.645	0.645	N/AV
SCHOOL 012	67	0.372	0.449	0.528	0.528	0.623
MEDIAN R		0.549	0.584	0.604	0.605	0.623
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		30.2%	34.1%	36.5%	36.6%	38.8%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.285	0.497	0.536	N/AV	N/AV
SCHOOL 002	100	0.336	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.589	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.527	0.681	0.710	N/AV	N/AV
SCHOOL 005	98	0.518	0.539	0.571	N/AV	N/AV
SCHOOL 006	66	0.361	0.584	0.635	N/AV	N/AV
SCHOOL 007	28	0.518	0.607	0.676	0.767	0.812
SCHOOL 008	91	0.443	0.454	0.508	0.527	N/AV
SCHOOL 009	155	0.307	0.370	0.394	0.396	0.450
SCHOOL 010	136	0.476	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.530	0.558	0.585	0.586	N/AV
SCHOOL 012	67	0.313	0.352	0.367	0.369	0.477
MEDIAN R		0.460	0.539	0.571	0.527	0.477
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		21.1%	29.0%	32.6%	27.8%	22.8%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.572	0.605	0.658	N/AV	N/AV
SCHOOL 002	100	0.662	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.601	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.503	0.633	0.683	N/AV	N/AV
SCHOOL 005	98	0.509	0.509	0.565	N/AV	N/AV
SCHOOL 006	66	0.538	0.693	0.706	N/AV	N/AV
SCHOOL 007	28	0.481	0.540	0.634	0.717	0.831
SCHOOL 008	91	0.598	0.599	0.617	0.634	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.542	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 012	67	0.346	0.424	0.465	0.468	0.538
MEDIAN R		0.540	0.599	0.634	0.634	0.684
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		29.2%	35.9%	40.2%	40.2%	46.8

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.366	0.637	0.640	N/AV	N/AV
SCHOOL 002	100	0.451	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.541	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.548	0.741	0.779	N/AV	N/AV
SCHOOL 005	98	0.542	0.532	0.590	N/AV	N/AV
SCHOOL 006	66	0.474	0.652	0.659	N/AV	N/AV
SCHOOL 007	28	0.589	0.686	0.701	0.773	0.743
SCHOOL 008	91	0.466	0.504	0.564	0.565	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.523	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.423	0.427	0.443	0.452	N/AV
SCHOOL 012	67	0.335	0.413	0.466	0.467	0.562
MEDIAN R		0.474	0.585	0.615	0.516	0.653
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		22.5%	34.2%	37.8%	26.6%	42.6%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.275	0.469	0.495	N/AV	N/AV
SCHOOL 002	100	0.580	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.517	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.524	0.615	0.617	N/AV	N/AV
SCHOOL 005	98	0.403	0.405	0.531	N/AV	N/AV
SCHOOL 006	66	0.455	0.644	0.665	N/AV	N/AV
SCHOOL 007	28	0.472	0.509	0.571	0.687	0.859
SCHOOL 008	91	0.426	0.453	0.503	0.503	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.501	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.442	0.466	0.510	0.510	N/AV
SCHOOL 012	67	0.408	0.536	0.595	0.599	0.637
MEDIAN R		0.455	0.489	0.551	0.554	0.748
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		20.7%	23.9%	30.3%	30.7%	55.9%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.324	0.438	0.453	N/AV	N/AV
SCHOOL 002	100	0.398	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.470	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.336	0.516	0.554	N/AV	N/AV
SCHOOL 005	98	0.362	0.363	0.376	N/AV	N/AV
SCHOOL 006	66	0.309	0.518	0.561	N/AV	N/AV
SCHOOL 007	28	0.496	0.601	0.621	0.725	0.739
SCHOOL 008	91	0.205	0.286	0.409	0.409	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.380	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.383	0.391	0.426	0.428	N/AV
SCHOOL 012	67	0.333	0.394	0.409	0.409	0.477
MEDIAN R		0.362	0.416	0.440	0.418	0.608
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		13.1%	17.3%	19.3%	17.5%	37.0%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.340	0.483	0.575	N/AV	N/AV
SCHOOL 002	100	0.488	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.503	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	0.542	0.659	0.673	N/AV	N/AV
SCHOOL 005	98	0.432	0.486	0.506	N/AV	N/AV
SCHOOL 006	66	0.338	0.507	0.601	N/AV	N/AV
SCHOOL 007	28	0.445	0.528	0.670	0.729	0.779
SCHOOL 008	91	0.398	0.431	0.469	0.470	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.425	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.428	0.435	0.453	0.459	N/AV
SCHOOL 012	67	0.343	0.359	0.382	0.383	0.502
MEDIAN R		0.428	0.484	0.540	0.465	0.640
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		18.4%	23.5%	29.2%	21.6%	41.0%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 002	100	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	0.204	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	98	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	66	0.308	0.390	0.458	N/AV	N/AV
SCHOOL 007	28	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 008	91	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 009	155	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	104	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 012	67	0.200	0.202	0.325	0.343	0.433
MEDIAN R VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		0.204 4.2%	0.296 8.8%	0.392 15.4%	0.343 11.8%	0.433 18.8%

N/A - GRADES NOT AVAILABLE

* OAT scales 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 SCALES ONLY*	OAT & Math/Science GPA	OAT, Math/Science & Overall GPAs	OAT, Math/Science, Overall & Other GPAs	OAT, Math/Science, Overall & Other GPAs & Options
SCHOOL 001	53	0.246	0.535	0.570	N/AV	N/AV
SCHOOL 002	100	0.472	N/AV	N/AV	N/AV	N/AV
SCHOOL 003	164	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 004	38	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 005	98	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 006	66	0.312	0.414	0.492	N/AV	N/AV
SCHOOL 007	28	0.514	0.529	0.547	0.596	0.770
SCHOOL 008	91	0.177	0.187	0.286	0.291	N/AV
SCHOOL 009	155	N/AV	N/AV	N/AV	N/AV	N/AV
SCHOOL 010	136	0.234	N/AV	N/AV	N/AV	N/AV
SCHOOL 011	104	0.302	0.305	0.317	0.317	N/AV
SCHOOL 012	67	0.444	0.455	0.460	0.464	0.647
MEDIAN R		0.307	0.435	0.476	0.391	0.708
VARIANCE ACCOUNTED FOR (MEDIAN R-SQUARE)		9.4%	18.9%	22.7%	15.3%	50.2%

N/A - GRADES NOT AVAILABLE

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

Table 19 – Median Correlations, Observed (in Parentheses) and Corrected for Range Restriction, between OAT scores and First- and Second-Year Optometry School Overall GPAs

	First-year GPA	Second-year GPA
Total Science	0.498 (0.418)	0.343 (0.283)
Academic Average	0.520 (0.453)	0.375 (0.323)
Quantitative Reasoning	0.362 (0.298)	0.284 (0.238)
Reading Comprehension	0.291 (0.269)	0.249 (0.232)
Physics	0.316 (0.309)	0.210 (0.208)
Biology	0.433(0.354)	0.325 (0.265)
General Chemistry	0.415 (0.350)	0.238 (0.196)
Organic Chemistry	0.365 (0.303)	0.331 (0.272)

Note. For each pair of numbers in each column, the first number is the median correlation coefficient corrected for range restriction. The second number in parentheses is the observed median correlation coefficient.

Optometry Admission Test Program
Department of Testing Services
211 East Chicago Avenue, Suite 600
Chicago, Illinois 60611-2637

David M. Waldschmidt, PhD, Director, Department of Testing Services (DTS)
Kathleen J. Hinshaw, EdD, Senior Manager, Operations, DTS
Matthew Grady, PhD, Manager, Psychometrics Development and Innovations, DTS
Nicholas B. Hussong, BA, Manager, Test Administration, DTS
Alix Katznelson, BS, Manager, DTS Communications, DTS
Ellen Ryske, MBA, PMP, Manager, Client Services and Special Projects, DTS
Bryan Svendby, MA, SSCP, Manager, Test Security & Fraud Prevention, DTS
Chien-Lin Yang, PhD, Manager, Research and Development/Psychometrics, DTS

December 2017