

THE EFFECTS OF CURRENT STUDENT SATISFACTION ON FUTURE ALUMNI  
DONATIONS

by

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THE EFFECTS OF CURRENT STUDENT SATISFACTION ON FUTURE ALUMNI  
DONATIONS

by Sarah Gliniecki

has been approved

March 15, 2016

APPROVED:



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Faculty Advisors



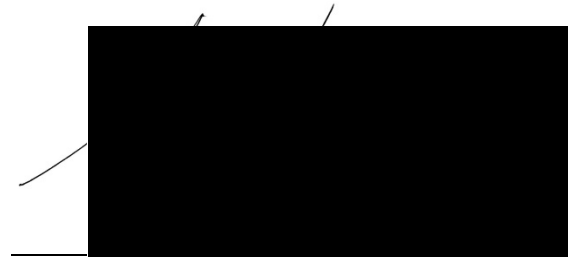
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DONATIONS

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## ABSTRACT

**Background:** Studies on alumni giving have revealed that satisfaction with their educational experience is a key factor, and the push to make alumni into donors should start well before the students graduate. Unfortunately, satisfaction is an ambiguous and subjective concept that can be difficult to quantify. For these reasons, it may be beneficial to colleges of optometry to understand what aspects of the student experience weigh most heavily on their overall satisfaction and likelihood to donate back to their institutions. This project attempted to isolate specific characteristics of the student experience that may make them more likely to donate as alumni. **Methods:** Current fourth year optometry students from member schools in the Association of Schools and Colleges of Optometry were asked to complete an online survey requiring a rating of agreement or disagreement with various statements about student satisfaction. Following these statements, participants were asked about likelihood of future donations to the optometry school. Upon collection of data from the participants, linear regression analysis was performed to attempt to find correlations between aspects of satisfaction and willingness to donate to the institution. 50 total responses were collected and analyzed. **Results:** 80% of responders showed interest in at least one form of donation after graduation. Of the responders that indicated interest in future donation, 40-46% showed interest in donating to the school itself, to special programs or workshops, to student organizations, and to scholarships. Only 16% expressed interest in leading fundraising projects for their institutions. There was no factor found within this study that strongly correlated with increased likelihood of future donation as alumni. **Conclusions:** While this study was unable to isolate an aspect of student satisfaction that strongly correlated with increased inclination toward future donation, it was discovered that most responders are willing to donate in some way to their school after graduation and the ways in which they are likely to give.

## ACKNOWLEDGEMENTS

I would like to thank Dr. Sarah Hinkley and Dr. David Damari for their support and guidance through the research process.

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## CHAPTER 1 – INTRODUCTION

The costs of higher education have been a hot topic of debate in recent years. In medical and allied health fields, the costs of college, graduate and post-graduate education can often discourage young people from pursuing these careers. A 2005 study by Jolly found that between 1984 and 2003, medical school tuition increased by 50% in private medical schools and 133% in public medical schools after accounting for inflation. Part of the reasoning for increased tuition is increased cost to the institutions in teaching such complex fields, the impact of operating patient care centers and the need to provide the integrative experiences needed to create competent doctors; however, these increased costs to students can make medical or optometry school financially prohibitive. In 1984, median student debt from public medical schools was \$22,000. By 2003, this had increased to \$100,000, which is a 150% increase after adjusting for inflation.<sup>1</sup> Simply increasing tuition to cover all costs of teaching medical students is not a feasible option for many schools, as the most qualified students will likely seek more cost-effective institutions to reduce their student debt. Allied health fields, such as optometry, have similar cost and student debt profiles. For this reason, many schools rely heavily on donations from alumni to help off-set costs and provide student financial aid in the form of scholarships. The question then becomes: If higher tuition costs lead to increased student debt, what can institutions do to increase the likelihood that their debt-laden alumni will donate?



Clotfelter (2003) analyzed factors related to alumni donation to 34 selective private colleges and universities. The study had access to previous student records (courses taken, extracurricular activities, honors received) as objective data as well as a survey to gather subjective data about alumni. While financial stability was an important baseline for alumni to consider donation, satisfaction with undergraduate experience was found to be a significant factor for increased rate of donation. Satisfaction seemed to be boosted most by having had a mentor at the college during the undergraduate years and that college having been their first choice school.<sup>2</sup>

Monks (2003) reviewed multiple studies of undergraduate institutions and the factors that related to increased alumni giving. Factors analyzed included financial aid status as a student, extracurricular activity involvement, major of study, and academic experience. There was a reasonable correlation found between increased student debt and lower donor contributions, increased extracurricular activity and increased donation, and liberal arts majors (versus science or fine arts) and increased contributions. The single most important factor in increasing alumni giving was found to be satisfaction with the institution. Satisfaction was found to increase donation amount by 2.6 times for those who were “very satisfied” and 1.8 times for those who were “generally satisfied” over alumni who were “ambivalent,” “generally dissatisfied,” or “very dissatisfied.”<sup>3</sup> This seems to indicate that happy graduates equate to more donations for the school and that, perhaps, colleges and universities should focus on increasing satisfaction within their current student populations to secure donation revenue for the future. But what about the student experience would make a graduate “very satisfied?”

There are few studies that explore alumni donations beyond the undergraduate level and even fewer that focus on optometry schools. This study seeks to find an aspect, or group of aspects, related to the optometry student experience that correlates to increased or decreased alumni donation.

## CHAPTER 2—METHODS

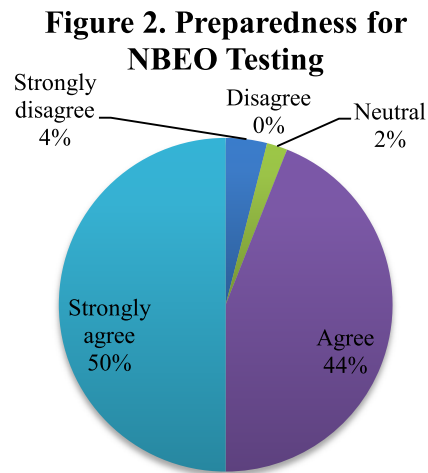
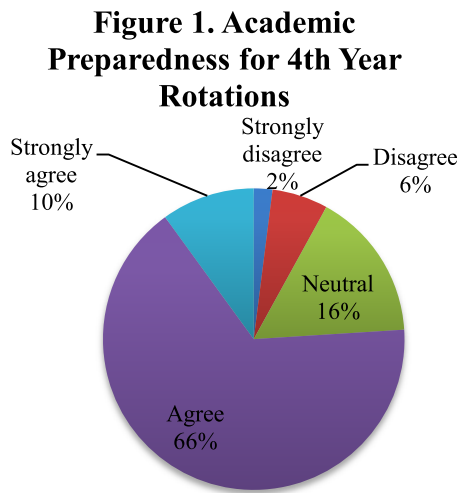
A survey was devised to ask current fourth year optometry students about their level of agreement with statements relating to their satisfaction with their optometry school experience. These statements were grouped into broad categories such as feelings of academic preparedness for fourth year rotations (items 2-10), feelings of preparedness for National Board of Examiners in Optometry (NBEO) testing (items 11-13), feelings toward faculty at their institution (items 14-19), and “intangibles” related to feelings of belonging and opportunities to be involved (items 24-32). There were also miscellaneous items about selection of rotation sites and clinical experience, among others. The final satisfaction-related item required participants to rank their agreement with “I feel my optometry education has been worth the tuition cost and other expenses.” There were then items asking about intended future donations to their optometry schools, including total amount of lifetime giving anticipated (see Appendix B). All items, aside from the amount of lifetime giving, had response options of “strongly agree,” “agree,” “neutral,” “disagree,” and “strongly disagree.” “Not applicable” was an option for NBEO items only, in case respondents had not attempted those exams. Administrators at all of the optometry schools within the Association of Schools and Colleges of Optometry were asked to forward the survey to their fourth year students. In order to ensure honest responses from participants, the survey was anonymous, asking only optometry school of origin as an identifier.

Responses to the survey were collected and responses were converted to

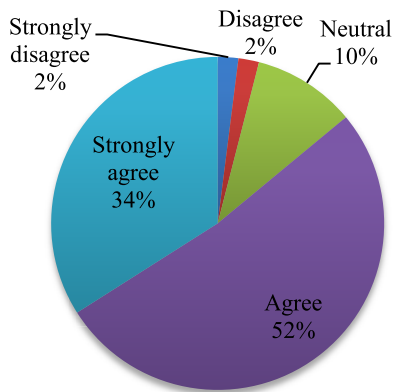
numerical values for the purposes of correlation analysis. “strongly agree” was assigned a value of 5, “agree” was assigned 4, “neutral” was assigned 3, “disagree” was given a value of 2, and “strongly disagree” was assigned a value of 1. Mean and median were calculated for each individual item and for groups of related items. Linear regression analysis was used to find correlation coefficients between individual and groups of satisfaction items and intended donation items. Correlation coefficients (r-value) range between -1 and +1, with negative values indicating an inverse relationship and positive values indicating a direct relationship. Values  $>0.70$  indicate a strong correlation between items, values 0.40-0.69 indicate a moderate correlation, and those  $<0.39$  indicate weak correlation. An r-value of 0 indicates no correlation.

## CHAPTER 3—RESULTS

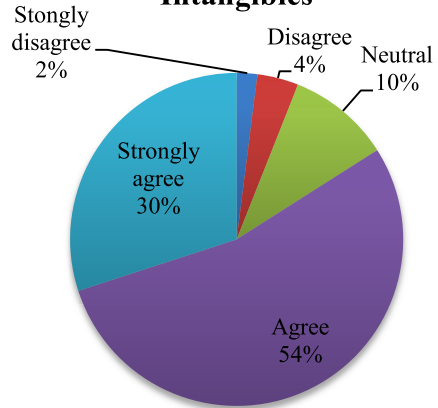
Fifty fourth year students from six geographically diverse optometry schools responded to the survey, though each of the schools was not represented in equal proportion. Items inquiring about academic preparedness for fourth year rotations had median responses of “agree” or “strongly agree” in 38 respondents (Figure 1). Forty-seven individuals reported median responses “agree” or “strongly agree” to preparedness for NBEO items (Figure 2). A median response of “agree” or “strongly agree” was found in 43 of the 50 respondents concerning satisfaction with instructors (Figure 3) and in 42 of 50 regarding the intangibles (Figure 4).



**Figure 3. Satisfied with Instructors**

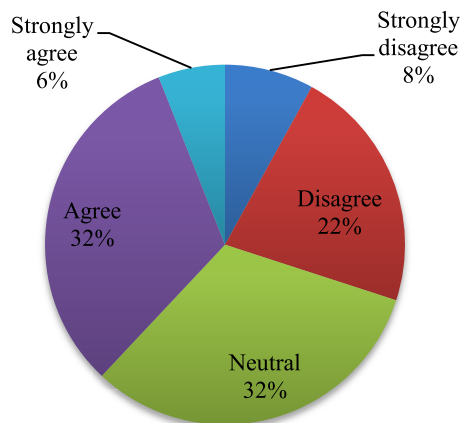


**Figure 4. Satisfied with Intangibles**



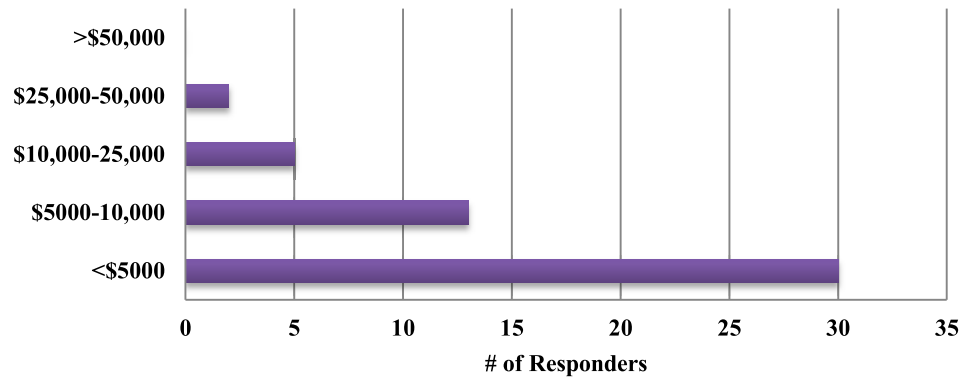
Despite the largely favorable responses to the previous categories of items, only 19 of the 50 respondents indicated “agree” or “strongly agree” to the item stating “I feel my optometry education has been worth the tuition cost and other expenses” (Figure 5). Additionally, only 21 respondents felt they had ample opportunity to apply for scholarship funds to help subsidize their educational costs.

**Figure 5. Optometry Education Worth Investment**



On the future donation items, 40 of the respondents indicated “agree” or “strongly agree” to at least one avenue of anticipated giving. Twenty participants indicated interest in donating to the optometry school itself, 22 showed interested in donating to special programs or workshops hosted at their optometry school, 23 agreed to interest in contributing to student organizations, 23 specified interest in giving to scholarships, and only 8 responded with interest in leading fundraising projects for their institution. Sixty percent of respondents anticipated giving less than \$5000 over the course of their careers to their institutions via these avenues (Figure 6).

**Figure 6. Lifetime Expected Donation**



**Figure 7. Correlation Coefficients Based on Linear Regression**

Item/Category	Optometry School	Programs/ Workshops	Student Organizations	Scholarships	Fundraising
<b>Academics</b>	0.485810535	0.47149944	0.343140256	0.325003373	0.241078017
<b>NBEO</b>	0.317159043	0.310209993	0.293518447	0.33600712	0.287811541
<b>Instructors</b>	0.448720125	0.3380075	0.336865684	0.164823561	0.336428771
<b>Intangibles</b>	0.508482829	0.500894469	0.337409943	0.22705509	0.417713433
<b>Scholarship</b>	0.389643529	0.174837282	0.202059952	0.439271798	0.278880677
<b>Worth it?</b>	0.458790207	0.418939042	0.3263976	0.303659491	0.315158791

Figure 7 shows the correlation coefficients (r-values) for each of the avenues of alumni giving studied in relation to the categories and individual items listed. There was a moderate correlation between feelings of academic preparedness for fourth year rotations and increase donations to the institution, as well as academic preparedness and donations for special programs and workshops. Additionally, feelings of satisfaction with instructors correlated moderately with increased giving to the school. Items categorized as “intangible” had some of the highest correlation coefficients in this study with donation to the school, to programs and workshops, and to interest in leading fundraising efforts. NBEO preparedness had only weak correlations with increased giving. No positive responses to satisfaction factors correlated with decreased giving (there were no negative r-values).



## CHAPTER 4—DISCUSSION

This study was unable to find a strong correlation between any single item or set of items about student satisfaction and increased desire to donate to their optometry school in the future. Moderate correlations, however, were found for several factors. As based on the criteria mentioned in METHODS, the strongest correlations exist between satisfaction with intangible items and direct donation to the optometry school and between satisfaction with intangible items and donating to programs or workshops. This also shows that those respondents who felt they had adequate access to scholarship funds are those mostly likely to feel positively toward donation to scholarship funds. Interestingly, while more participants showed interest in donating to student organizations and scholarships, these forms of giving have some of the weakest correlations to the factors of satisfaction studied.

This study had several flaws that may have hindered isolating a factor or group of factors of satisfaction that correlate with increased likelihood of alumni donation. The small sample of fourth year student respondents in this research makes generalizations about optometry alumni as a whole difficult to support. A larger pool of participants may have helped to outweigh some of the outlier data, although using the median responses instead of mean responses was helpful in combatting this problem. It is also possible that multiple questions about forms of donation made respondents more likely to respond positively at the early items and negatively for the later items, in which case reducing the number of items or randomizing them between participants may have been useful.

The perspective of fourth year students in this study is also a source of potential

controversy. As discussed in INTRODUCTION, the costs of higher education lead to large amounts of student debt that fourth year students may just be considering starting to repay. In this case, it may be difficult for optometry students to consider donating toward their institution while contemplating 20 years of repayment of their educational expenses. It is not surprising that many upcoming and new graduates may be concerned given that the Association of Schools and Colleges of Optometry (ASCO) estimates more than \$110,000 of optometry school debt (not including undergraduate debt) for over 70% of graduates. And the impact of this debt is never far from the mind of an optometry student; most members of ASCO report some sort of budgeting education in their curriculum, often repeated multiple times through several courses.<sup>4</sup> The perspective of a 4<sup>th</sup> year optometry student, however, was chosen specifically for this study due to the fact that fourth year students' feelings about their education are still very much relevant to them. Also, many colleges and universities begin soliciting donations from alumni within six months or a year of graduation, when contentment with their educational choices may outweigh the financial hardship of donating.

The fact that no item or group of items related to satisfaction in this study correlated strongly to more positive attitudes toward alumni donation may indicate that there is some other factor not studied, such as having a mentor as suggested by Clotfelter, that may be an essential motivating factor for donation. It is also possible that the decision to donate is not related to any one item or group of items, but an overall feeling that causes educational satisfaction greater than each of the items or combination of them. Ultimately, it could be beneficial to repeat this study for more consistent results keeping

these criticisms in mind. Results from such a study could be useful for schools of optometry, and other allied health professional programs, to learn the aspects of their programs that are most important to students and how those factors affect attitudes toward future alumni donation.

## CHAPTER 6-- REFERENCES

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## APPENDIX A

FERRIS STATE UNIVERSITY  
Institutional Review Board for Human Subjects in Research  
Office of Academic Research, 220 Ferris Drive, PHR 308 · Big Rapids, MI 49307

Date: September 21, 2015

To: Dr. David Damari, Dr. Sarah Hinkley and Ms. Sarah Gliniecki

From: Dr. Gregory Wellman, IRB Chair

Re: IRB Application #150903 (The Effects of Current Student Satisfaction on Future Alumni Donations)

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, “The Effects of Current Student Satisfaction on Future Alumni Donations” (#150903) and determined that it meets Federal Regulations Exempt-category 1C. This approval has an expiration date of three years from the date of this letter. As such, you may collect data according to the procedures outlined in your application until September 21, 2018. Should additional time be needed to conduct your approved study, a request for extension must be submitted to the IRB a month prior to its expiration.

Your protocol has been assigned project number (#150903), which you should refer to in future correspondence involving this same research procedure. Approval mandates that you follow all University policy and procedures, in addition to applicable governmental regulations. Approval applies only to the activities described in the protocol submission; should revisions need to be made, all materials must be approved by the IRB prior to initiation. In addition, the IRB must be made aware of any serious and unexpected and/or unanticipated adverse events as well as complaints and non-compliance issues. This project has been granted a waiver of consent documentation; signatures of participants need not be collected. Although not documented, informed consent is a process beginning with a description of the study and participant rights, with the assurance of participant understanding. Informed consent must be provided, even when documentation is waived, and continue throughout the study via a dialogue between the researcher and research participant.

As mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) the IRB requires submission of annual reviews during the life of the research project and a Final Report Form upon study completion. Thank you for your compliance with these guidelines and best wishes for a successful research endeavor. Please let us know if the IRB can be of any future assistance.

Regards,  
Ferris State University Institutional Review Board  
Office of Academic Research, Academic Affairs

## APPENDIX B

# The Effects of Current Student Satisfaction on Future Alumni Donations

Please complete the following survey honestly. No personal identifying information will be attached to your responses. If you feel a question does not apply to you at this time, please choose "Not applicable"

**\* Required**

**Which optometry school do you attend? \***

Please type the full name without abbreviations

**I feel my school's systemic disease curriculum adequately prepared me for my 4th year rotations.\***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's pharmacology curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's pediatrics/binocular vision/vision therapy curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's anterior segment disease curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's posterior segment disease curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's neurology/neuroanatomy/neuro-optometry curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's low vision/vision rehabilitation curriculum adequately prepared me for my 4th year rotations. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's billing and coding curriculum has adequately prepared me to accurately code and bill vision and medical exams. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree

- Strongly Agree

**I feel my school's practice management curriculum adequately prepared me to pursue the type of practice setting I find most appealing. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school's curriculum adequately prepared me for NBEO Applied Basic Sciences (Part 1). \***

If you have not yet completed NBEO Part 1, please choose "Not applicable"

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- Not applicable

**I feel my school's curriculum adequately prepared me for NBEO Patient Assessment and Management (Part 2) \***

If you have not yet completed NBEO Part 2, please choose "Not applicable"

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree
- Not applicable

**I feel my school's curriculum adequately prepared me for NBEO Clinical Skills Examination (Part 3). \***

If you have not completed NBEO Part 3, please choose "Not applicable"

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree



- Not applicable

**I feel my classroom and clinical instructors offered adequate time outside of class hours to answer extra questions. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my classroom and clinical instructors were open to friendly professional relationships \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my classroom and clinical instructors were interested in getting to know me as an individual. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel I was provided a good variety in the styles and philosophies of clinical instructors. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my clinical instructors were competent to precept students. \***

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

**I feel my school's administration was accessible and helpful. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school provided adequate clinical equipment to diagnose and manage most ocular conditions within our scope of practice. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school provided an adequate number of clinical patient encounters. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school provided me adequate dispensing experience to confidently fit spectacles on a patient. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school offered adequate practice options for 4th year rotation selection. \***

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

**I feel my school offered adequate opportunities to get involved in extracurricular activities, such as clubs, organizations or events. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school fostered a fair and efficient 4th year rotation selection process. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school offered adequate opportunities for students to participate in research. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school fostered strong interprofessional relationships with other health care professions. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel a sense of belonging at my optometry school. \***

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

**I feel a sense of ownership of my optometry school. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school fostered a strong sense of professionalism. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school fostered a sense of teamwork and community. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel pride in my school's building(s). \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my school used technology meaningfully to assist in the learning process. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree

- Strongly Agree

**I feel I was given ample opportunity to apply for scholarship funds to assist with optometry school expenses. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I feel my optometry education has been worth the tuition cost and other expenses. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I am interested in donating money to my optometry school sometime after graduation. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I am interested in helping to fund special programs or workshops at my optometry school sometime after graduation. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I am interested in helping to fund a student organization at my optometry school sometime after graduation. \***

- Strongly Disagree
- Disagree
- Neutral

- Agree
- Strongly Agree

**I am interested in contributing to scholarships for students at my optometry school sometime after graduation. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I am interested in leading fundraising projects for my optometry school sometime after graduation. \***

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**I anticipate that, over the course of my entire career, I would donate to my school of optometry: \***

- <\$5000
  - \$5000-10,000
  - \$10,000-25,000
  - \$25,000-50,000
  - >\$50,000
-