

DEBT ACCUMULATION OF MICHIGAN COLLEGE OF OPTOMETRY STUDENTS

by

Annie Miller and Jamie Bala


Has been approved

26 June, 2014

APPROVED:

  
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Faculty Advisor.

ACCEPTED:

  
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Ferris State University  
Doctor of Optometry Senior Paper  
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Michigan College of Optometry Long Term Effects of Student Debt

We, Ann Miller and Jamie Bala, hereby release this Paper as described above to Ferris State University with the understanding that it will be accessible to the general public. This release is required under the provisions of the Federal Privacy Act.

  
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Date

DEBT ACCUMULATION OF MICHIGAN COLLEGE OF OPTOMETRY STUDENTS

by

Annie Miller and Jamie Bala

This paper is submitted in partial fulfillment of the  
requirements for the degree of

Doctor of Optometry

Ferris State University  
Michigan College of Optometry

June, 2014

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## ABSTRACT

**Background:** Student debt is exponentially on the rise, especially among graduate students. Thus, it is important for students in a higher education program to be aware of how much debt to expect to accumulate. Additionally, being educated on how to properly prepare for and conduct the student loan process, if needed, in order to fund an educational program while avoiding excessive debt is of great value. In February of 2009, Practice Advancement Associates on behalf of the New Graduate Academy concluded that there was a link between how much new graduates of optometry school expected to earn and how much student debt they had<sup>1</sup>. In a survey conducted in 2005/2006 by the Nova Southeastern University College of Optometry, it was found that newly graduated optometrists chose mode of practice largely based on their current financial situation, and were more likely to start out in a retail or commercial setting as opposed to private practice. However, many of these students later switched to a group or solo private practice<sup>2</sup>. In addition, a 2006 survey of first through fourth year students at the Illinois College of Optometry analyzed the relationship between student debt amount and the initial choice of practice mode upon graduation. When debt was eliminated as a factor, fewer students chose corporate practice while the majority of student chose owning a solo private practice<sup>3</sup>. A more current study of optometry student debt is important to obtain up to date information about the future trends of optometry, as well as the possible challenges future optometrists may face. The purpose of this study is

to examine past and present student debt from the Michigan College of Optometry (MCO). **Methods:** Current students and graduates of the Michigan College of Optometry were surveyed via an anonymous, short online questionnaire-no identifying material was asked for in the survey. The survey results were analyzed for any patterns and to determine the percentage of each response chosen. **Results:** Based on the responses received, the average amount of student debt from year to year significantly increased along with years needed to complete loan repayment. In the more recent graduating classes, multiple modes of practice were more common compared to those who graduated in earlier years. The majority of alumni felt that their student debt did not impact their chosen mode of practice, but it did contribute to life choices. **Conclusions:** Students are taking out larger amounts of debt than they have in the past. This is partially due to rising tuition costs. Not only are they taking out larger amounts in student loans, but these loans have higher interest rates. The amount of debt that students are having to take out for their graduate degree is not necessarily affecting their mode of practice but is affecting their life choices. Students need to be financially informed so they can be financially stable and responsible after graduation. Students need to be better educated on the overall cost of optometry school, as well as how to pay back their loans efficiently.

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## CHAPTER 1

### INTRODUCTION

Tuition for optometry school around the country is climbing. The cost to earn a degree as a doctor of Optometry is becoming more and more costly. Optometry students should be informed, from the time of application, how much it will cost to acquire a degree as well as the effects this debt could have on career outlooks. Using loan money to pay for tuition and living costs has become the norm for many graduates and some have found the aftermath crippling. Paying back these loans can take some up to 30 years. Students applying for graduate degrees specifically at the Michigan College of Optometry should be aware of not only the cost of tuition but also the debt that students have taken out before them and how it has affected their lives after school and their career choices. This will allow them to make more educated decisions about the career they would like to pursue. This survey aims to answer the questions of whether students entering the program are aware of the financial burden, and if it has affected the careers of new graduates.

## CHAPTER 2

### METHODS

Current students and graduates of the Michigan College of Optometry were surveyed via an anonymous, short online questionnaire. No identifying material was asked for in the survey. A reference of the survey questions administered can be found in Appendix B. The voluntary survey was sent to subjects via emails that were on file for contact purposes at the Michigan College of Optometry. The survey results were analyzed for any patterns and to determine the percentage of each response chosen. This study was approved by the Ferris State IRB. See Appendix A for the letter of approval.

## CHAPTER 3

### RESULTS

There were two cohorts targeted during this study, alumni and current students. This leads us to have two sections of results.

#### ***Student Survey***

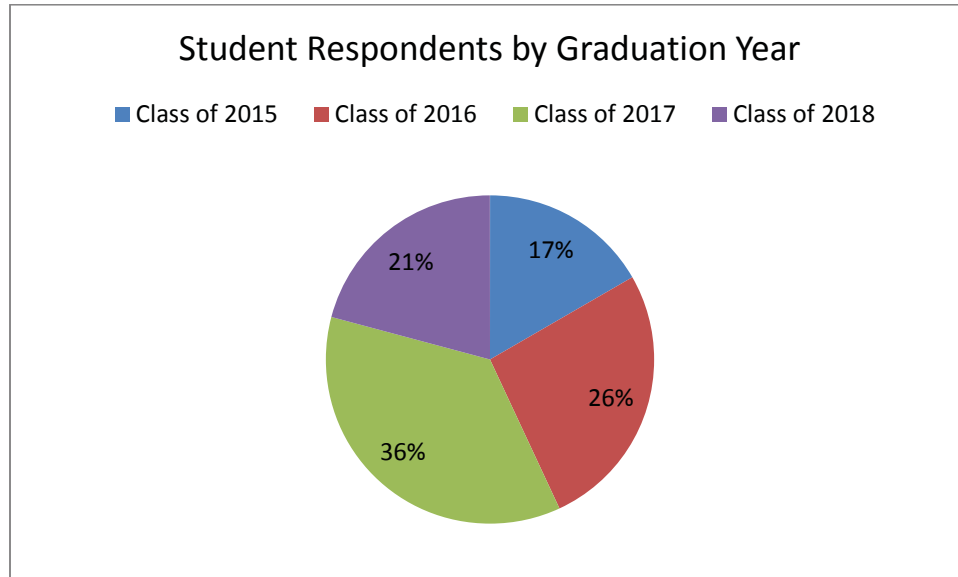
Students currently enrolled in the Michigan College of Optometry were surveyed. This included students in the graduating classes of 2015-2018. The data analysis is below, and trends over time are discussed subsequently. This approach to data analysis attempts to uncover factors that contribute to a higher debt amount, and/or hinder students from appropriately managing their debt during and after optometry school.

#### ***Class of 2015-2018 (n=70)***

The student cohort comprised of 70 Michigan College of Optometry students (n=70). However, Graph 1 below includes 72 total responses. Two individuals only answered the first question included in the survey which asked for the year of graduation. Since all other survey questions had 70 responses, that was the number used to perform data analysis. Members of the 2015 graduating class made up 17% (n=12) of the responses, the class of 2016 accounted for 26% (n=19), the class of 2017 accounted for 36% (n=26), and the class of 2018 accounted for 21% (n=15) of student survey responses (See Figure 1).

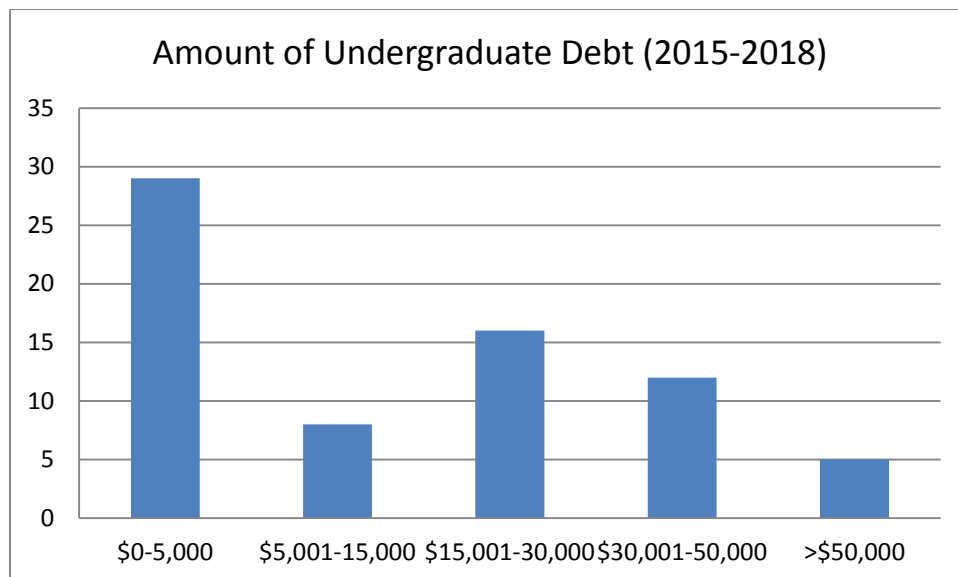


Figure 1



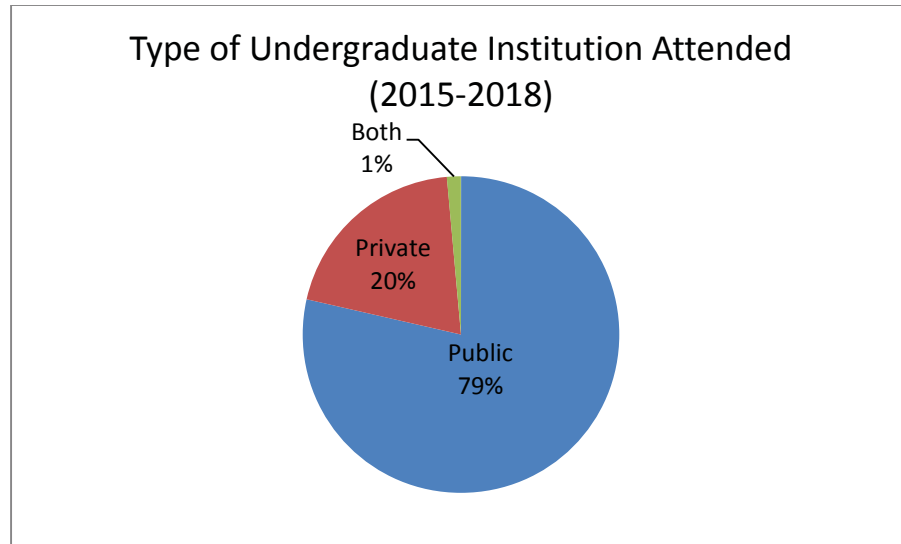
Out of the 70 responses gathered, 41% reported an undergraduate debt of \$0-\$5,000 (n=29), 11% reported \$5,001-15,000 (n=8), 23% reported \$15,001-30,000 (n=16), 17% reported \$30,001-\$50,000 (n=12), and 7% (n=5) reported greater than \$50,000 (See Figure 2).

Figure 2



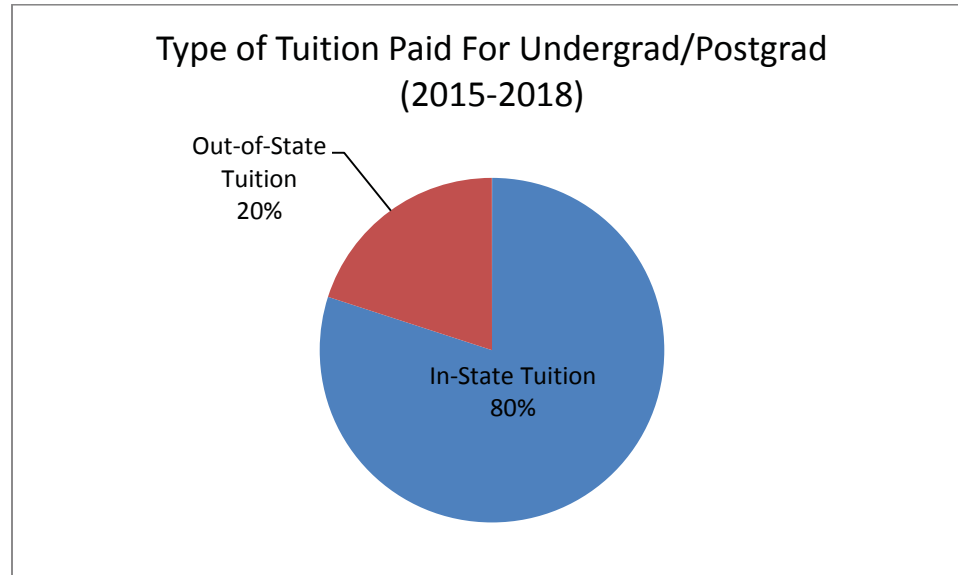
It is important to note that 79% (n=55) of responders attended a public school while 20% (n=14) attended a private school. One person attended both a private and public undergraduate institution (See Figure 3).

Figure 3



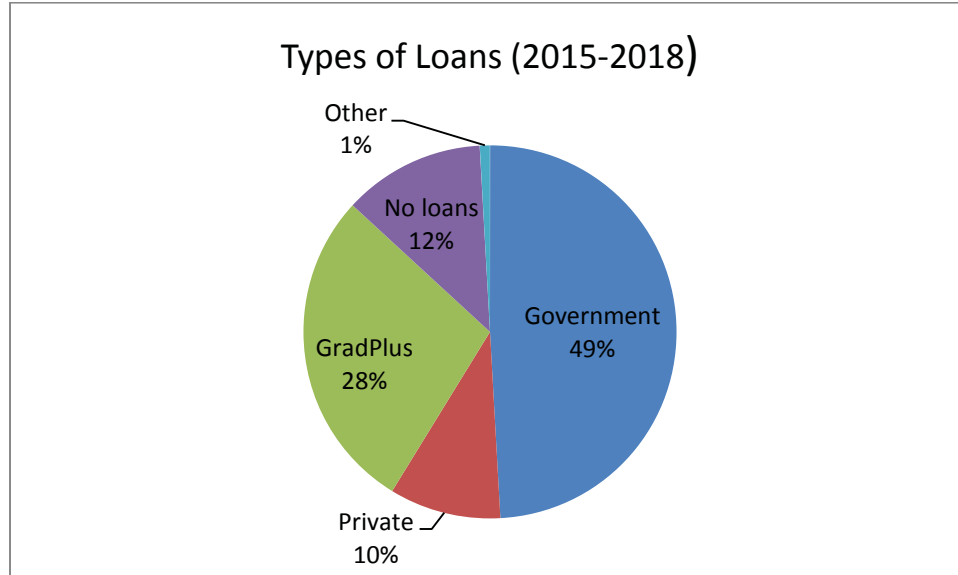
A majority of student debt was accumulated from paying in-state tuition at 80% (n=56), while 20% (n=14) of responders reported paying out-of-state tuition for two years or less (See Figure 4). Those who paid out-of-state tuition tended to have more undergraduate debt, but there was no clear correlation between the amount of undergraduate debt and whether a public or private institution was attended.

Figure 4



In terms of loan types used during undergraduate and optometry programs, government loans were taken out most frequently, used by 80% (n=56) of responders. GradPlus loans were utilized by 46% (n=32), and 16% (n=11) took out private loans. Other forms of payment were used by 20% (n=14) of the student cohort. One person had a military scholarship, and the remaining 20% (n=14) did not take out any loans to fund their education (See Figure 5).

Figure 5



When asked about debt repayment, only 37% (n=26) of student responders felt informed on how to pay back debt efficiently (See Figure 6). Out of the 70 optometry students included in the study cohort, 41% (n=29) felt informed on how much was reasonable to borrow via loans during optometry school (See Figure 7).

Figure 6

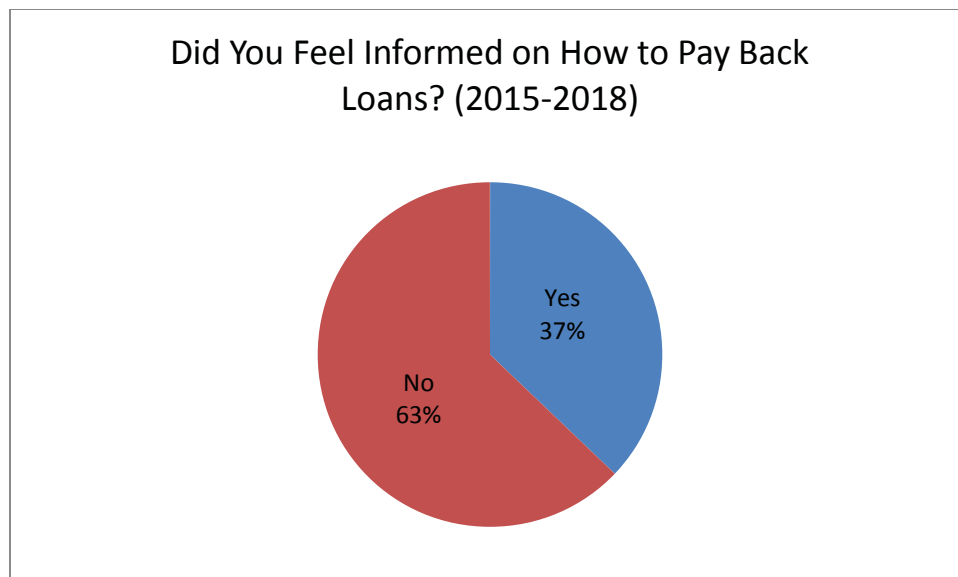
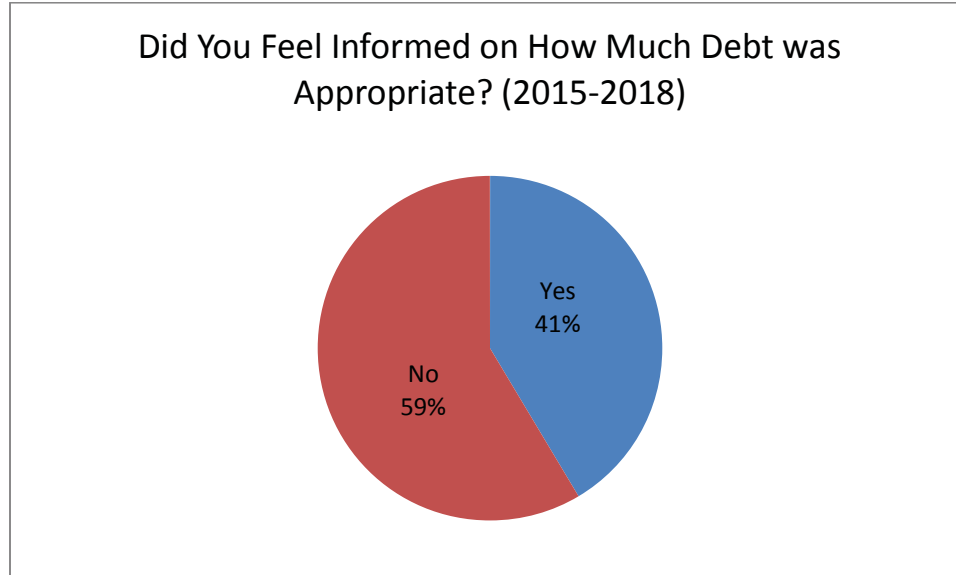


Figure 7



### *Alumni Survey*

The survey targeted Alumni that graduated between the years of 1979 and 2014. Since tuition and the cost of living were higher in 2014 as compared to 1979, reporting all of the alumni data together could create large outliers and potentially skew the statistics. In attempt to avoid this, the alumni were sorted into 3 categories based upon graduating year as follows: 1979-1990, 1991-2000, and 2001-2014.

#### ***1979-1990 (n=30)***

The most common amount of undergraduate debt taken out by this group was \$0-5,000, 43% (n=13). The category receiving the next highest amount of responses was \$5,001-15,000, at 26% (n=8) (See Figure 8). Total debt after graduation from the Michigan College of Optometry had the most responses in the \$10,001-40,000 category, 63% (n=19). The next highest category was \$0-10,000, which was 23% (n=7) (See Figure 9). Concerning the total debt after graduation, it is important to note the

categories that had no responses. There were no alumni in this group claiming to have more than \$110,000 in total debt after graduating optometry school. Also, only 3% (n=1) had \$80,001-110,000 in total debt.

Figure 8

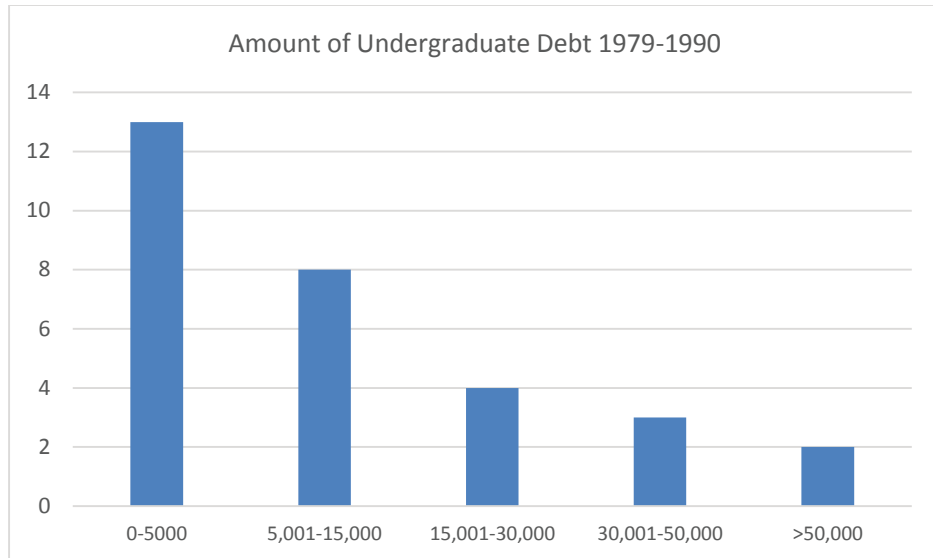
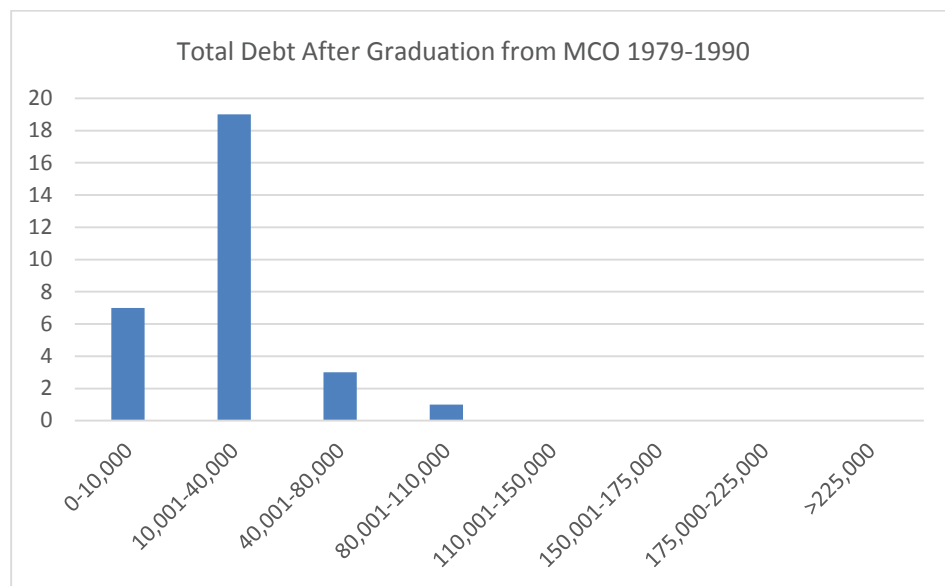
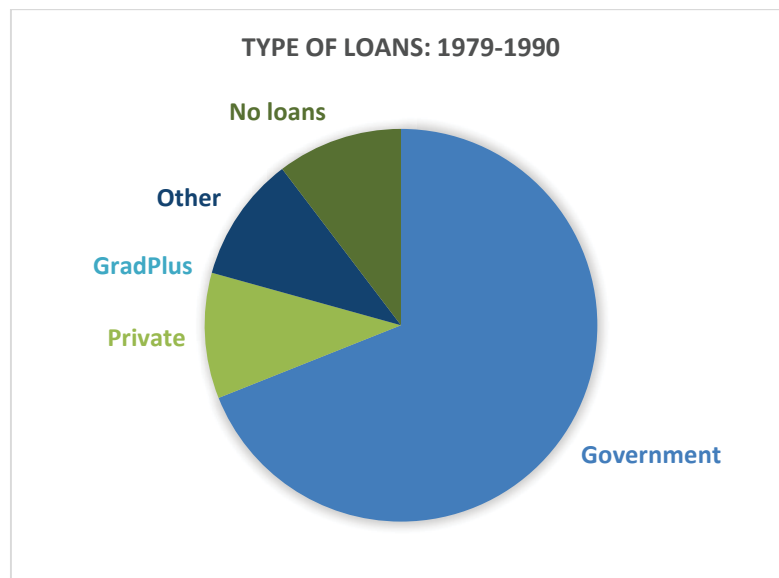


Figure 9



Government loans were the most prevalent type of loans taken out if needed, with 66% (n=20) of responders taking them out. Also, 10% (n=3) of responders reported not using loans. A few reported borrowing from family, using the health professional loan, and a navy scholarship, which are represented in the 'other' category below (See Figure 10). In terms of tuition, only 6.67% (n=2) of responders reported that they had to pay out-of-state tuition; one responder for 1 year and the other for 4 years.

Figure 10



Concerning loan repayment after graduation, 83.3% reported paying \$0-500 per month and 16.7% (n=5) reported paying \$501-1000 per month. Most, 60% of (n=18), alumni reported taking 5-10 years to pay back their loans, while 33% (n=10) reported paying them off in 0-5 years. Only 3% (n=1) of responders reported taking 10-20 or 20-30 years to pay back student loans.

The responses were split about evenly among alumni graduating 1979-1990 when asked if they felt informed about how much student debt was appropriate. Of the

respondents, 53% (n=16) reported they did not know how much was appropriate and 47% (n=14) felt they were informed on the topic (See Figure 11). When asked if they knew how to efficiently pay back the loans, 47% (n=14) responded that yes, they did, and 53% (n=16) responded that they did not (See Figure 12).

Figure 11

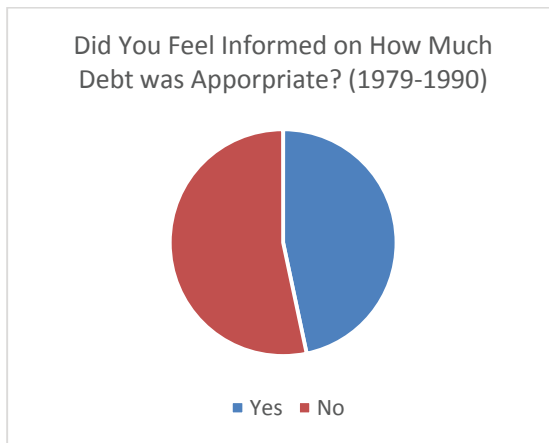
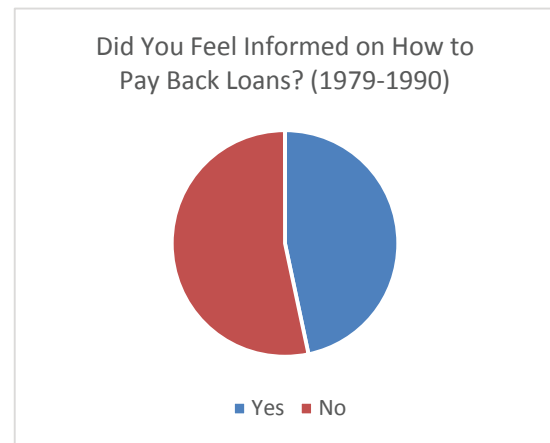


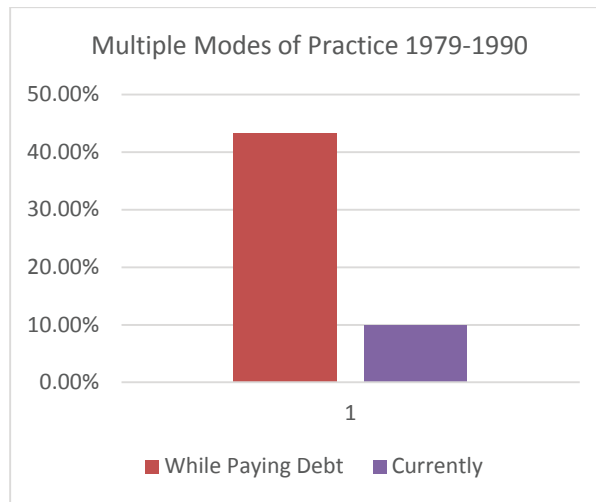
Figure 12



When asked about mode of practice while paying off student debt, the most common response was private practice with 20 responses. The next highest category was a commercial setting with 8 responses, and 43% (n=13) worked in multiple modes of practice. As for the current mode of practice, the most common response was in private practice again with 17 responses. There were an equal number of responses for group and commercial settings with 5 responses each. There were also 3 responders who reported that they were now retired. Only 10% (n=3) of responders stated that they were in multiple modes of practice (See Figure 13) currently.



Figure 13



Of alumni from classes 1979-1990, 90% (n=27) stated that their debt load did not affect the mode of practice they went into after school (See Figure 14). Also, 83% (n=25) of responders reported that their debt did not affect their life choices (See Figure 15) (ie. Buying a house, getting married, buying a car, etc.).

Figure 14

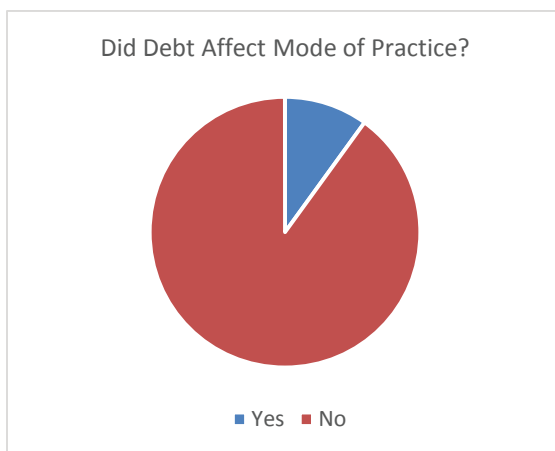
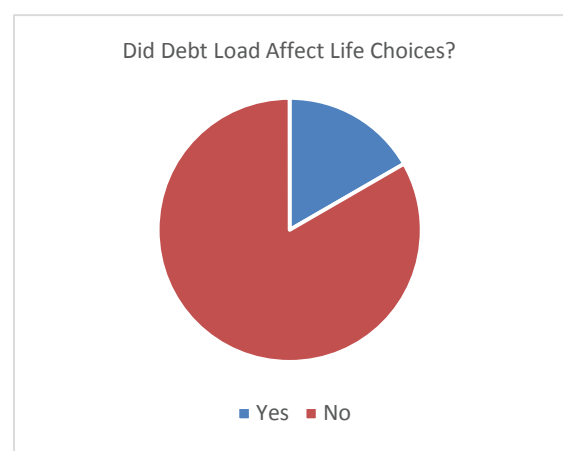


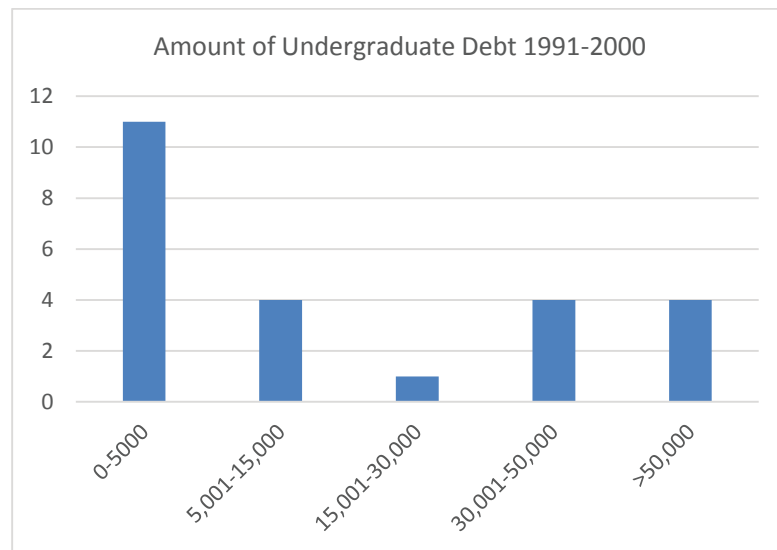
Figure 15



**1991-2000 (n=23)**

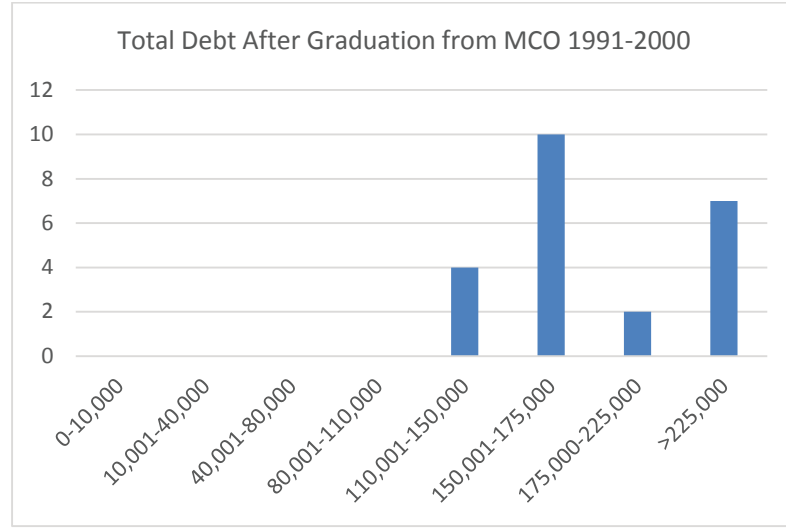
Again, in this group, the category that received the most responses for amount of undergraduate debt was \$0-5,000, with 37% (n=9) of responders. There was an even split with 17% (n=4) of responses in each of the following undergraduate debt ranges: \$5-15,000, \$20-50,000 and greater than \$50,000. There was only one response for the \$15-30,000 category, 4% (n=1) (See Figure 16).

Figure 16



The most common debt amount after graduate school was \$40-80,000 at 42% (n=10). The second most common response was \$0-10,000 with 29% (n=7) of alumni reporting in this category. There were also a few responses in the higher category of \$80-110,000 at 17% (n=4). Only 8% (n=2) said they had \$10-40,000 of debt after optometry school (See Figure 17).

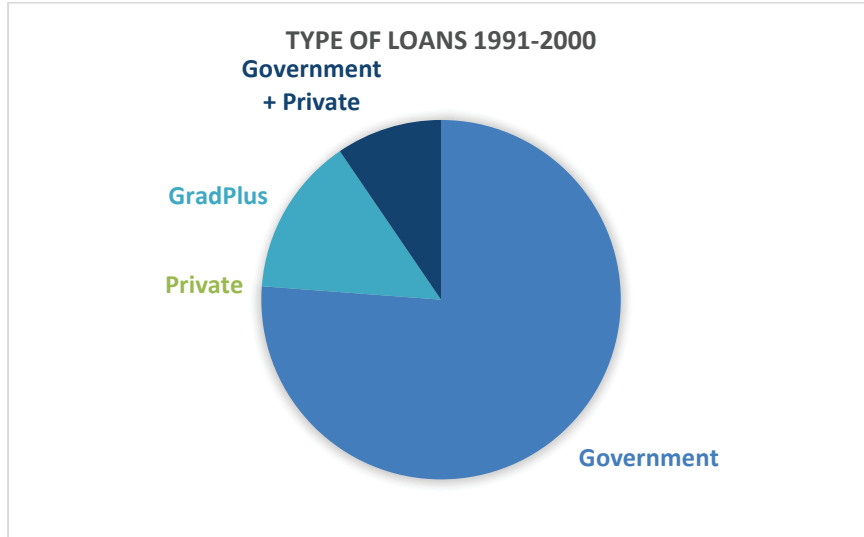
Figure 17



Only 9% (n=2) responders went to a private undergraduate university and all others went to a public institution. There were also only 9% (n=2) responders who reported having to pay out-of-state tuition; one responder for one year and the other for one semester.

Government loans were utilized most often at 69% (n=16) of responders. The second highest response was having used no loans, with 26% (n=6) of responders. GradPlus loans were used by 13% (n=3) of responders, 9% (n=2) used a combination of government and private loans, and 9% (n=2) had contribution from parents and did not require loans (See Figure 18).

Figure 18



When asked if they felt like they knew how much money was appropriate to take out in student loans, 65% (n=15) people reported feeling uninformed (See Figure 19). When asked if they felt they knew how to pay back the loans after graduation, 65% (n=15) said yes (See Figure 20).

Figure 19

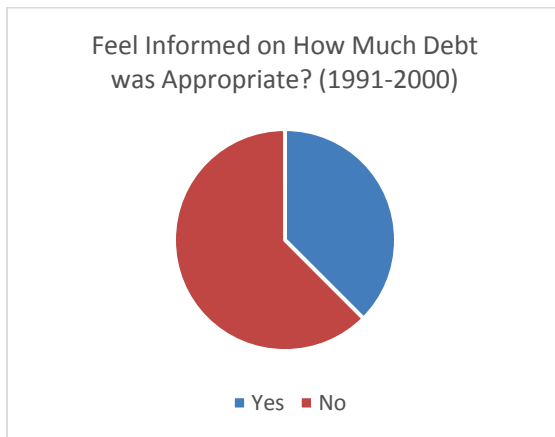
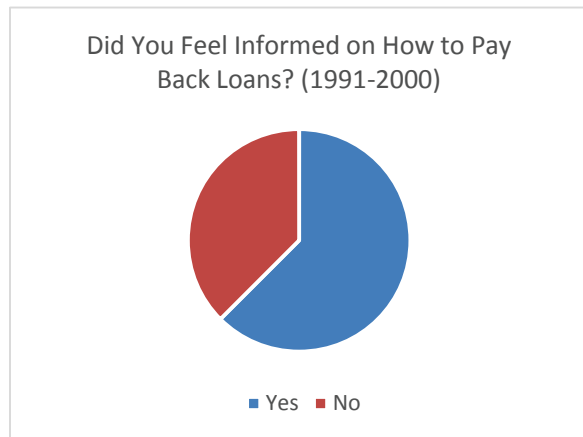


Figure 20



When asked what mode of practice they were in while paying off student debt, the most common response was a commercial setting with 12 responses. The next highest category was in private practice with 10 responses. Of responders, 35% (n=8) reported working in multiple modes of practice while paying off debt.

After debt was paid off, the most common mode of practice was private practice with 11 responses in that category. Interestingly, after student debt was paid off there was a decrease in number of people who still worked in commercial settings, with 7 responders. There were only 13% (n=3) of responders who reported working in multiple modes of practice currently (See Figure 21). Of responders, 74% (n=17) said that the amount of debt they took out did not affect their mode of practice after graduation (See Figure 22).

Figure 21

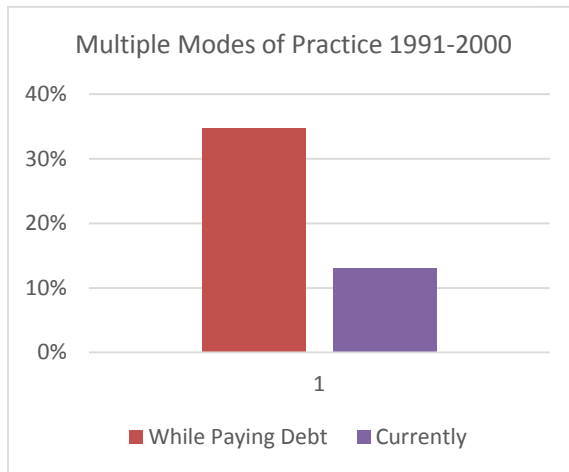
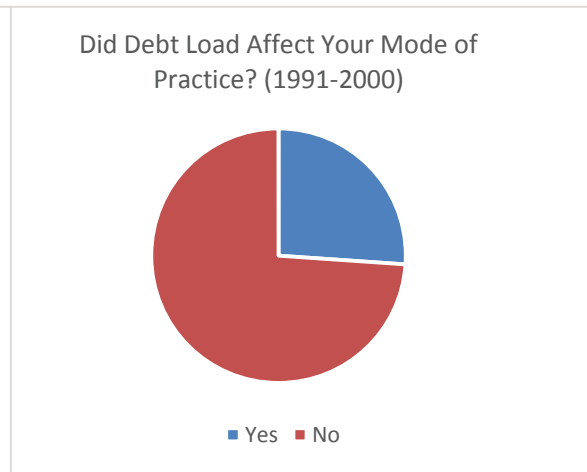


Figure 22

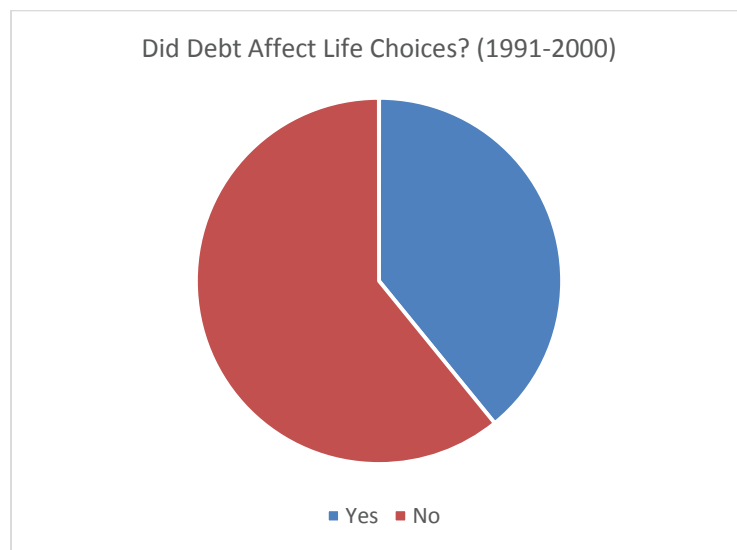


It took most people 0-5 years to pay off their student debt with 52% (n=12) of responses in this category. The next highest category was 5-10 years with 30% (n=7) of responders. Only 4% (n=1) reported taking 20-30 years to pay off their student loans. The

monthly payments for these loans were on the low side with 70% (n=16) stating they were only \$0-500, 26% (n=6) reported monthly payments of \$500-1,000, and only 9% (n=2) paid \$1,000-3,000 per month.

When asked if debt load affected life choices, such as buying a newer car, house, getting married etc., 61% (n=14) claimed it did not. Of the 39% (n=9) that reported debt load did affect their life choices, one responder commented that they did not have to take out loans, so the impact was positive (See Figure 23).

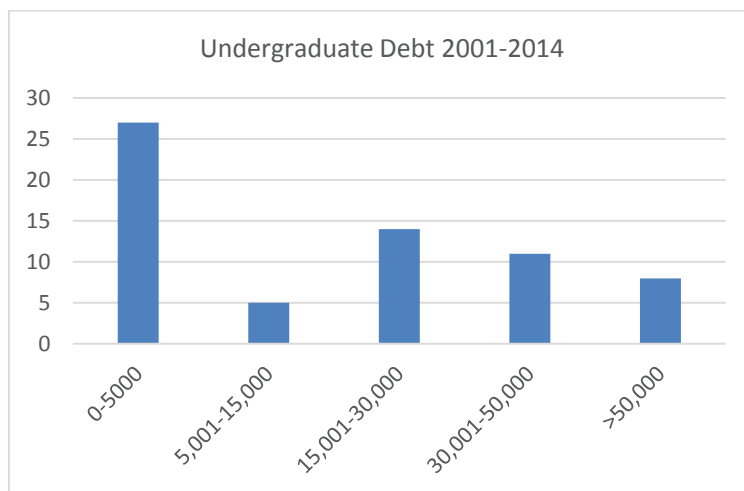
Figure 23



**2001-2014 (n=65)**

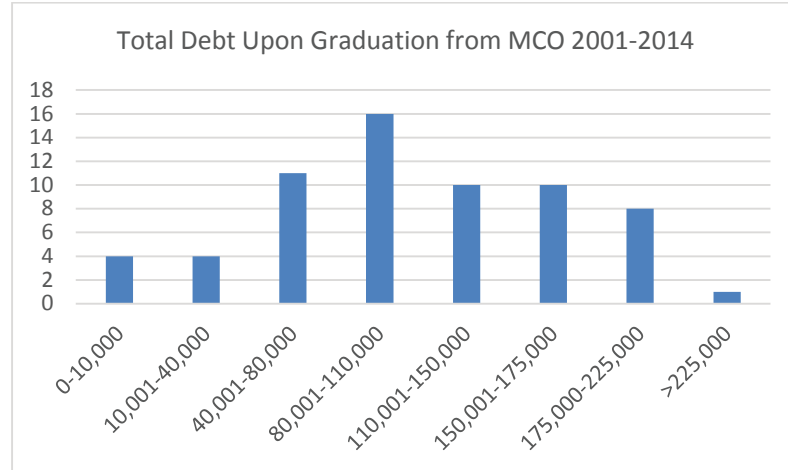
The most common range of Undergraduate debt for this group was \$0-5,000 at 42% (n=27) of responders. The category that received the second highest amount of responses was \$15,000-30,000 with 22% (n=14). The \$30-50,000 category accounted for 17% (n=11) of responses, and 12% (n=8) reported undergraduate debt greater than \$50,000 (See Figure 24).

Figure 24



After graduation from the Michigan College of Optometry, 2% (n=1) of responders reported having more than \$225,000 in total debt. The category with the most responses was \$80,000-110,000 with 25% (n=16) of responders, while 17% (n=11) of responders were in the \$40,000-80,000 range. There were 15% (n=10) of responders in each of the \$110,000-150,000 and \$150,000-175,000 range. There was 12% (n=8) that reported having \$175,000-225,000 of total debt. There were only 6% (n=4) of responses in each of the \$0-10,000 and \$10,000-40,000 ranges. It is important to note that one responder received loans from their parents and another responder had tuition covered by scholarships (See Figure 25).

Figure 25

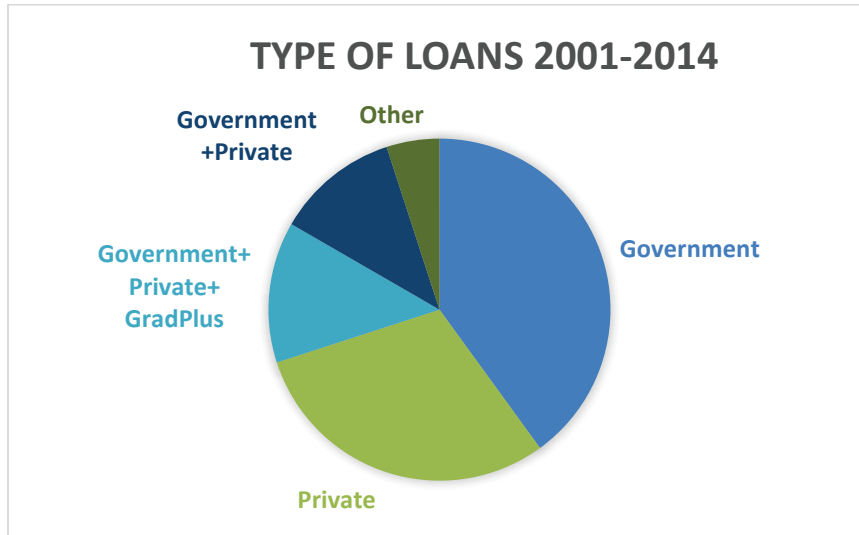


There were more people that reported having gone to a private university than the other 2 groups of alumni, with 17% (n=11) saying they did. Only 3% (n=2) of responders attended both public and private undergraduate institution. The majority attended a public university, with 71% (n=46) of responses in that category.

Aside from the two responders who reported using scholarships or borrowing from family, the majority, 37% (n=24) of alumni had to take out government loans. Some responders only utilized private loans, 28% (n=18), while 12% (n=8) took out both government and private loans. There was 11% (n=7) of responders who had to take out loans from all 3 categories—government, private, and GradPlus (See Figure 26).



Figure 26



When asked if they knew how much money in loans was appropriate to borrow for their education, 71% (n=46) said no, they did not (See Figure 27). When asked if they knew how to pay the loans back after graduation 57% (n=37) said that yes, they did (See Figure 28).

Figure 27

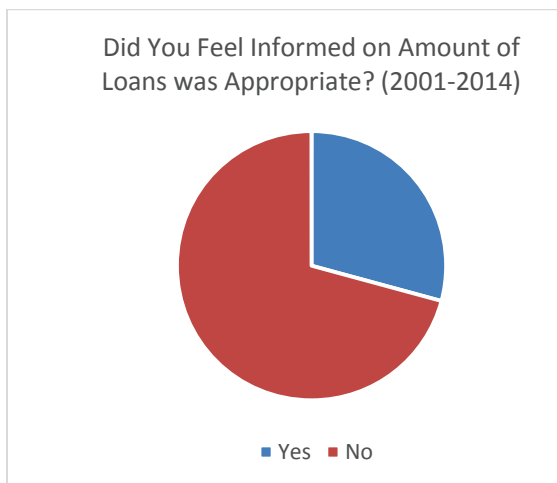
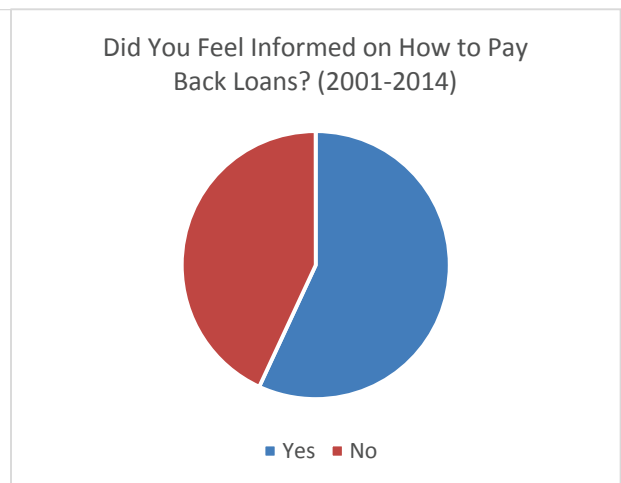
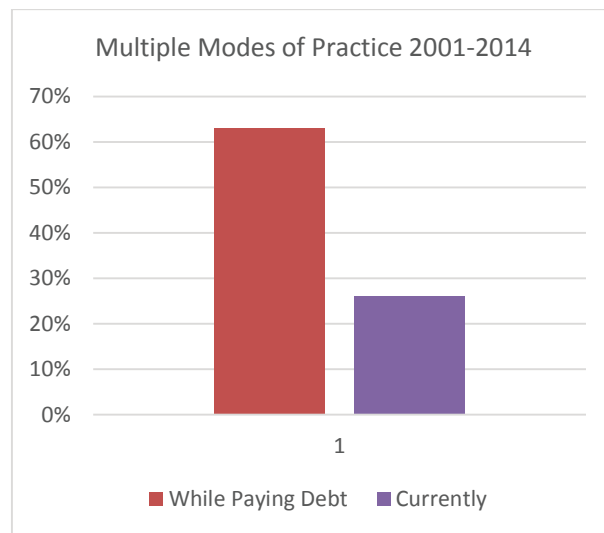


Figure 28



The most common mode of practice while paying off student debt was private practice with 37 responses. The second most common was commercial setting with 33 responses. The next two highest categories were independent contractor and group practice having 17 and 14 responses, respectively. Of responders, 63% (n=41) reported working in multiple modes of practice while paying off student debt. When asked for current mode of practice, the most common response was private practice with 30 responses. Working in a commercial setting had 13 responses, independent contractor had 12 responses, and group practice had 11 responses. There were 36% (n=23) of responders who reported currently working in multiple modes of practice (See Figure 29).

Figure 29

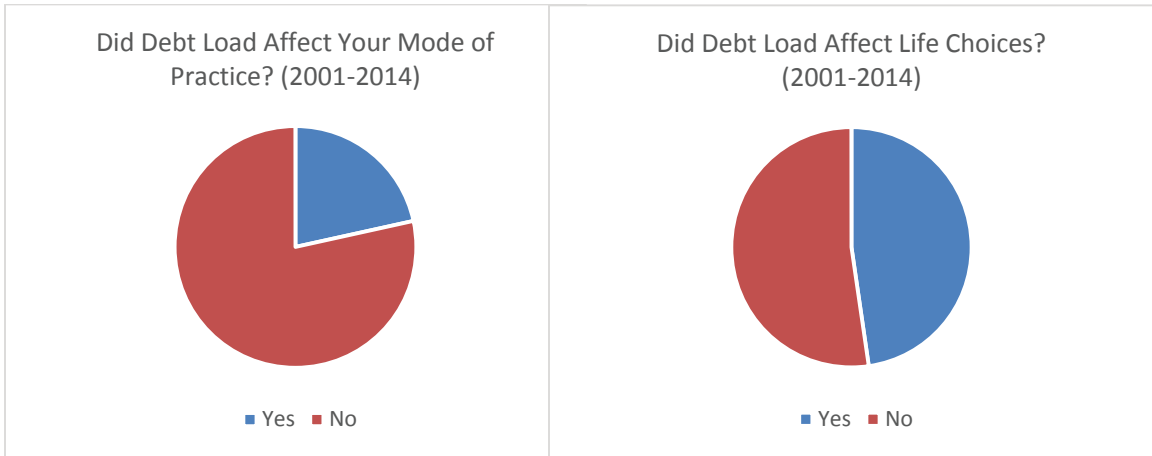


When asked if the amount of student debt affected their mode of practice after graduation, 78% (n=51) reported that no, it did not (See Figure 30). When asked if their

debt load affected their life choices, the responses were pretty split with 52% (n=34) responding no and 48% (n=31) responding yes, it did (See Figure 31).

Figure 30

Figure 31



## CHAPTER 4

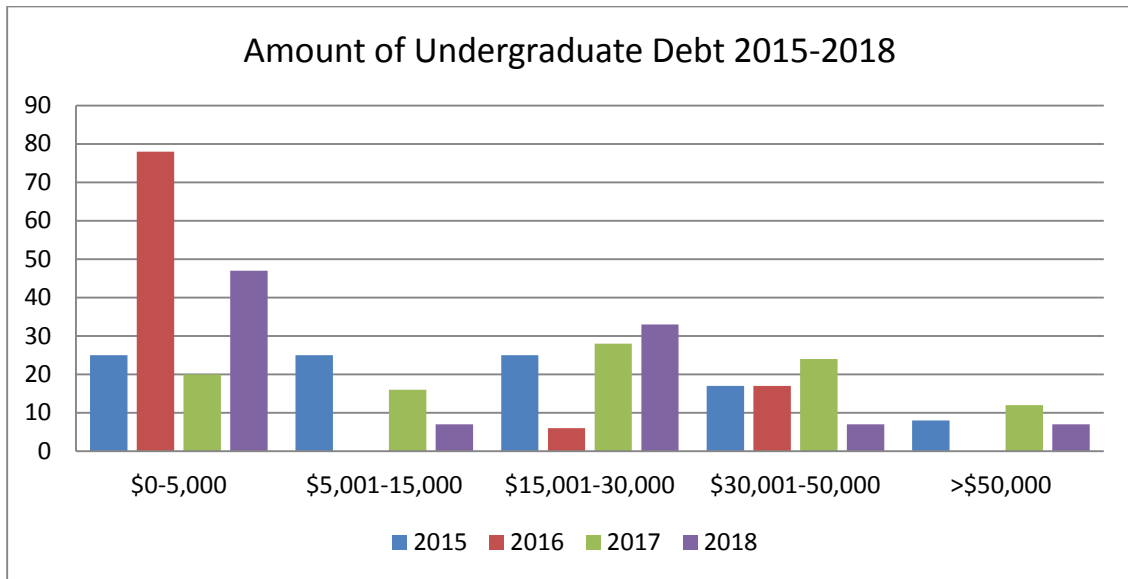
### DISCUSSION

#### *Student Survey*

In order to better analyze trends over time among current optometry students, this discussion will compare data from each class surveyed. As seen in Figure 32, the majority of current optometry students have less than \$30,000 of undergraduate debt. However, especially with the graduating classes of 2017 and 2018, the spread is becoming more evenly distributed. The classes of 2017 and 2018 were also the only ones with respondents who claimed to have greater than \$50,000 in undergraduate debt. This could partly be due to increasing tuition among undergraduate institutions. The graduating class of 2016 showed undergraduate debt amounts highly skewed towards the lower end of the spectrum. It is important to note that this class also had the highest number of respondents claiming no loans were used. It is interesting that the class of 2016 had more members paying out-of-state tuition yet significantly less total undergraduate debt as compared to the other classes. This may be due in part to lower tuition costs in the state that they completed their undergraduate degree in, but this was not part of the study. In addition, most of those respondents who reported paying out-of-state tuition fell into the lower undergraduate debt ranges. Other factors could certainly

contribute to this such as scholarships and family financial contributions. Further investigation would be required to determine the specific reasoning for this finding.

Figure 32



Another factor to consider is whether students are becoming more informed over time about student debt utilization and repayment. Figures 33 and 34 below display the responses regarding how well informed current optometry students felt on the topic.

Figure 33

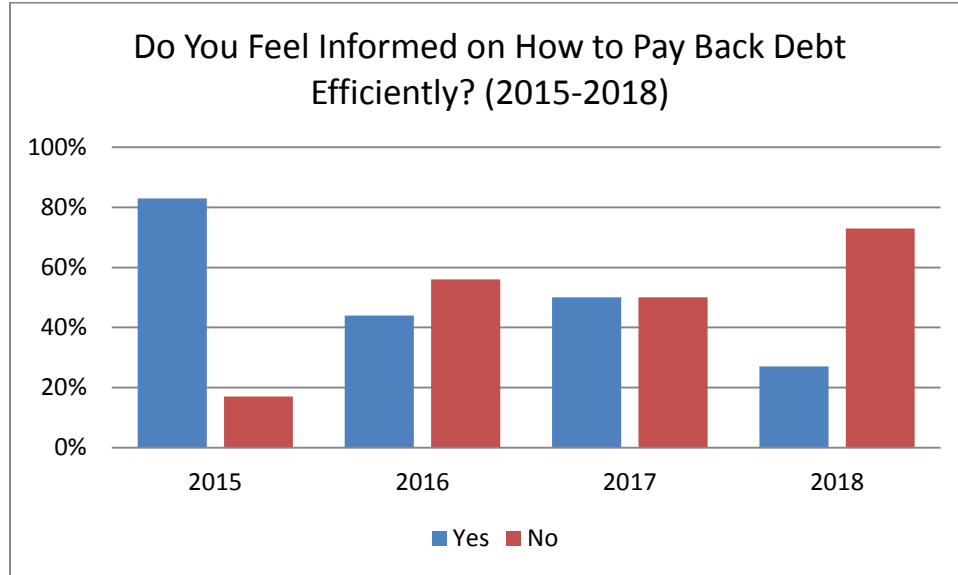
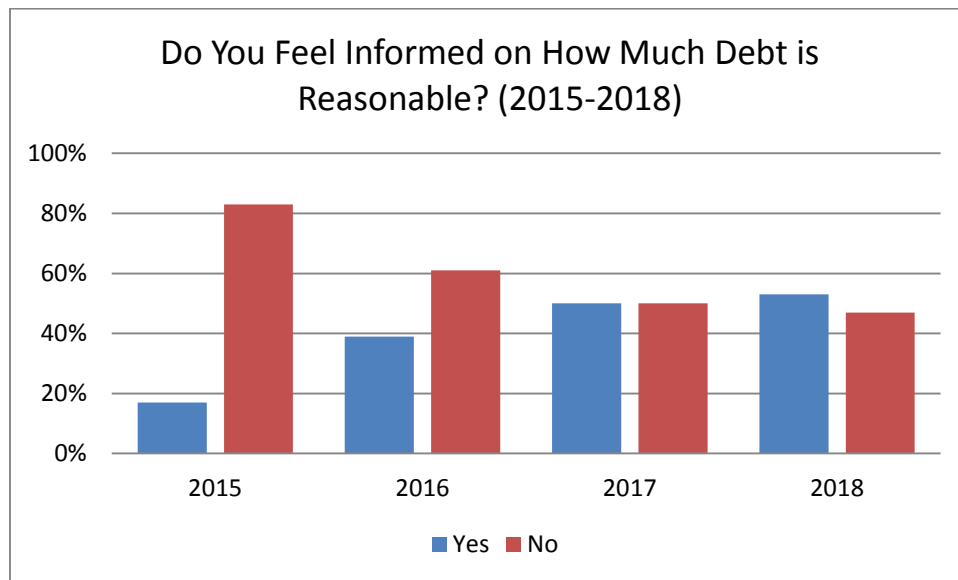


Figure 34



It is clear from the graphs above that the respondents closer to graduation tended to feel more educated on how to repay their student loans but did not know how much debt was reasonable to have. This may be partially due to a change in information

presentation to new students over time, or could also be indicative of the independent research or experience of the students as they progress through their optometric education.

Interestingly, the opposite trends were seen in the alumni cohort (See Figures 42 and 48). Based on this data, it could be argued that the schools are better informing incoming students of how much student debt to expect after optometry school, but in recent years may not have spent as much time educating incoming students on how to repay those loans. Being well informed about how much student debt is reasonable after attending optometry school and knowing how to pay back the loans efficiently could greatly benefit students and also possibly decrease the amount of student debt per person accumulated upon graduation.

The following graphs display the types of loans that are being taken out by each class currently enrolled at MCO (See Figures 35, 36, 37, and 38).

Figure 35

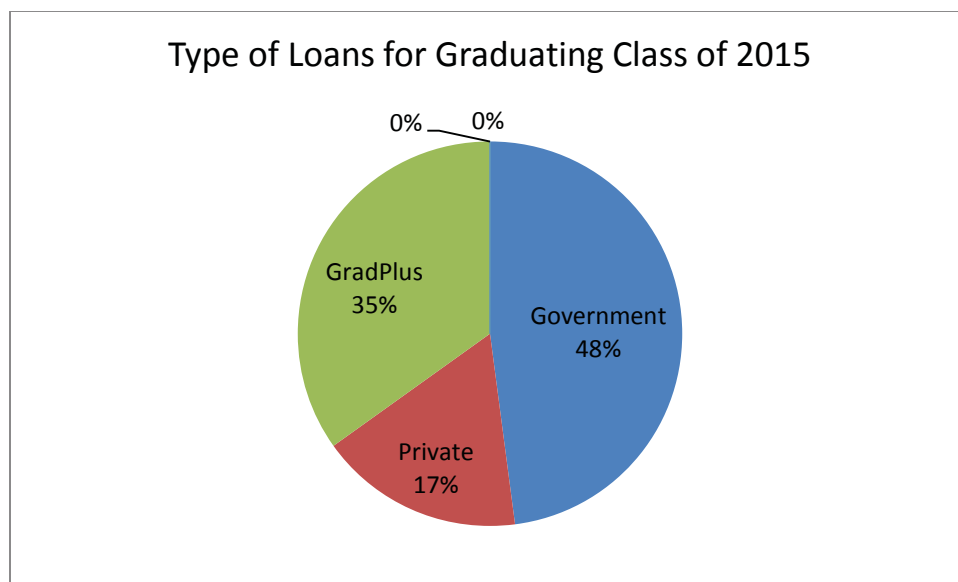


Figure 36

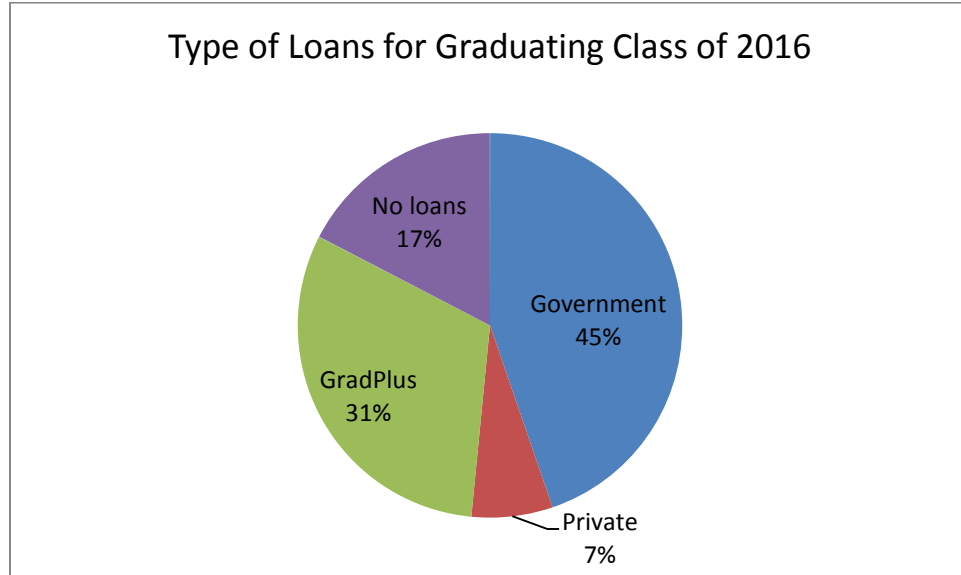


Figure 37

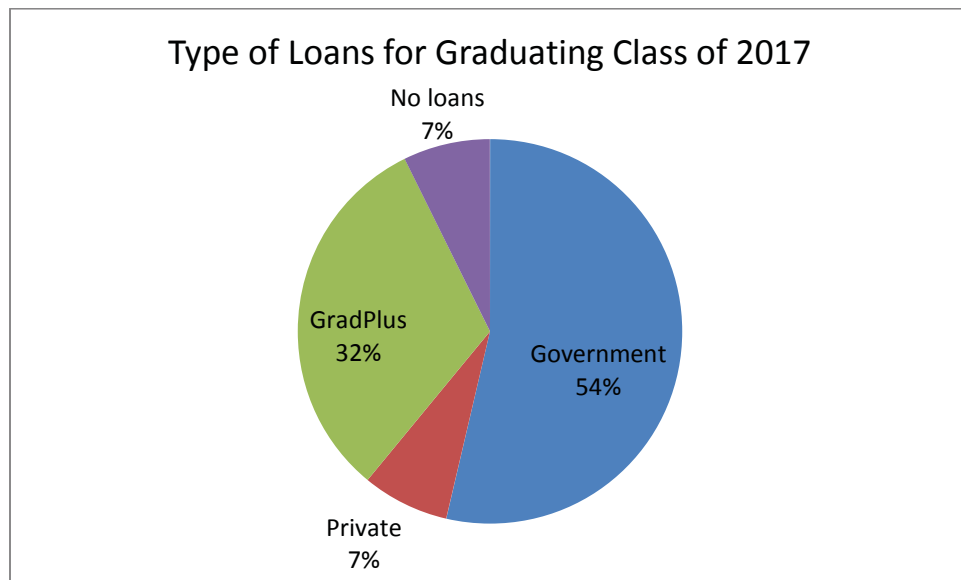
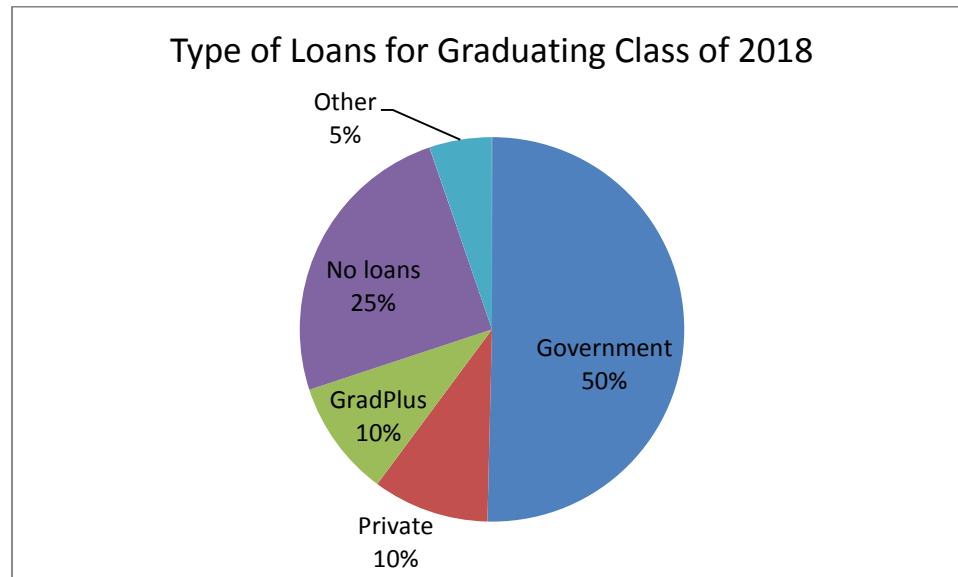




Figure 38

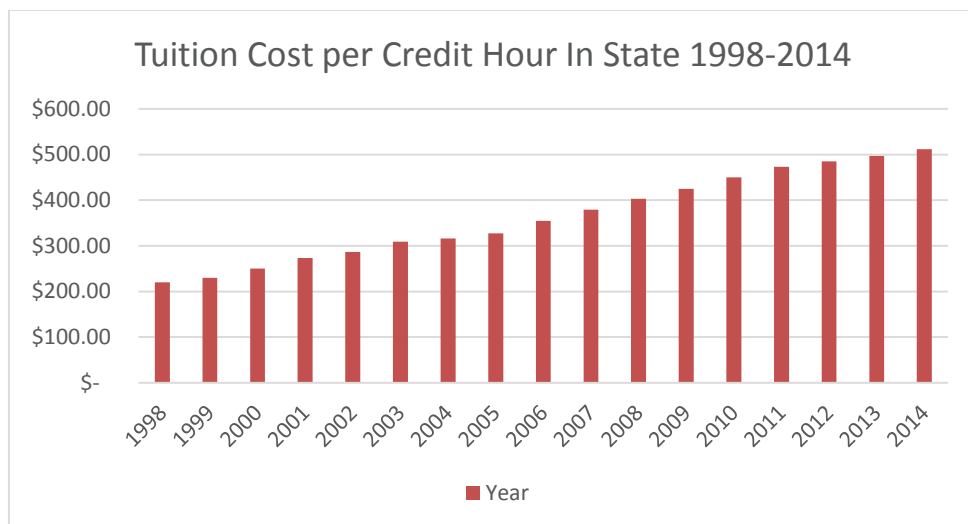
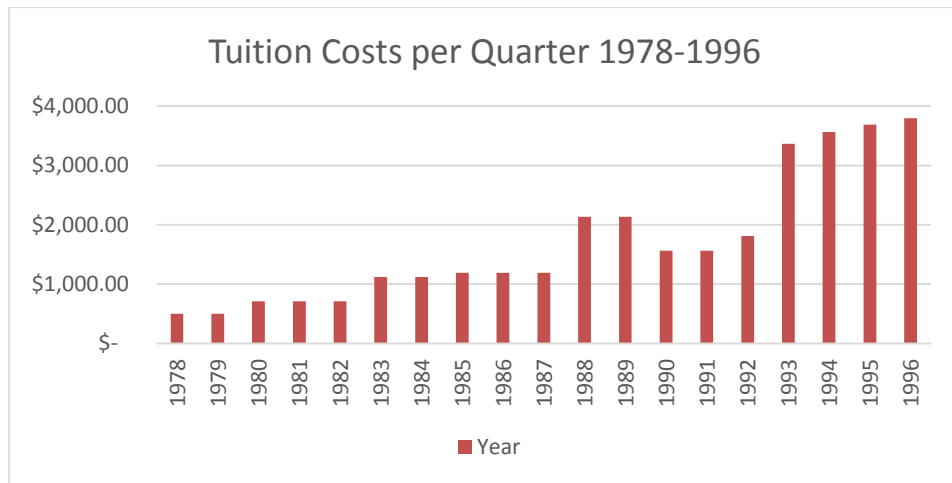


When compared to the alumni data, the distribution of loan types reported by the student cohort show similar trends over time (See Figures 43-45). Both cohorts have more loan type diversity in later graduating classes. The possible reasons for this were not investigated in this survey. However, this could be partially due to the fact that some of the student responders were not finished with the education process, and thus had not required as many loans at the time of the survey compared to the classes closer to graduation.

### ***Alumni Survey***

The alumni cohort was separated by graduating year due to change in tuition costs from year-to-year. Figure 39 provides a breakdown of tuition costs by year for the Michigan College of Optometry. Tuition rates were originally determined per quarter (3 quarters per year), then changed to billing per credit hour. The two forms of billing are displayed separately below in Figure 39.

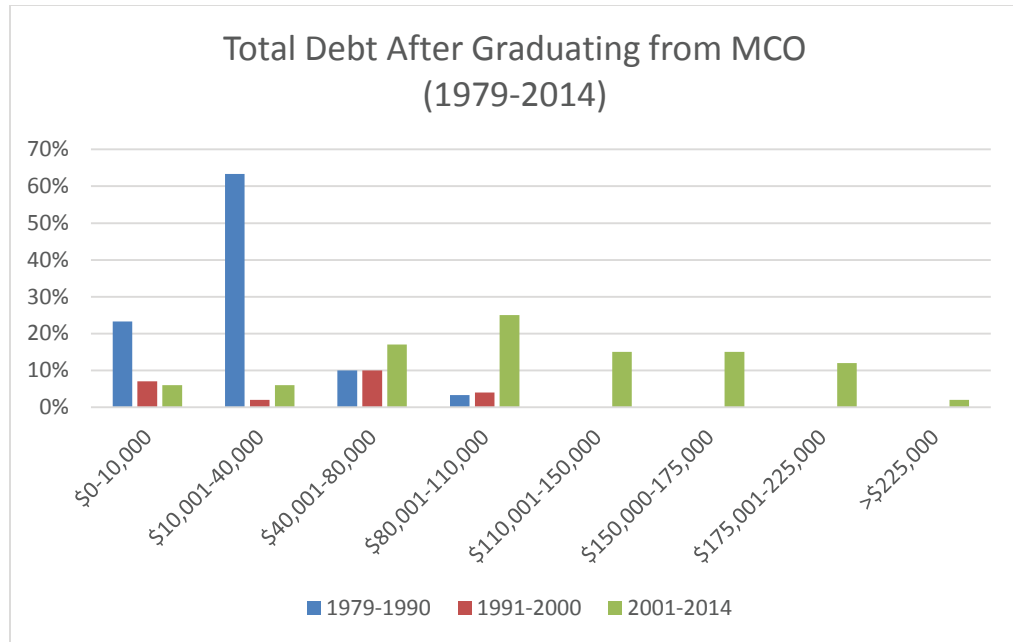
Figure 39



Tuition costs have steadily increased since 1979, as seen in Figure 39. This trend correlates with total debt amount reported by alumni from different graduating years (See Figure 40). In the earlier graduating classes, the majority of responders reported a much lower total debt as compared to the later graduating classes. Even in the second group of responders that graduated in the years 1991-2000, there was no debt reported over \$110,000. It wasn't until the 2001-2014 graduating classes that total debt of over

\$110,000 was reached. The trend for the latest graduating class is in the higher numbers of debt as compared to those alumni who graduated earlier which matches the rising tuition costs for MCO.

Figure 40



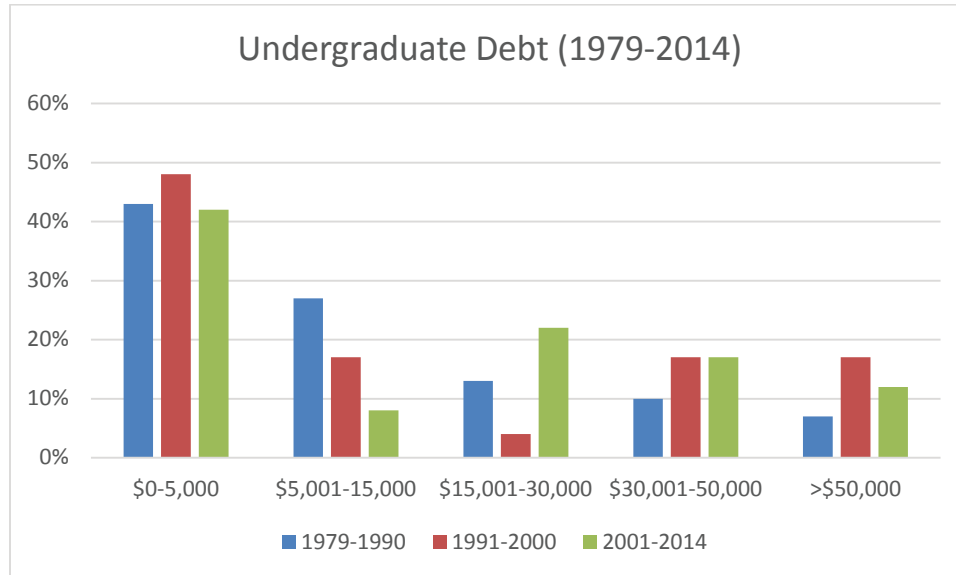
As the tuition has increased, so has the amount of total debt among Michigan College of Optometry alumni. Total debt after graduation can be affected by several factors, some of which were investigated in this survey. One factor, the type of university that was attended for the undergraduate degree, did not differ dramatically between the two cohorts. In both cohorts, public universities were most commonly attended with at least 75% of responders going to a public university only.

Another factor considered was whether alumni had to pay out-of-state tuition. Again, this did not differ significantly between the groups of alumni, with 9% being the

highest amount of responses in only one group. Of those who did pay out-of-state tuition for a portion of their schooling, it was one year or less.

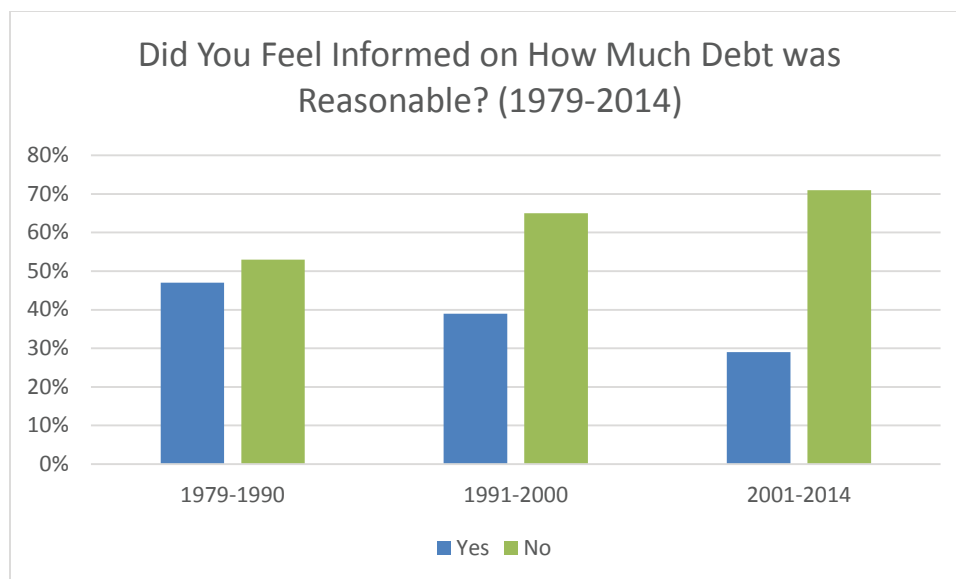
The last factor that was looked at in the survey was the amount of undergraduate debt before entering the Michigan College of Optometry. This data was analyzed to determine any correlation with total debt after graduation. Although not many responders attended private universities, there are large differences in tuition rates among public universities as well. Figure 41 shows the amount of debt after undergraduate education for the three different groups. The most common amount of undergraduate debt for all three groups was \$0-5,000. The amount of undergraduate debt varied from one group to the next but the overall trend was similar. This means that although undergraduate debt has some contribution towards total debt after optometry school, it is not the main contributor. Furthermore, if the amount of undergraduate debt was a large factor, the total student debt after optometry school would be more consistent over time. The largest difference between the three groups of alumni analyzed was the cost of tuition at the Michigan College of Optometry rather than the amount of debt accumulated from undergraduate universities.

Figure 41



Since the majority of optometry students are taking out several loans each academic year, it was asked if they felt confident about how much debt was appropriate to be taking out. Figure 42 shows the difference between the alumni groups surveyed.

Figure 42



Alumni who graduated later did not feel as informed about the amount of reasonable debt. This may partly be due to an increase in the amount needing to be borrowed due to tuition increase. On the other hand, some alumni reported that loans were not needed. Others reported supplemental help from parents, which kept loan amounts lower.

Bases on this survey, it is clear that the majority of current optometry students borrow a substantial amount of money in student loans to fund their education. As tuition increases, so does the amount of total student debt. Due to the demanding schedule and study load, optometry students are not able to effectively offset the cost of tuition with a part time job. This leads to a greater dependence on student loans for those who cannot pay tuition out-of-pocket. The survey also indicates that the type and amount of loans utilized affects repayment length, amount of monthly payments, and sometimes plays a role in career choice after graduation.

Government loans were the most prevalent type of loans for the earlier graduating alumni surveyed. Among those who graduated in 2001-2014, there was a combination of loans that was not in the earlier alumni groups. Government loans were still the most common for this group at 37% (n=24), but private loans took a close second with 28% (n=18) of responders. The graduating classes of 2001-2014 also took out a combination of government, private, and GradPlus loans, with 12% (n=8) reporting that was the case. There were 11% (n=7) of responders stating they took out government and private loans. The percentages of loan types reported were much more widely distributed for those who graduated 2001-2014 compared to the previous alumni groups (See Figures 43, 44 and 45).

Figure 43

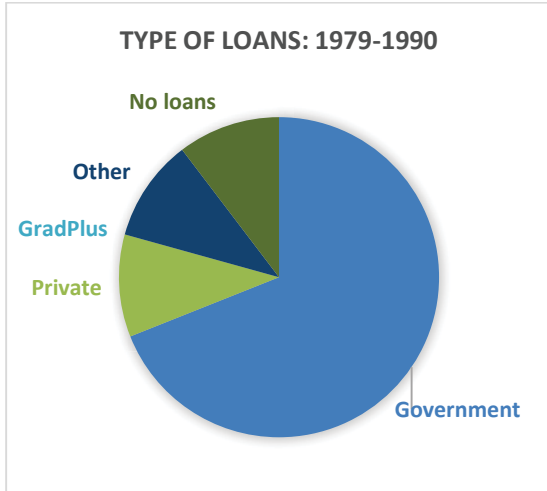


Figure 44

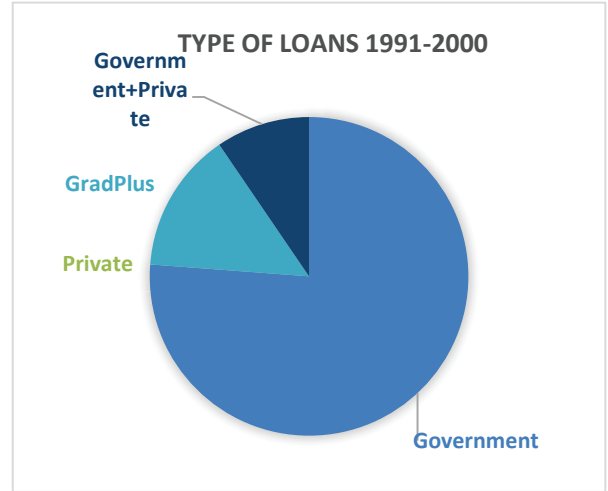
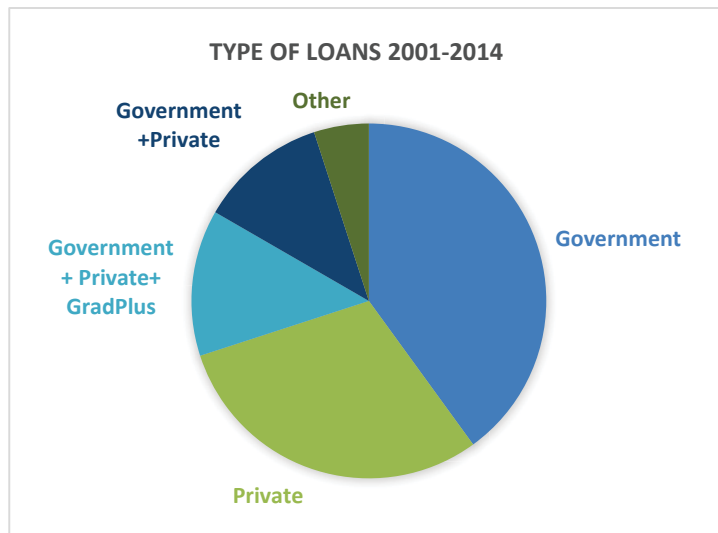


Figure 45



As the above figures show, government loans were the most common loan type in all alumni groups but were utilized by a lesser percentage of optometry students over time. Meanwhile, private loans and a combination of different loan types seemed to become more popular.

The interest rates on different loan types vary. This affects how quickly students are able to pay back loans, as well as the monthly payment amount. In order to consider this factor into the analysis of the survey results, the different interest rates were researched. For reference, table 1 lists some of the loan interest rates pertinent to this survey. According to studentaid.edu.gov, for the year of 2013, interest rates for direct unsubsidized loans from the government were at an interest rate of 3.86% for undergraduate degrees and 5.41% for graduate or professional degrees. Direct PLUS, or GradPlus loans were at 6.41% interest rate. For these loans, the rates are fixed for the life of the loan<sup>1</sup>. The interest rates are much higher for graduate students as compared to undergraduate students and as presented in Table 1, the interest rates also increased after 2013. This further adds to the debt load for later graduating optometry students.

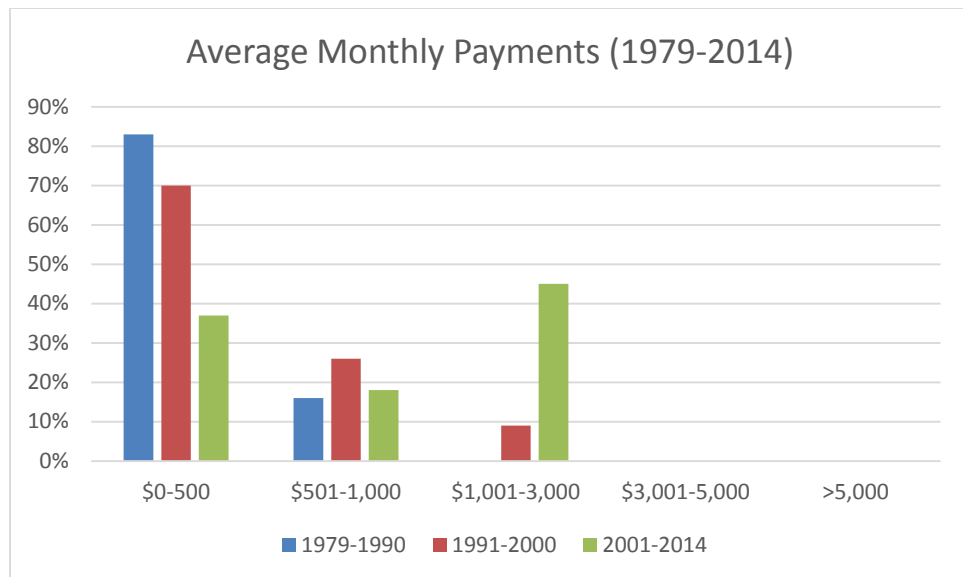
Table 1

<b>Interest Rates for Direct Loans First Disbursed on or After July 1, 2013</b>			
<b>Loan Type</b>	<b>Borrower Type</b>	<b>Loans first disbursed on or after 7/1/13 and before 7/1/14</b>	<b>Loans first disbursed on or after 7/1/14 and before 7/1/15</b>
Direct Subsidized Loans	Undergraduate	3.86%	4.66%
Direct Unsubsidized Loans	Undergraduate	3.86%	4.66%
Direct Unsubsidized Loans	Graduate or Professional	5.41%	6.21%
Direct PLUS Loans	Parents and Graduate or Professional Students	6.41%	7.21%



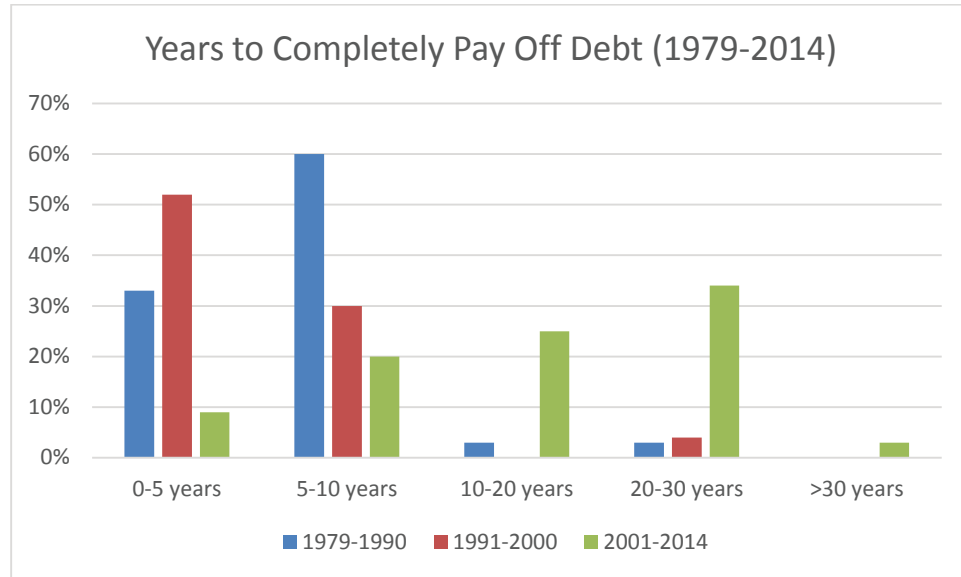
These interest rates need to be looked at in general terms to fairly assess the monthly payments and years it took the alumni to pay off their loans. The only interest rate that cannot be assessed are private loans as those differ depending on the source of the loan. This information was not asked for in the survey. Since interest rates generally increase over time, this can lead to longer repayment schedules and higher monthly payments for those who graduated at later dates. As presented in Figure 46, those who graduated later had higher monthly payments on average as compared to those who graduated earlier.

Figure 46



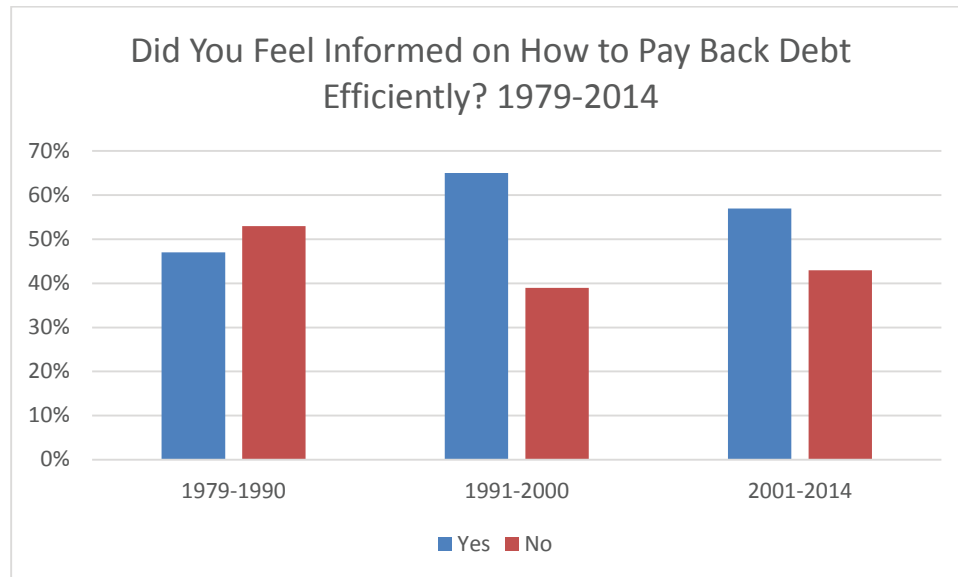
In terms of loan repayment schedule, there was an increase in average total number of years needed to completely pay off student loans for later graduating alumni (See Figure 47). This could be attributed to higher tuition and loan interest rates.

Figure 47



When the alumni were asked if they felt informed on how to pay back student loans efficiently, most responders reported that yes, they did. The responses were close to equal for the 1979-1990 group but in later two groups, the responses were mostly yes (See Figure 48). This shows that even though alumni did not know how much to borrow in student loans initially, by the end of optometry school the majority felt prepared to pay back the loans efficiently.

Figure 48

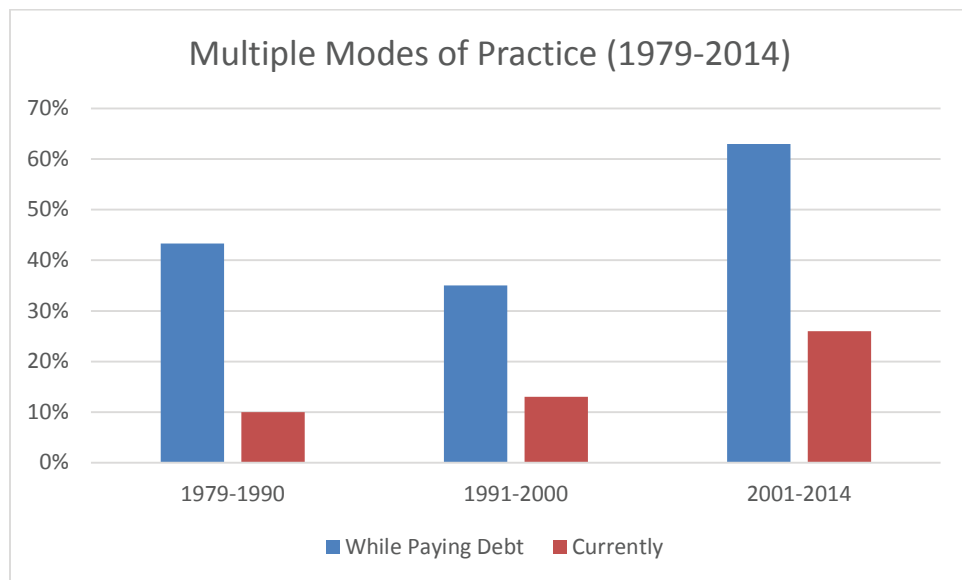


The mode of practice chosen after graduation can also play a role in how quickly students are able to pay back their loans. It is common knowledge that, on average, commercial settings pay more starting out than private practice. The survey did not inquire about initial salaries after graduation, but did ask about mode of practice while paying off student debt, as well as current mode of practice. Many alumni from the graduating classes of 2001-2014 reported an estimated 20-30 year loan repayment schedule. Therefore, the mode of current practice and mode of practice during loan repayment were the same for most of these alumni. Earlier graduating classes reported taking 10 years or less to pay back their loans, so it was more useful to compare current mode of practice to mode of practice during loan repayment in these groups.

In the 1979-1990 alumni group, 43% (n=13) of responders reported being in multiple modes of practice while paying off debt, while only 10% (n=3) were currently working in multiple practice settings. In the 1991-2000 group, 35% (n=8) of responders

were in multiple modes of practice while paying off debt and 13% (n=3) were currently in multiple modes of practice. Of the responders from the 2001-2014 group, 63% (n=40) were in multiple modes of practice while paying off debt, while 26% (n=17) were currently in multiple modes of practice (See Figure 49).

Figure 49



As is shown in the figure above, the majority of alumni were in multiple modes of practice while paying off student debt. In the comments section of the survey, many alumni stated that working in several practice settings was required to sustain lifestyle changes, including home purchase, car purchase, marriage, buying into a practice, or paying off student loans quicker. After debt was paid off, most optometrists worked in a single mode of practice.

When asked if the amount of student debt affected their mode of practice the results were quite consistent between all groups. Most said that no, their debt load did

not affect their mode of practice. However, student debt did seem to have an effect on life choices, especially for later graduating classes. In the 2001-2014 group, only 52% (n=34) of responders stated that student debt did not affect life choices. This is a significant decrease from the 1979-1990 group, for which 83% (n=25) of responders felt that student debt did not impact life choices. Based on comments made by survey respondents, student debt led to a greater need for further loans to finance things such as a vehicle, house, or practice purchase. One person commented that the debt accumulated did not affect the way they practiced, but they were not able to live the way they had wanted.

### ***Conclusion***

The purpose of this survey was to determine how much student loans are affecting graduates from the Michigan College of Optometry. This survey also examined the amount of loans necessary to complete an optometry degree and the perception of students and alumni regarding debt accumulation. Data from the student and alumni cohorts were then compared to determine any trends over time. This study will hopefully inform students entering the Michigan College of Optometry of what to expect and be better prepared financially.

Students now are taking out larger amounts of debt than they have in the past. This is partially due to rising tuition rates. Not only are they taking out larger amounts in student loans, but these loans have higher interest rates. These factors are causing them to alter their lifestyles after graduation due to the amount of debt accumulated. Many alumni are taking 20-30 years to pay off their loans and this is causing a lot of career

changes during the repayment process, as well as utilizing multiple modes of practice to incur more revenue.

Larger amounts of student debt increases the importance for students to be well informed so they can be financially stable and responsible after graduation. Even though students at the Michigan College of Optometry are informed of the cost, the survey indicates there is still uncertainty about how much of the cost should be covered by loans. The Michigan College of Optometry incorporates a class into the curriculum that teaches students how to manage money and what to expect after graduation. Even though this information is valuable, it may be presented too late for some, as loans need to be taken out right away or have already been taken out during their undergraduate degree. Students should be taught not only how to take out loans, as well as how much is reasonable to borrow even before choosing optometry as a career path. This is not necessarily something that the Michigan College of Optometry can institute, but could be offered online as a resource for potential students.

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APPENDIX A  
IRB APPROVAL LETTER



To: Dr. Paula McDowell, Ann Miller and Jamie Bala  
From: Dr. Stephanie Thomson, IRB Chair  
Re: IRB Application #140501 (Title: *Debt Accumulation of Michigan College of Optometry Students*)  
Date: June 26, 2014

The Ferris State University Institutional Review Board (IRB) has reviewed your application for using human subjects in the study, "*Debt Accumulation of Michigan College of Optometry Students*" (#140501) and determined that it is *Exempt-category 1C* from full committee review. 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 June 26, 2017.** It is your obligation to inform the IRB of any changes in your research protocol that would substantially alter the methods and procedures reviewed and approved by the IRB in this application. Your protocol has been assigned a project number (#140501) which you should refer to in future correspondence involving this same research procedure.

We also wish to inform researchers that the IRB requires annual follow-up reports for all research protocols as mandated by Title 45 Code of Federal Regulations, Part 46 (45 CFR 46) for using human subjects in research. We will send a one-year reminder to note the continuation of this project or to complete the final report. The final-report form is available on the [IRB homepage](#). 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  
ADMINISTERED SURVEY QUESTIONS

1. What year do you expect to graduate from MCO?
2. How much student debt did you have upon completing your undergraduate program?
3. What type of university did you attend for your undergraduate education?
4. What types of loans did you take out during your undergraduate and graduate programs?
5. Did you pay out of state tuition for any of your education?
6. Do you feel you are informed on how to pay back debt efficiently?
7. Did/do you feel informed on how much debt was a reasonable amount to take out for your graduate degree?
8. Please leave any feedback here.