

ACADEMIC INTEGRITY IN OPTOMETRY STUDENTS

by

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ABSTRACT

Background : Due to recent events within the optometric profession concerning academic integrity, this research study was intended to investigate the optometry students' definition of academic dishonesty and to discover the reasons why students may commit these acts. *Methods*: A two question survey with multiple response options was emailed to approximately 150 current and past optometry students from Michigan College of Optometry. However, the exact number of current versus past students is unknown. These questions were completed anonymously through the use of an online survey. The students who are or have been enrolled in the Michigan College of Optometry's graduate level program were asked to evaluate various degrees of academic dishonesty. *Results*: Student responses in what constitutes cheating varied; especially when it came to behaviors such as asking previous students about test material and obtaining old exams previously given. Although more than half of the students polled stated they would rather fail than partake in dishonest behavior, fear of failure or increasing a grade were also reasons to cheat. *Conclusions*: There is definitely a grey area in what students report is dishonest behavior. Therefore, faculty should be meticulous in defining what they consider cheating to maintain academic integrity in their courses.

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Introduction

The American Optometric Association's (1) code of ethics states, "it shall be the ideal, resolve, and duty of all optometrists to conduct themselves as exemplary citizens and professionals with honesty, integrity, fairness, kindness, and compassion."

Optometric students are held to these standards by their educational institution, colleagues, and faculty. However, academic dishonesty and cheating has become a higher profile issue across the United States in this profession (2). A study published in 2000 by Werner DL et. al. (3) surveyed students from 16 optometry schools asking them to self-report if they had cheated in optometry school. That survey found that 5.5% of students admitted to cheating in graduate school, while 13.9% admitted to dishonest behavior in undergraduate studies. We can not be sure that these numbers are completely accurate due to the fact that students may not always tell the truth when asked to self-report. A questionnaire completed by Jones showed a 12% increase of cheating when the question asked students to report themselves or someone they knew (4). Recently, in the spring of 2010, the National Board of Examiners in Optometry had to delay scores due to a cheating scandal allegedly executed by one of the schools over a number of years. After further investigation, this allegation was found to be accurate and those involved were reprimanded (5).

Academic dishonesty is not a problem solely in optometry programs, it is found throughout numerous universities and is on the rise (6,7). The increase in misconduct is detrimental for academia; it is "devaluing awards, frustrating academics and demotivating 'honest' students (7)." According to the Merriam-Webster dictionary (8), cheating is defined "to influence or lead by deceit, trick, or artifice or to violate rules

dishonestly.” Although this definition is black and white, there is a grey area in what students believe constitutes breaking the rules (6,9). Our study tried to raise awareness of those grey areas with two questions. One, what do students consider dishonest behavior to be and two, what would motivate them to partake in this activity.

Methods

A two question survey with multiple response options was delivered via e-mail to approximately 150 current and past optometry students from Michigan College of Optometry. Unfortunately, the exact number is unknown because a secretary’s mailing list was used. It is possible that some of those students could have changed their email addresses or no longer use that account. A link to an online survey was provided in the email so it could be answered anonymously. The students, who are or have been enrolled in a graduate level optometry program, were asked to evaluate various degrees of academic dishonesty. The first question they answered was in regards to the definition of academic dishonesty and the second addressed the reasons why students may cheat. The data was analyzed using the percentages of the sample group for each choice. Graphs were then made to easily view the varying opinions of the students.

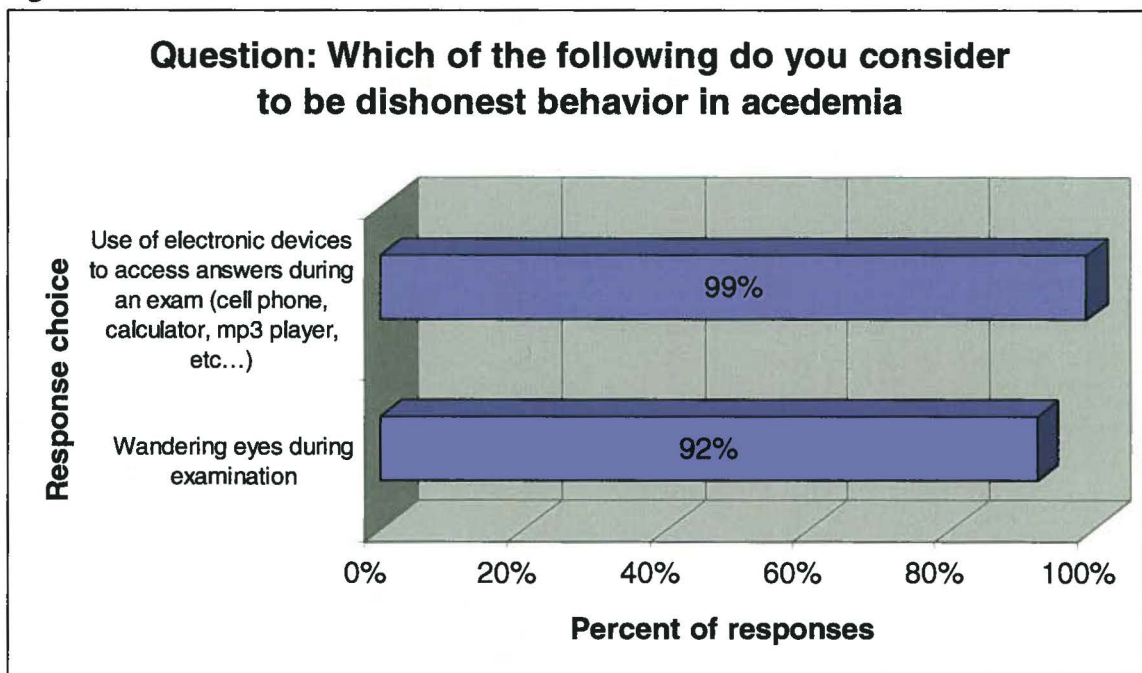
Results

The survey administered had a total of 104 students participate and respond to the questions. The results of the survey are shown here, they are broken down into 6 graphs. Figures 1-5 represent the responses gathered to the first question in the survey. Each of the first 5 graphs display the responses gathered to 2 of the 10 possible options presented in question one. The graphs are presented in this manner for ease of interpretation. Figure 6 is a graph that represents the responses to the second question in the survey.

It is important to remember that participants were asked to select all that apply from the 10 options, so a survey taker may have selected all, none, or any combination of the 10 options presented. Each bar represents the percentage of the 104 participants that selected each particular response. The first question in the survey asked: “Which of the following do you consider to be dishonest behavior in academia?”

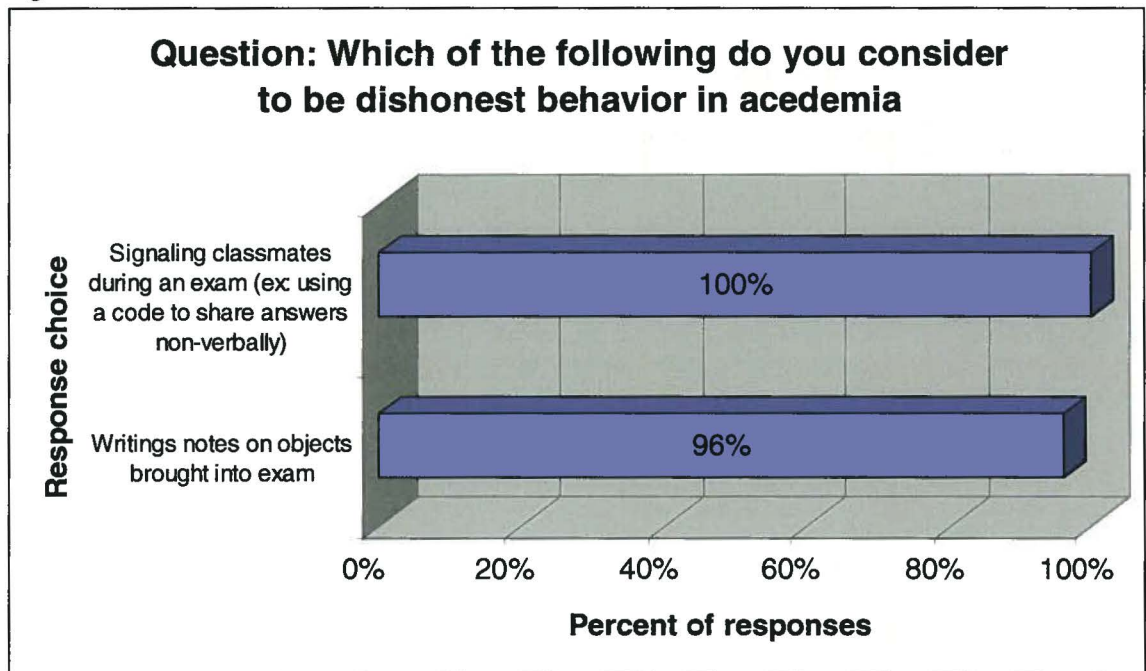
Figure 1 shows the percentage of positive responses to the first 2 options of question 1. You will see that 99% of those surveyed considered it academic dishonesty to use electronic devices such as a cellular phone, stored memory on a calculator, or some kind of text or sound recording on an mp3 player or digital media device. Likewise, 92% of those surveyed considered wandering eyes during an examination as academic dishonesty.

Figure 1.



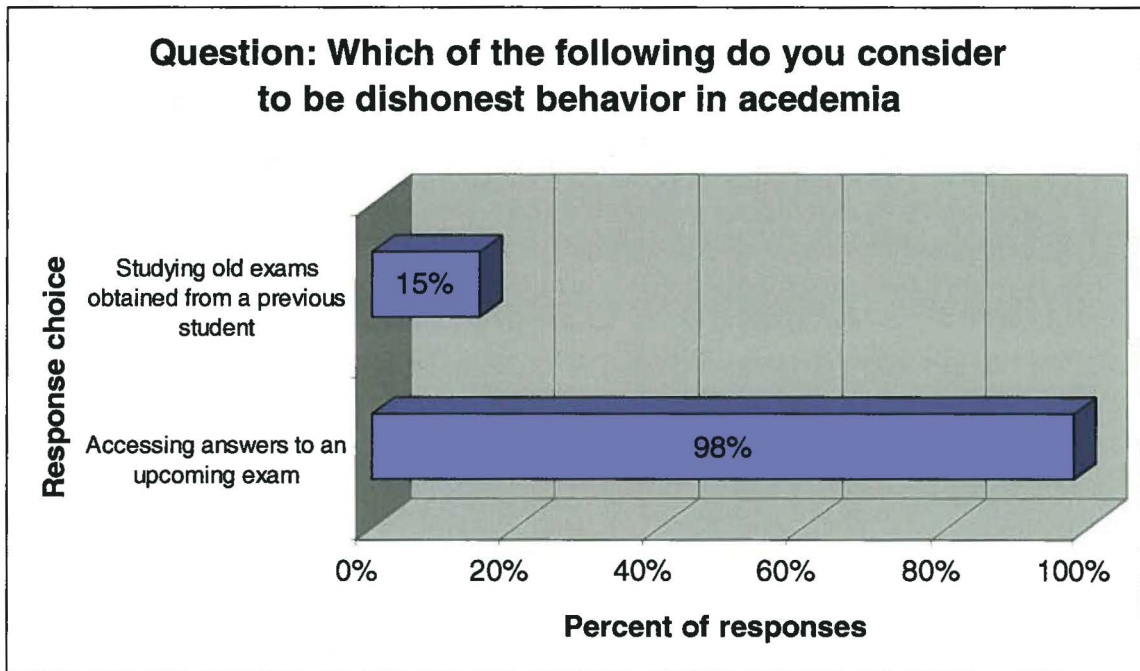
The graph in figure 2 shows the responses to the next 2 options in question 1. The entire surveyed population, 100% of those surveyed, believed it would be considered academic dishonesty to signal other classmates during an exam. The example we had given during the survey was using a code to share answers non-verbally, such as with gestures. Figure 2 also shows that 96% of those surveyed considered it dishonest behavior to write notes on an object that would be brought into the examination, this could be any common object: a pencil, eraser, water bottle, etc.

Figure 2.



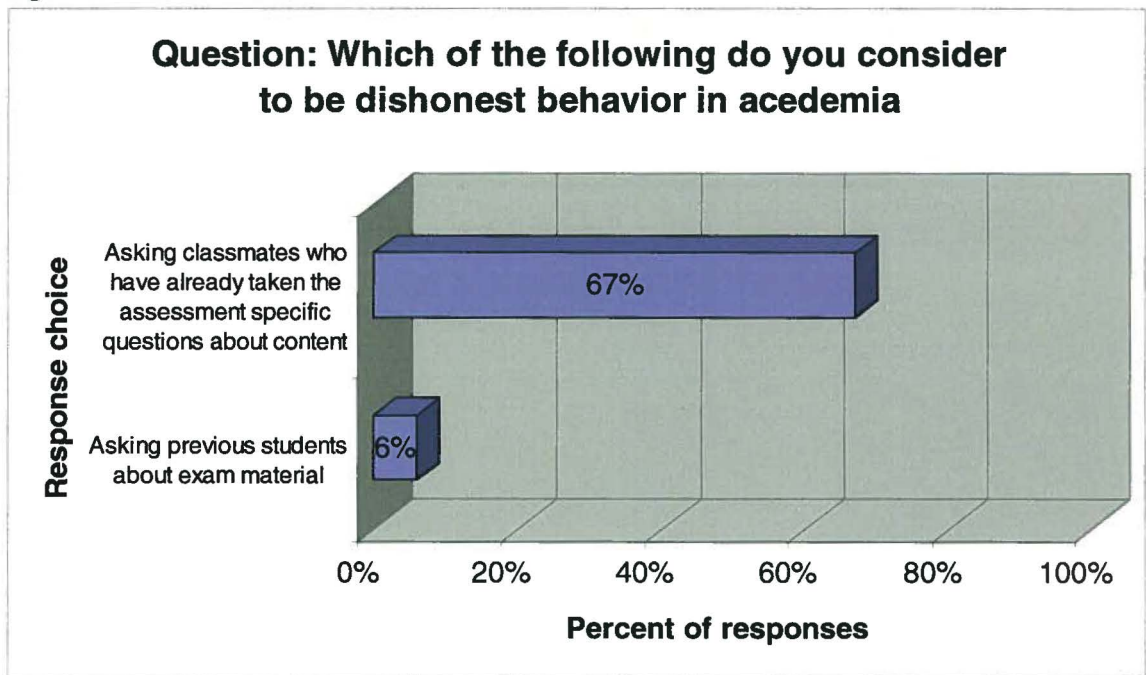
The graph in figure 3 shows that 15% of those surveyed regard studying old exams which have been obtained from previous students as academic dishonesty. Alternatively, 98% of those surveyed believed it to be dishonest behavior to access the answers to an upcoming examination before taking it.

Figure 3.



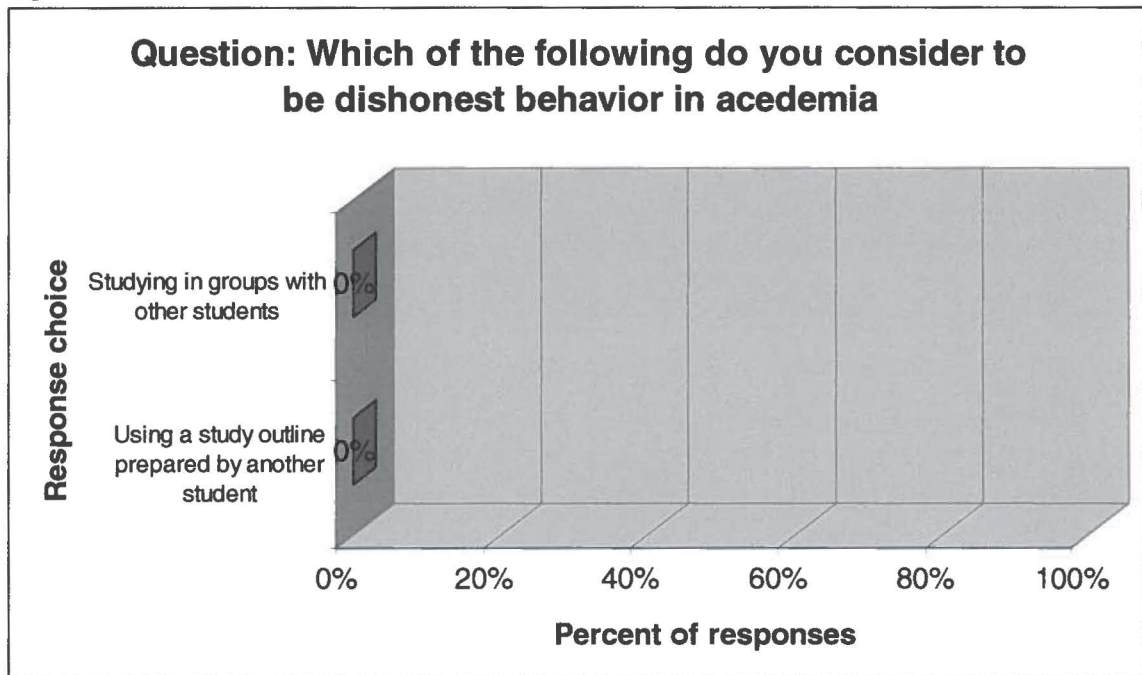
The graph in figure 4 displays the result that 67% of those surveyed responded to “asking classmates who have already taken the assessment specific questions about its content” as academically dishonest behavior. Also shown, is that 6% of those surveyed responded that “asking previous students questions about exam material” is dishonest behavior.

Figure 4.



The responses in figure 5 were that 0%, or none of the 104 survey participants, thought of it as academic dishonesty to study in groups with classmates for an upcoming examination; or to share study resources (such as using a summary or study outline) prepared by another student.

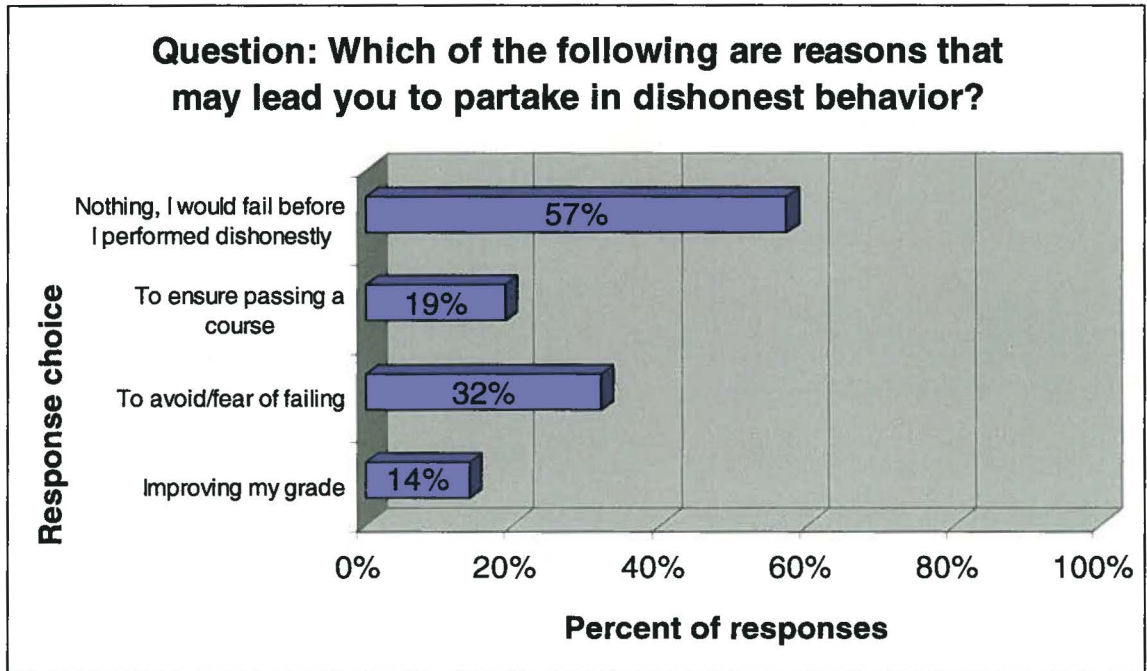
Figure 5.



The graph in figure 6 shows the responses to the second question posed in the survey. Question 2 asked: “Which of the following are reasons that may lead you to partake in dishonest behavior?”. The results show that 57% of those surveyed responded that none of the reasons given would lead them to academic dishonesty, and that they would rather fail the course than perform dishonestly. Of those surveyed, 19% responded that one possible reason they may be lead to perform dishonestly was to ensure that they would pass the course. 32% of those surveyed answered that they may be lead to perform dishonestly to avoid failing, or because they were afraid of, or in danger of failing the

course. Finally, 14% of those surveyed replied that they may be lead to perform dishonestly in academia to improve their grade.

Figure 6.



Discussion

Academic integrity is a very important issue in every field of study. Learning the importance of integrity is just as important as the subject material in a given field. This is supported by the core philosophy of many organizations, such as the American Association of Colleges and Universities (10). In our experience, academic integrity is usually reviewed at the beginning of every semester. There is an academic integrity article in almost every course syllabus, and it is continually reinforced by teachers and administrators. Academic integrity is also very important to our colleagues, the profession, and the public. It is known however, that academic dishonesty does occur (3). So, why does this happen? We sought to investigate this through our research.

The definition of what constitutes academic dishonesty is an important topic to explore because there is no universal definition of exactly what behavior is considered dishonest (11). Our research gave insight into students' definition of what is acceptable behavior and what they consider dishonest. Responses show that nearly all of the students surveyed thought that certain behaviors were clearly unacceptable. These behaviors included using electronics such as cell phones, stored memory on a calculator, an mp3 player, or any other electronic device. Signaling to classmates during an assessment was also thought to be dishonest behavior, in addition to somehow accessing the answers to an upcoming exam. It is interesting that these 3 responses were the only ones which students agreed on nearly unanimously, to be considered dishonest behavior in academia.

The options provided in the survey questions were intended to include some options which should seem clearly dishonest, some clearly not dishonest, as well as some which could be debated or considered to be in a "grey area". Interestingly, many of the questions intended to be clearly dishonest did not have as many of the responses as would have been expected. Wandering eyes during an examination was thought to be dishonest behavior by 92% of students who took the survey; this could include peeking at the answers or scratch paper of the student next to you during an exam. Perhaps some students who answered this question were thinking of harmless looking about the room, at the clock, wall, ceiling or at classmates' facial expressions, and not specifically at the paper of the exam next to you. The wording of the response may have been a bit ambiguous, but if that is not the case then a surprising number of students, 8% of those surveyed, felt that it was not dishonest behavior. Likewise, 96% of students surveyed responded that writing notes or answers on objects brought into the exam would be

considered dishonest behavior. This means that 4% of those surveyed felt writing notes on objects brought into the exam would be acceptable. The option was intended to represent writing on ordinary objects brought to the exam such as a water bottle, eraser, shoe, skin, etc. The question may have been misunderstood as a note sheet or formula sheets which are occasionally allowed in some exams, which would not be an issue if it was within the parameters allowed by the professor administering the exam. However, even with these possibilities considered, given the nature of the survey, we feel that the misinterpretation of this option is not very likely.

Similar to one of the options already discussed: accessing answers to an upcoming exam, is the option to study from old exam papers received from upper classmates who have previously taken the course. Responses show that only 15% of students taking the survey thought that using an old exam from the same course would be considered dishonest behavior. This response would be one which is considered in the “grey area”, because several factors must be considered. Did the professor freely give these exams back to the students in previous years? Did the professor re-write the test to ensure it would not be the same as an older version? Some professors give out old exams as examples, or encourage students to find old test material to study from to get an idea of the types of questions that will be asked. Then, the test is re-written so that specific answers are not given by looking at old exams. On the other hand, some professors don't want their old tests to be used as study materials. One thing we have seen over the years is that certain people will acquire old exams from previous students, or by some other means. This may create an unfair advantage for those students who have an old test to study from. This can be especially detrimental on very difficult exams where many

students don't do well and the students who had the old material throw off any kind of grading curve that would account for the difficulty of the exam. To prevent this, teaching faculty may consider distributing old tests to all students so that the students unable to see old exams would not be at a disadvantage. Likewise, having the old exam come directly from the instructor would eliminate the question of whether or not it would be dishonest to see a particular old exam. Another question to ask, which could affect the interpretation of this response would be, did the students remember and compile questions immediately after taking their exam with the intention of sharing this with underclassmen in years to come? If that was the case, and the professor was unaware, it would certainly be considered dishonest behavior.

Whether or not paper is involved, many students look to upperclassmen for guidance when preparing for an exam. Responses show that only 6% of students surveyed thought that asking a previous student questions about exam content was dishonest behavior. This goes back to the point made about professors changing test material, and whether students intentionally remember question details after taking exams. Responses to the survey also show that 67% of students participating thought that asking classmates who have previously taken the assessment specific questions about content would be considered dishonest. This question was also a bit ambiguous because it would depend on the content of the questions, and who one was asking. What if your friend was leaving town for a funeral and took a test early, and you were to ask them what you needed to know to do well on the exam? There is a delicate balance to how you ask, as well as how your friend responds to details of the exam which could be

considered dishonest. This question is in a “grey area” and depends on many factors, so it is not surprising that the survey responses were fairly split on this issue.

The final 2 responses to the first question in the survey were fairly straight forward. Of those students surveyed, 0% responded that studying in groups with other students or using a study outline prepared by another student would be considered dishonest behavior. It is clear from the results of this option, that students are very comfortable with the idea of studying in groups or using notes compiled by other students, and do not consider it dishonest in any way.

The second question in the survey also yielded interesting results. The question asked the following: “Which of the following are reasons which may lead you to partake in dishonest behavior?” It is important to remember the phrasing of the question here, as the students taking this survey are not admitting to dishonest behavior for these reasons, they are merely responding that under certain circumstances these factors may lead them to consider it.

Of those surveyed, 19% responded that they may be lead to perform dishonestly to ensure passing a course. This is similar to the next response option, which 32% of those surveyed responded that they may be lead to perform dishonestly due to the fear of failing a course. The difference in these responses is subtle, but the percentage of responses shows an interesting finding. We can conclude from the responses that few students would perform dishonestly just to ensure passing a course, even if they thought that they could pass anyway but just wanted to be sure. Significantly more students would resort to dishonest behavior as a way to avoid failing a class they were performing poorly in. This gives insight into students’ perception of failing and how much

importance they place on success in academia. While most students who work hard should be able to pass a course in their field, the threat of failure in the presence of sincere effort is so strong that it could motivate students to take desperate measures. It does not make their behavior justified, but it is interesting that it could result in such decisions.

Students responded that another reason they may be motivated to perform dishonestly would be to improve their grade in a course. It is surprising that as many as 14% of those surveyed responded they may be motivated to perform dishonestly just to improve their grade. The educational system places so much importance on achieving good grades that some students may be motivated to increase theirs by any means necessary, even cheating. As students, we are told by our teachers that grades don't matter and that we should only focus on learning and understanding the material. As a student it is easy to agree with this philosophy in theory, but harder to accept it in reality. It is true that understanding concepts is more important than getting a good grade, but grading is the way teachers measure our understanding and reward our efforts. The grades can then become more important than the understanding because so many rewards depend on grades to be determined. Graduating with honors, receiving a scholarship, being on the dean's list, and many other awards rely on your grades, so it would seem that good grades are, in fact, important to students. Therefore, it is not surprising that in order to be the most competitive, some students would turn to dishonest behavior. This does not justify dishonest behavior, it merely points out that there are motivating factors underlying this problem.

Our survey results showed that 57% of students responded that nothing would lead them to partake in dishonest behavior, and that they would rather fail than perform dishonestly. This response is admirable and ethically correct. Many people would like to say this is how they would respond to this situation. Without casting doubt on the honesty of these responses, it must be stated that in difficult situations mistakes can be made. What you would like to think you would do may not be what actually takes place. We are all human and are prone to fail; adding the pressure to perform in academia could make even the most dedicated student make a decision that is against their better judgment. Doing the right thing is a difficult choice to make under pressure, but it is something that all students must consider and ultimately decide for themselves. The importance of honesty and integrity can not be stressed enough, but in order to motivate students to do their best in an ethical manner, the definitions of dishonest behavior may need to be more clearly defined and emphasized to students. We sincerely hope that our research has helped with that.

With that being said, we feel there are several areas in which our research could have been improved to give even more insightful data. One thing that had an effect on the analysis of our results was our uncertainty in the way respondents interpreted the options presented in the survey. There were several responses discussed previously which required too much interpretation on our part. If our response options were a bit longer and gave more examples there might have been less room for misunderstanding on the part of the responder. Perhaps we could have used a form of case study to set up each question. A short synopsis of a scenario could be given to better illustrate the surrounding circumstances for a particular questionable behavior. Although, if we had made the

survey longer and more in-depth, we may not have gotten as many responses as we did. Our aim was to make the survey short, simple and easy to take, in an effort to obtain the most participation.

One way to combat the issue of participation, as well as increase the reliability and usefulness of the responses would be to expand the target population. Our study was only sent to current and previous students from the Michigan College of Optometry. If our survey questions were sent to current students and alumni from every optometry school in the country, our sample size and number of responses would have increased dramatically. Even if the percentage of responders was much lower, the number of total responses would almost certainly be higher. This could have given us much more insightful and well distributed data. Ideally our initial survey population would have included other schools, but the logistics would have been immensely more complex, and would have required large amounts of coordination and cooperation from the administrations of each optometry school.

The last change we would have made to our research design would be to send out similar survey questions to optometry instructors, such as had been done in other studies in the past. One of these studies had students and faculty list and then rate the severity of different acts of dishonest behavior in order from most severe to least. The study then compared the faculty and student views on why students engage in cheating. Their findings showed students claimed having a poor professor and difficult material was the reason, while the faculty members suggested that students did not prepare adequately or they did it in order to get a high grade (12).

Another study performed by Schmelkin LP et. al. also compared faculty and student views of what constitutes cheating and how severe the acts are. Such behaviors as giving or getting answers during an exam rated high. Although, giving exam questions to fellow students, obtaining a copy of an exam that would be given, and getting a test from a peer from a previous semester ratings were less clear. In general, faculty viewed all behaviors as more severe than the students (13).

Having the instructors' responses in addition to the students' would have allowed us to analyze a side by side comparison of the responses gathered from both parties. We feel that this could have provided valuable insight into the possible difference in perception of dishonest behavior within each group. Perhaps some of the most difficult issues to deal with surrounding the issue of academic integrity come from a lack of open communication between students and teachers. Where do students draw the line between behavior that is acceptable or dishonest? Do students and teachers have different definitions of what constitutes dishonest behavior? Are students willing to perform dishonestly, or are they unknowingly performing dishonestly in a way that they think is acceptable? What are the reasons that make students feel that they can or must resort to dishonest behavior? Do students fully comprehend the severity of dishonest behavior? These questions can be hard for students and teachers to address with one another openly. Students may feel reluctant to bring up the topic for fear of getting into trouble for something they might have done, intentionally or unintentionally. It is difficult to discuss a sensitive subject such as academic dishonesty, but it is something that needs to be done. We believe more investigation is required in this area. The more that is learned about the

issues, the more students and instructors will share a common understanding of what academic dishonesty really looks like.

We greatly appreciate the cooperation of those who responded to our survey. We hope that they were able to answer these difficult questions honestly in an effort to shed some light on this very sensitive, yet serious topic. We feel that the results of this survey will help expose the reasons some students engage in dishonest behavior and help to bridge the gap between students and faculty regarding what is considered dishonest behavior in academia.

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