

DIFFERENCES IN PERCEPTIONS AND PREFERENCES REGARDING EYECARE
AMONG FOUR RACIAL SUBGROUPS IN LOWER MICHIGAN

by

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ABSTRACT

Background: This investigation consists of a survey to Caucasian, African-American, Hispanic, and Asian populations of Michigan's Lower Peninsula. The first component of the survey explores their perceptions of eye care including the frequency and quality of optometric care. The second portion of the survey analyzes their preferences of ideal eye care delivery. The survey will procure valuable information which can help to understand and be able to meet the desires for each race. The results are analyzed to determine the differences in opinions regarding optometric care in the region. *Methods:* Surveys were distributed randomly to the public in various settings totaling 136 people with at least 30 from each race. Results of surveys from each race were compared to each other and to all races. *Results:* Similarities were discovered among the races' opinions regarding how long an eye exam should take, how much they would be willing to pay for a complete eye exam, and that the race or gender of their eye care provider did not matter. There were differences with the frequency of eye exams among the races. Asians seek eye care the least frequently when compared to the other races. Hispanic and Asian respondents are least likely to know that optometrists can detect systemic disease with a thorough eye exam including dilation. *Conclusions:* Much of the public is still unsure about the role of Optometrists (ODs) and Ophthalmologists (OMDs). Minority groups such as Hispanics and Asians do not seek eye care services as often as others, and may have less understanding of the importance of eye care. Most races do not have a preference regarding race or gender of their eye care practitioner. Quality the most important factor regarding eye exams and eye glasses.

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*Some participants did not answer every question on the survey resulting in data percentages that may not total exactly "100" on the figures listed above.

INTRODUCTION

Eye care practitioners across Michigan's southern Lower Peninsula have serviced countless numbers of people from a wide variety of ethnic backgrounds. Individuals from different races have their own opinions of the eye care services and products they have received versus the ones they desire. The goal of this survey is to examine the perceptions and preferences regarding eye care from four separate races: African-American, Asian, Caucasian, and Hispanic. By using a survey to collect data and comparing the data of each race to each other and to all respondents, we hope to gain a better understanding of the perceptions and preferences of eye care in this region.

METHODS

Phase I: Data Collection

1. Distribute survey at multiple locations to acquire largest and most diverse participants including metropolitan Detroit, Jackson, Battle Creek, and Benton Harbor.
2. Read "Survey Consent and General Information" sheet to each participant. Provide a copy of the sheet to any and all participants who request it. Answer any questions to be sure that the participant understands the purpose, directions, and consent information regarding the survey.
3. There are 3 components to the survey that must be completed. The first component is general information about the participant, the second will inquire about the participant's perceptions of eye care, and the third component determines the participant's preferences regarding their eye care.

4. When a minimum of n equal to or greater than 30 is collected for each race, the data collection phase will be complete.

Phase II: Data Analysis

1. Analyze data to determine perceptions and preferences of all the survey participants as a whole.

2. Analyze data to determine perceptions and preferences for each race.

3. Compare data of each race to each other and to all participants.

4. Determine if more education of the general public and any underserved minority groups is needed by the eye care industry.

5. Determine if eye care practitioners can better serve the needs of the general public and any underserved minority groups.

RESULTS

Caucasians

The majority (56%) of Caucasians surveyed are aged 41-60 with 58% of them being females. Most (42%) lived in rural areas followed by 38% living in suburbs. Most (36%) are in healthcare services. The majority (73%) had vision care through OD's. 91%

are satisfied with their eye care (by either an optometrist or an ophthalmologist). Most (38%) would seek eye care every 1-2 years.

49% of Caucasians think they should receive an exam every year while 36% believe it should be every 2 years. When asked about who should provide care for a “pink eye”, 24% of those surveyed did not know the difference between an OD and an OMD. The next most chosen answer was OMD with 33%. 31% chose an OD to manage their “pink eye”. Quality was by far the most important factor (73%) for an eye exam and 62% chose quality as the most important factor regarding their eyeglasses as well. 53% of Caucasians know that OD’s can aid in the diagnosis and management of systemic disease.

Vast majority (84%) have no preference regarding the race of their eye doctor. 56% of Caucasians believe that an eye exam should be as long as needed. 29% believe that the exam should be 30 minutes. Most (58%) would like their exam to be in a private office, and most (44%) are willing to pay \$76-\$100 for a comprehensive vision and ocular health exam. 89% have no preference regarding the gender of their eye doctor.

African Americans

Most (53%) of the African Americans surveyed were 41-60 with 60% being males. Most (47%) lived in the city and the majority (47%) reported “other” as occupation. The vast majority had vision care through an OD (77%) with 87% being satisfied with their eye care (by either an optometrist or an ophthalmologist). Most (43%) reported to seeking eye care every 1-2 years with 23% reporting that they sought eye care greater than every 3 years.

When asked about who should provide care for a “pink eye”, 27% of patients did not know the difference between an OD and an OMD. The next most chosen answer was OD with 37%. 27% chose an OMD to manage their “pink eye”. 87% of African Americans surveyed chose quality is the most important factor in an eye exam (Price came in 2nd with 13%). 73% of African Americans surveyed chose quality as the most important factor regarding their eyeglasses (price came in 2nd with 23%). 50% of African Americans surveyed knew that OD’s can aid in the diagnosis and management of systemic disease.

Only 13% of African Americans surveyed would prefer to have an eye doctor of their own race. When asked if there was a preference regarding how they would like their eye exam to be, most (37%) reported “as long as it takes” followed by “30 minute” exams with 27% of surveys. Most (53%) Africans Americans preferred their eye examination to be at a private office. 30% of those surveyed preferred chain stores. 83% had no preference regarding the gender of their eye doctor, while 13% preferred female practitioners. Most (33%) of those surveyed are willing to pay between 51 and 75 dollars for a vision and ocular health exam. Most (40%) are willing to pay over \$100 for a complete vision and ocular health exam.

Hispanics

Most (48%) Hispanic participants in the survey were between 41 and 60 years of age with 68% being males. Most (48%) resided in the city, while 45% lived in the suburbs. Equal percentages held occupations in “labor” and “other” with 35% each. 81% of surveyed participants’ eye care is provided by ODs. 94% of Hispanics are satisfied with eye care (by either ODs or OMDs). Most (42%) seek eye care greater than every 3 years. 29% of Hispanics seek eye care every 1-2 years.

Most (48%) Hispanics believe that they should get an exam every year. When asked about who should provide care for a "pink eye", 42% of patients did not know the difference between an OD and an OMD. The next most chosen answer was OMD with 29%. Only 16% chose an OD to manage their "pink eye". 65% of Hispanics surveyed chose quality as the most important factor in an eye exam (convenience came in 2nd with 23%). 61% of Hispanics surveyed chose quality as the most important factor regarding their eyeglasses (price came in 2nd with 35%). Only 23% of Hispanics surveyed knew that OD's can aid in the diagnosis and management of systemic disease.

19% of Hispanics surveyed would prefer to have an eye doctor of their own race. 61% would like their eye doctor to speak their native language. When asked if there was a preference regarding how they would like their eye exam to be, the majority (45%) of Hispanics reported "as long as it takes". Equal percentages (26%) reported they would like a 15 minute/30 minute examination. Most (48%) Hispanics preferred their eye examination to be at a private office. 84% had no preference regarding the gender of their eye doctor. 10% preferred male practitioners while 6% preferred females. Most (29%) of those surveyed are willing to pay between 76 and 100 dollars for a vision and ocular health exam. 6% are willing to pay over \$100 and 22% are willing to pay \$51-\$75.

Asian

Most (63%) of the Asians surveyed were between 21-40 years old. 53% of those surveyed were females and 47% were males. 80% of participants were from the suburbs. Most (33%) worked in food services with 20% working in office and management.

Vision care to 93% of participants came from an OD. 97% were satisfied with their vision care (either by OD or OMD). When asked how often they sought eye care, most (43%) respondents reported ">3 years" between exams. 23% seek eye care every 1-2 years.

Most(53%) believed that they should get an eye exam every 2 years followed by 30% believing that eye exams are required only when having difficulty seeing. When asked about who should provide care for a "pink eye", 50% of patients did not know the difference between an OD and an OMD to adequately answer the question. The next most chosen answer was OD with 27%. 20% chose an OMD to manage their "pink eye". 60% of Asians surveyed chose quality is the most important factor in an eye exam (price and convenience came in tied for 2nd with 20% each). 67% of Asians surveyed chose quality as the most important factor regarding their eyeglasses (Price came in 2nd with 27%). Only 23% of Asians surveyed knew that OD's can aid in the diagnosis and management of systemic disease.

33% of Asians would prefer to have an eye doctor of their own race. 47% would like their eye doctor to speak their native language. When asked if there was a preference regarding how they would like their eye exam to be, equal percentages (30%) of Asians reported "30 minutes" and "as long as it takes". Most (37%) Asians preferred their eye examination to be at a private office. 90% had no preference regarding the gender of their eye doctor, while the other 10% preferred male practitioners. Most (33%) of those surveyed are willing to pay between 51 and 75 dollars for a vision and ocular health exam. 27% are willing to pay \$76-\$100. Only 20% were willing to pay over \$100.

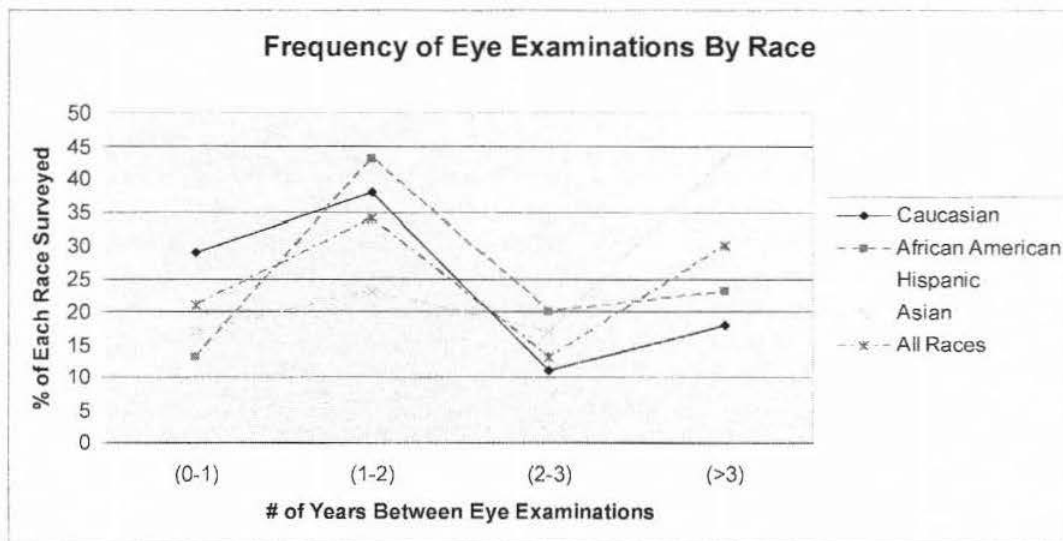


Figure 1: Plot displaying % of each race surveyed and the actual number of years between their eye examinations.

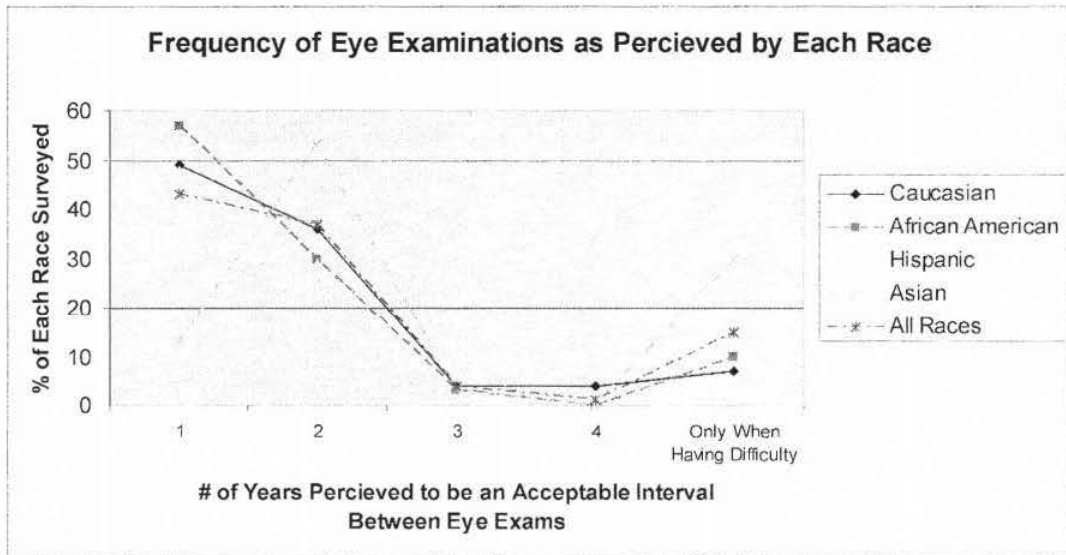


Figure 2: Plot displaying % of each race surveyed versus the # of years that each race believes is an acceptable time period between eye examinations.

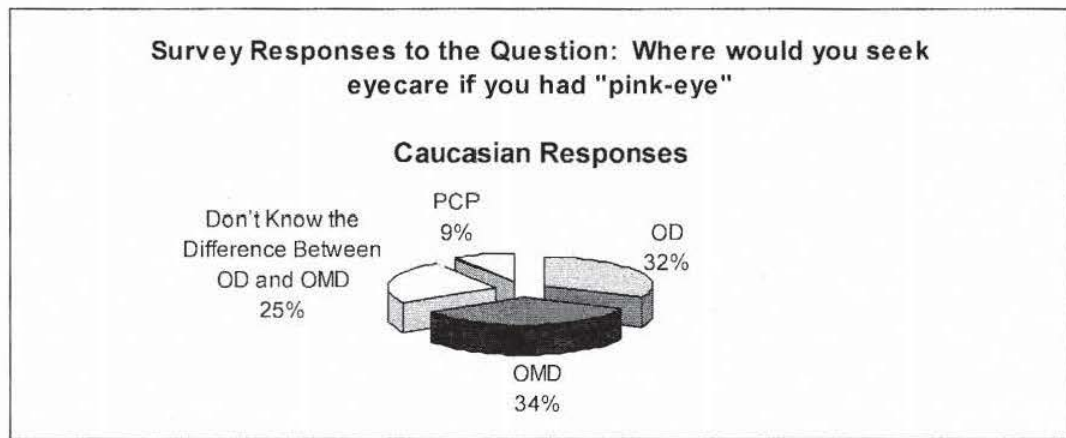


Figure 3

Survey Responses to the Question: Where would you seek eyecare if you had "pink-eye"

African-American Responses

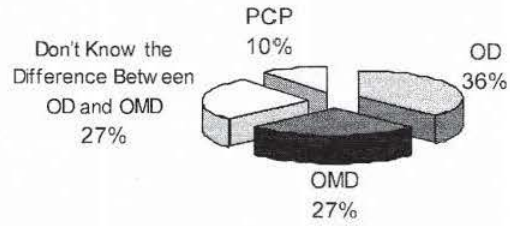


Figure 4

Survey Responses to the Question: Where would you seek eyecare if you had "pink-eye"

Hispanic Responses

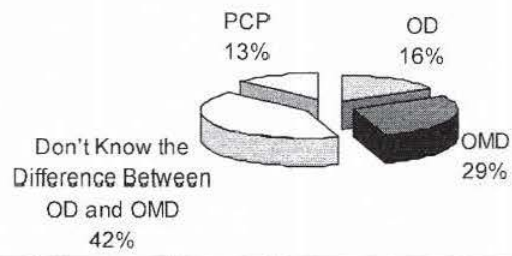


Figure 5

Survey Responses to the Question: Where would you seek eyecare if you had "pink-eye"

Asian Responses

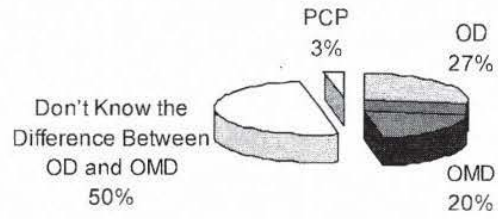


Figure 6

Survey Responses to the Question: Where would you seek eyecare if you had "pink-eye"

"All Races" Responses

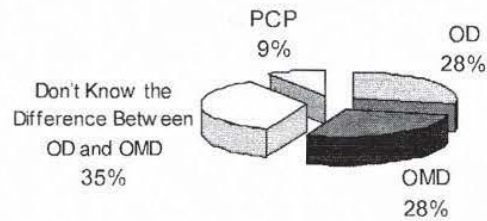


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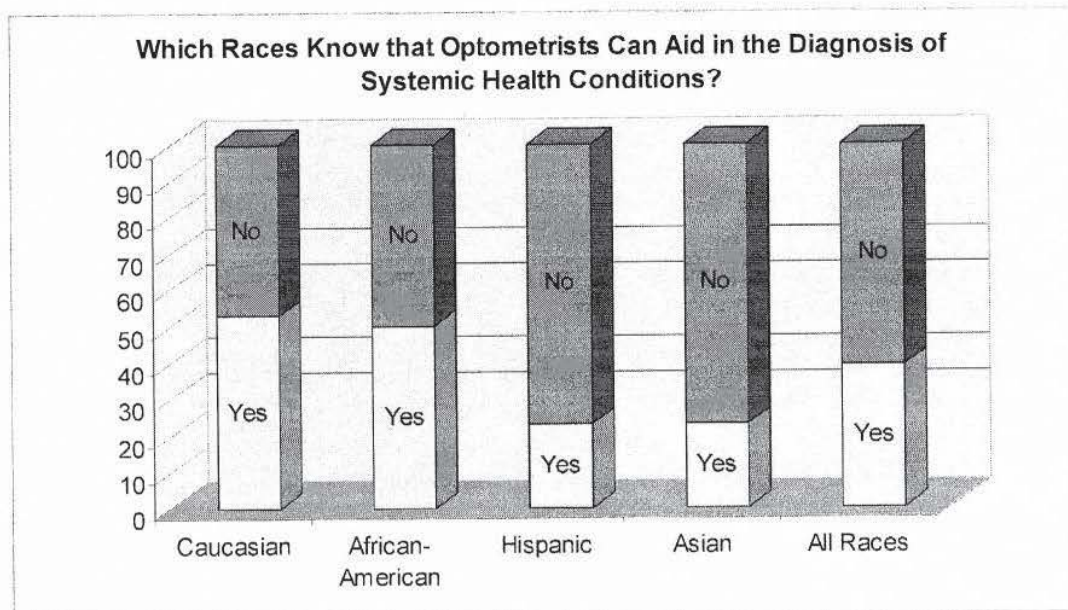


Figure 8

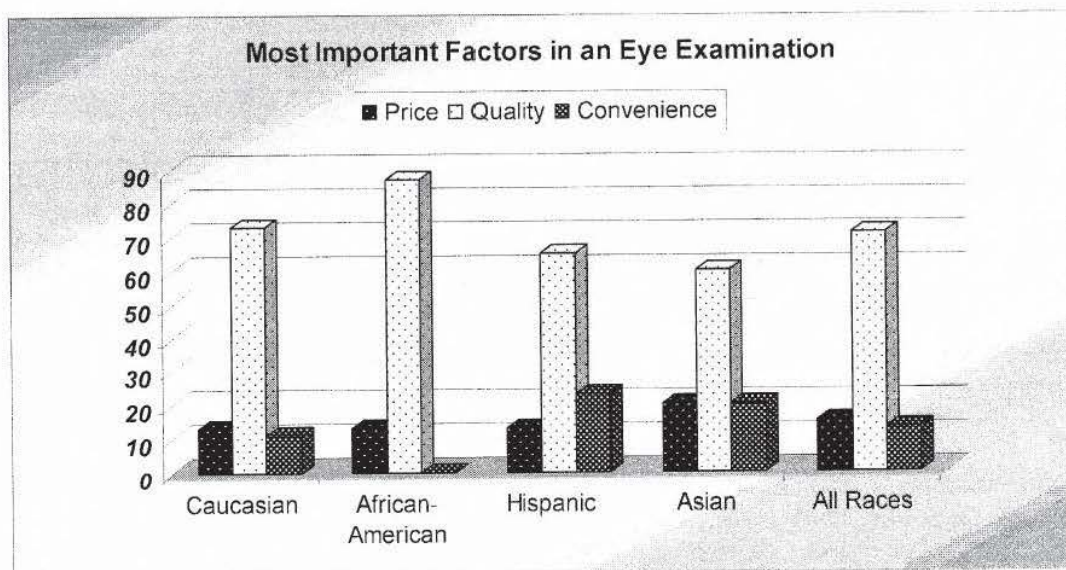


Figure 9

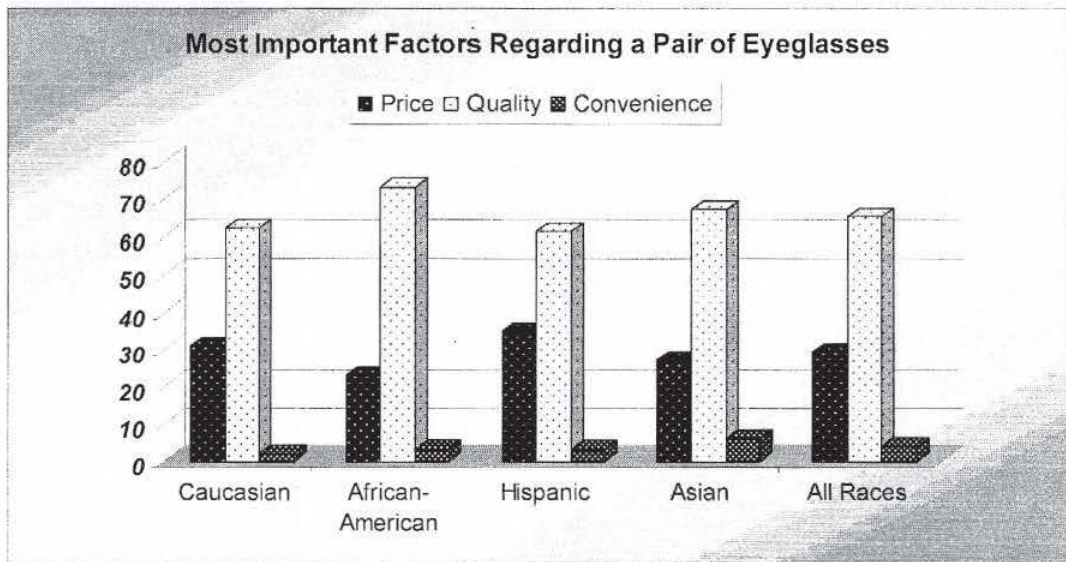


Figure 10

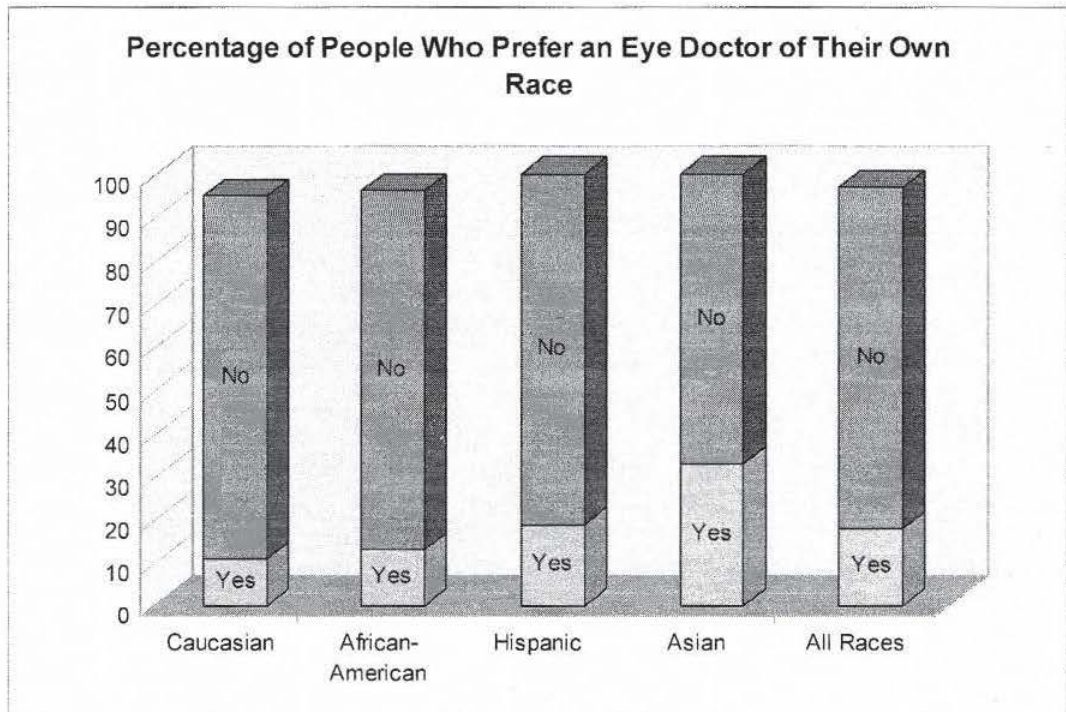


Figure 11

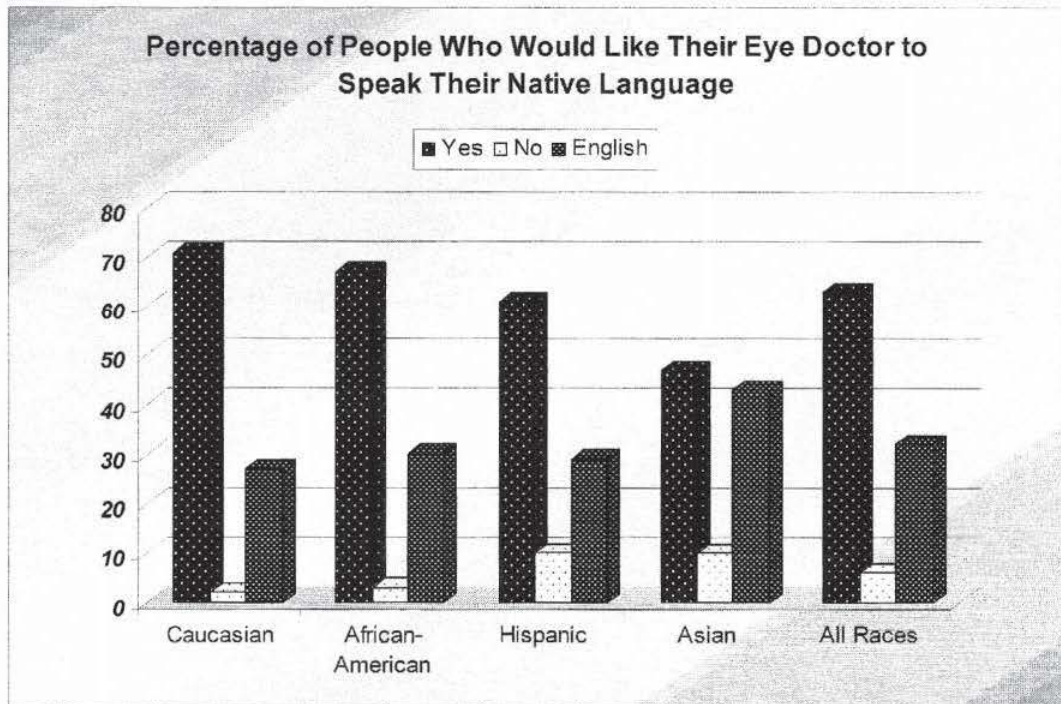


Figure 12

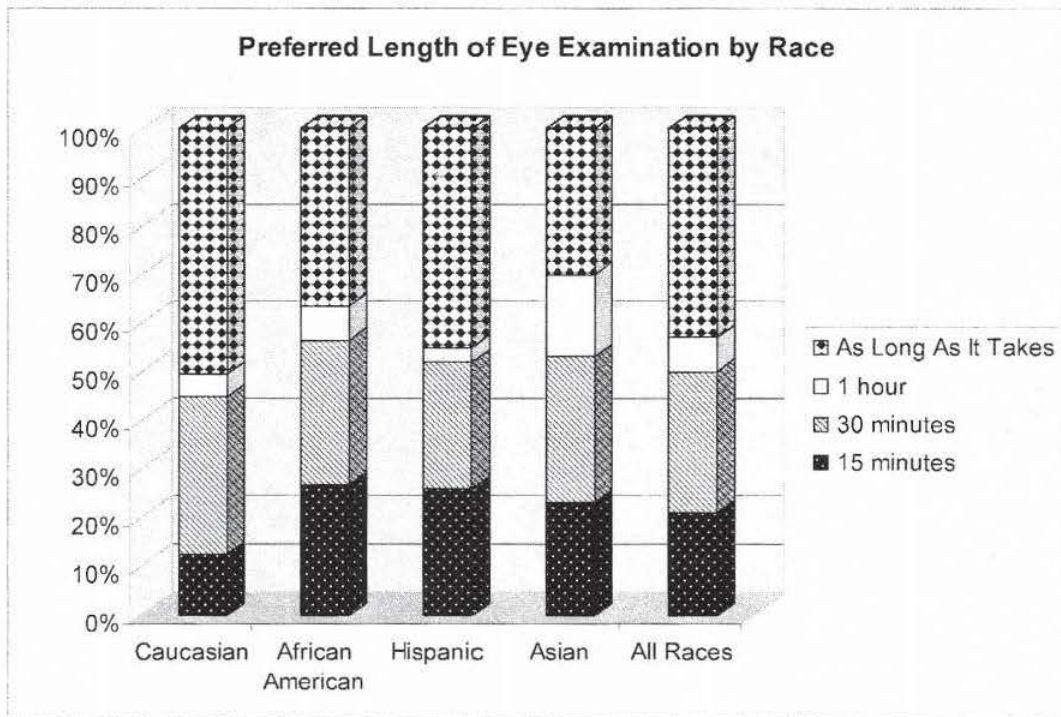


Figure 13

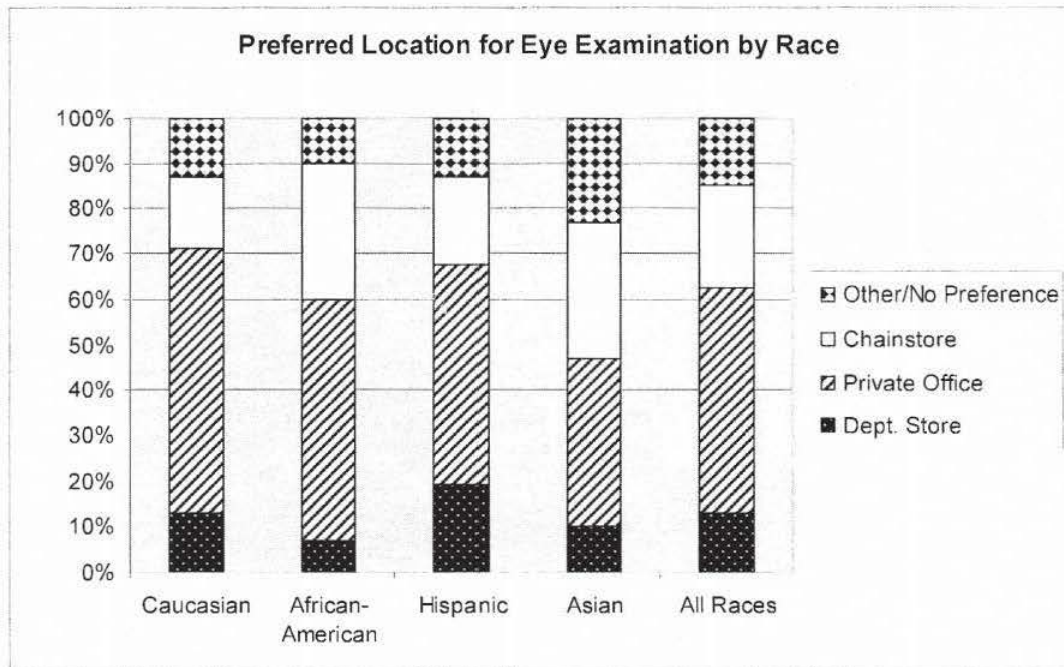


Figure 14

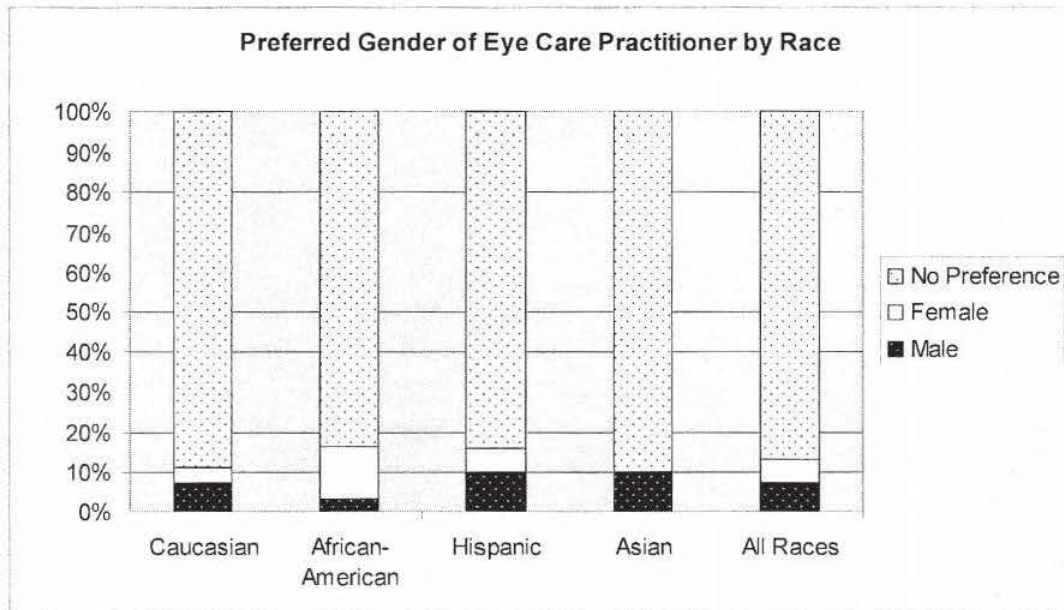


Figure 15

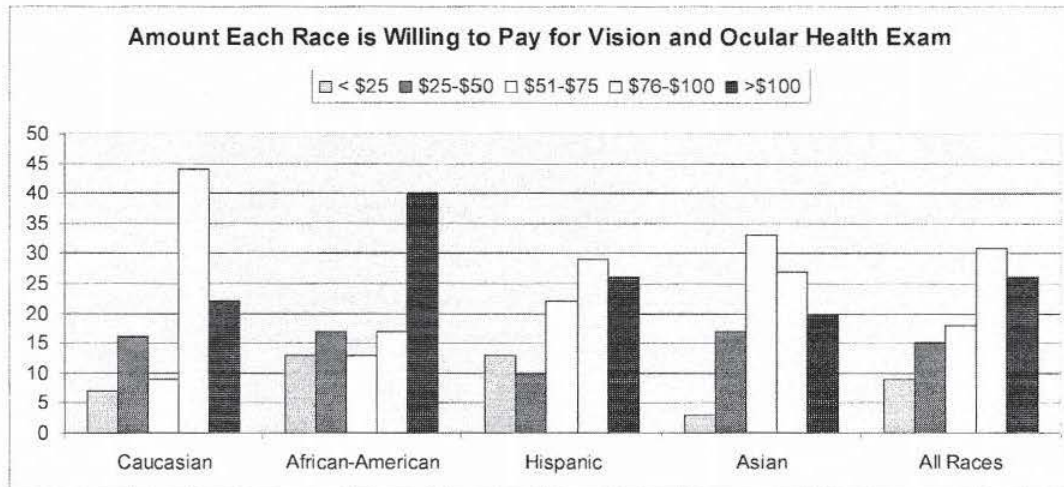


Figure 16

DISCUSSION

Our survey took a relatively small random sample size of 136 people living in the southern Lower Peninsula of Michigan. The majority of respondents were of working age (21-60 years old) and there were even numbers of men and women. Most reported living in suburban areas and having some “other” form of occupation not listed as a choice on our survey. We suspect unemployment, retirement, or an unlisted category of work as the reason for this selection.

After gathering basic demographic data, the next section of the survey acquired general information regarding how the different races perceive eye care. 80% of all surveyed sought an optometrist for their eye care needs with an overall satisfaction rate of 92% with their care (by either optometrist or ophthalmologist). All races believed that an eye exam should occur every 1 to 2 years, and the majority of Caucasians and African Americans actually reported obtaining the exam every 1 to 2 years. However, the majority of Hispanics and Asians reported actually seeking eye care at intervals greater than every 3 years. Obviously there is a significant disparity between the perceived and

actual frequency of eye care in the latter two races. Further studies may need to be performed to determine the exact etiology of this discrepancy. Possible causes could be lack of available care centers in the areas where these races reside or language barriers.

When asked about who should provide care for a “pink eye”, 35% of all respondents did not know the difference between an optometrist and an ophthalmologist to adequately answer the question. Equal numbers of those surveyed selected optometrist and ophthalmologist for their answer, each choice taking 28% of all votes. In retrospect, the survey should have included the option to pick their “primary care physician” as someone they would seek if they had “pink eye”. Many respondents added this choice to the survey. Where we addressed multiple topics in a single question, future surveys may more adequately address these topics as multiple questions. For example, the first survey question would address whether or not the public knows the difference between an optometrist and an ophthalmologist. A second survey question would determine who the participant would seek when inflicted with pink eye. Regretfully, aside from determining that a significant proportion of the population is still unable to differentiate an optometrist from an ophthalmologist, we were unable to accurately determine who the surveyed participants would seek in the event of a pink eye.

61% of all respondents did not know that optometrists can aid in the diagnosis of systemic health conditions including hypertension, diabetes, and hyperlipidemia. More specifically, about half of the Caucasians and African Americans did not have this knowledge and less than a quarter of both Hispanics and Asians surveyed knew. Eye care professionals and their professional societies must take more action to educate the public regarding these public health issues. Lack of this knowledge may also contribute to the reason that most Hispanics and Asians seek eye care less frequently than Caucasians and

African Americans.

Quality was overwhelmingly the most important factor for both eye exams and spectacles among all four races. Price was more of a factor for eye glasses than for eye examination for all races.

The final section of our survey examined the “preferences” of the general public. 87% of all respondents have no preference in the gender of their eye care professional. Likewise, 79% of all reporting say that race of the eye doctor does not matter when questioned if they would prefer one of their same race. However, the Asian group had the highest preference of having an eye doctor of their own race with this result taking 33% of the votes.

The majority (63%) preferred their eye doctor to speak their native language with 32% selecting English. This was another area of our survey that may be improved upon by future surveys. The question asked if the participant preferred the eye doctor to speak their own language, while at the same time listing English as another option. Often, both of these answers applied (they would prefer the doctor to speak their language which was English) and the survey taker picked either one. This question had more pertinence to the Hispanic and Asian races and should have been addressed to only these minority groups in future surveys to procure more accurate data.

From analysis of survey results, we concluded that 50% of all races preferred having their eye exams performed in a private practice setting and for the length of the exam to be “as long as it needs to take” (43% overall). The second most popular answer (29% of the votes) was for the exam to take 30 minutes. Chain stores were also popular among African Americans and Asians each with 30% of respondents reporting this as their choice location for examination. The highest number of Hispanics chose department

stores with 19%. Finally, the majority of the overall respondents were willing to pay between \$76-100 for a complete eye examination. Looking at individual races, the Caucasians and Hispanics both had a majority in the \$76-100 range, while most Asians preferred the \$51-75 range and the majority of African Americans selecting the >\$100 range.

All the races seem to be aware that they should have an eye examination every one to two years; however Hispanics and Asians are not actually getting exams at this frequency. This discrepancy needs to be addressed to ensure that all races receive the care they deserve. A direct correlation between knowledge and the frequency of care exists in all healthcare fields; the public requires more knowledge about their eyes. All races need more education on the role of different eye care practitioners and that the complete eye examination can aid in the diagnosis and management of systemic conditions. Changes to the way eye care is delivered may also be required to provide increased access of eye care equally to all races. Despite a growing commercialized presence in the eye care arena, the private practice modality continues to be the preferred source of eye care by patients of all races. Being true to the melting pot society in which we live, most of the respondents to this survey did not have a preference to the race or gender of their eye care professional. It appears as though commercialization of the eye care profession has not been able to completely devalue eye care professional fees as evident by the respondents' willingness to pay \$76-100 for full examination. This reinforces the fact that the maintenance of good visual and ocular health will continue to be an important service to the people. This survey has been able to examine the cultural differences in vision care perceptions and preferences for predominate races in the lower peninsula of Michigan. We hope future studies can build upon this information to provide a future where quality eye care is available to all.