

**SURVEY OF MICHIGAN OPTOMETRIC ASSOCIATION OPTOMETRISTS  
REGARDING PEDIATRIC OPTOMETRY**

by

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REGARDING PEDIATRIC OPTOMETRY**

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**Has been approved**

**May, 2011**

**ACCEPTED:**

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**Faculty Course Supervisor**

Ferris State University  
Doctor of Optometry Senior Paper  
Library Approval and Release

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REGARDING PEDIATRIC OPTOMETRY**

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## ABSTRACT

**Background:** This research survey is designed to investigate the number and the demographics of pediatric optometrists as well as the wide range of optometric services provided for pediatric patients throughout the state of Michigan by these optometrists. This study is focused on the training in pediatrics these optometrists have had and should have and the optometric associations to which they belong. Also, the survey is designed to provide insight into the marketing and success of InfantSEE assessments and the optometric services for pediatric patients across the state of Michigan. **Methods:** Electronic surveys were sent out to the 935 licensed optometrists who are members of Michigan Optometric Association. **Results:** A 6.7% return rate of the surveys was achieved, which helped accumulate and organize raw data into a resource to further explore the state of pediatric optometry in Michigan. **Analysis:** There is a great deal currently being accomplished in the area of pediatric optometry across the state of Michigan, but there is room for improvement. **Discussion:** Comprehensive eye care is critical for the pediatric population. Michigan optometrists continue to strive for excellence helping with early detection of ocular difficulties before adulthood.

## ACKNOWLEDGMENTS

We would like to acknowledge the hard work and dedication of our faculty advisor, Dr. Dean Luplow. Thank you for all of your help with the completion of this assignment.

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## **Introduction**

Examining patients in the pediatric age bracket has become an increasingly more significant part of an optometrist's responsibility. There has been rising awareness of the importance of having eye examinations at younger ages because vision disorders are one of the most handicapping conditions during childhood (1). In 2005, the American Optometric Association (AOA) launched the InfantSEE program to help ensure infants (age 0-1) have had their first vision assessment during their first year of life. The AOA also recommends eye exams at three years of age and before entering 1<sup>st</sup> grade to help prevent any ocular difficulties which could affect a child's learning (2). Through this study, the authors investigate the state of pediatric optometry in the state of Michigan. Are there enough pediatric optometrists? Are they qualified to see the pediatric population?

## **Methods**

In order to collect data related to pediatric optometry in the state of Michigan, a survey was emailed to all 935 optometrist members of the Michigan Optometric Association (MOA). Members of the MOA executive board authorized the survey questions prior to distribution. Once approved, an email was composed (see Appendix A) which explained the purpose of the attached survey, directions to complete the survey, and a statement of voluntary consent explaining that data gathered from the survey was to be used for student research and analysis. The cover email and electronic survey link were emailed directly via MOA administration to the appropriate members

Electronic distribution of the survey via email was selected due to high cost efficiency and vast population sample. Also, the use of an electronic survey allows

participants to complete the questions conveniently at their computer rather than having to mail back responses. Only optometric doctors of the MOA were surveyed; paraoptometric and student member responses were not included in the survey results.

By clicking on the electronic survey link, participants were directed to a 16 question survey on kwiksveys.com. Each question was composed in a multiple choice format. All but five of the questions allowed for a single answer response. Questions that allowed for multiple responses were suffixed by “Check all that apply”. Participants were given three weeks to complete the survey before it was closed and the link was automatically deactivated. The online survey service automatically organized the raw data separated by question in spreadsheet form (see Appendix C).

## Results

Approximately 6.7% of optometric members of the MOA responded to the electronic survey on the topic of pediatric optometry in the state of Michigan. With 63 total responses, individual questions will be examined and analyzed below.

The first question of the survey was used to address how many years the optometrist has been practicing since graduation. The choices were divided into five-year intervals until 30+ years was reached. Figure 1 shows a moderately even distribution of responses was seen with the greatest number being in 30+ years in practice category.

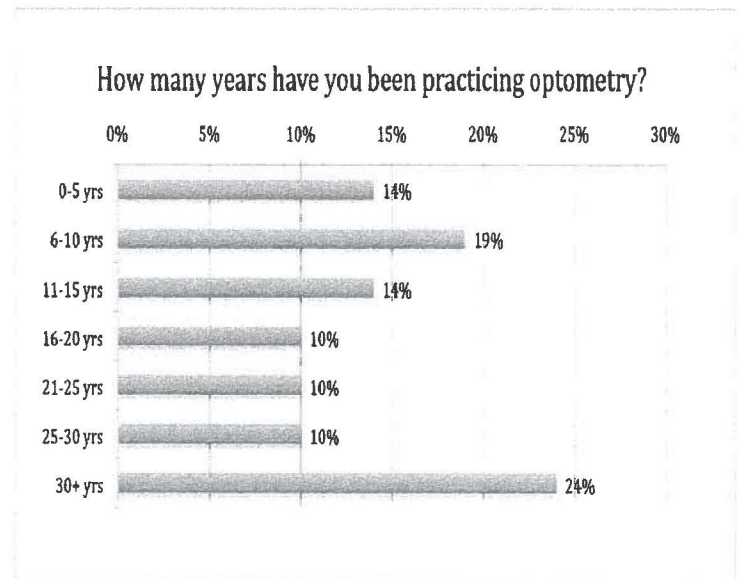
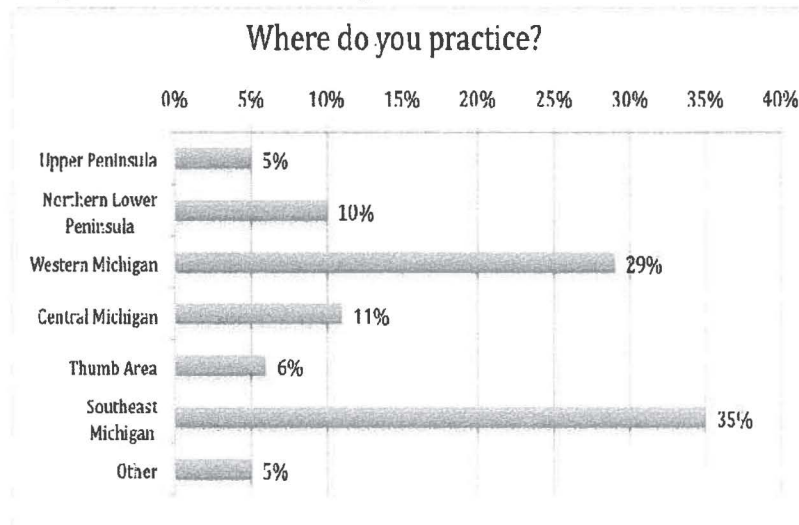


Figure 1

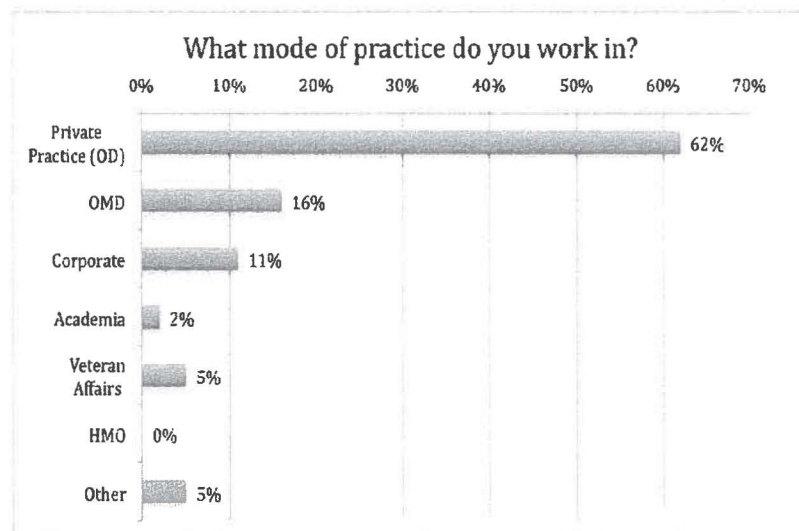


In order to understand the demographics of the participants, the second question of the survey queried practice location. The data in Figure 2 shows that a small amount of participants are outside of Michigan and that more than half of respondents are from Western Michigan or Southeast Michigan.

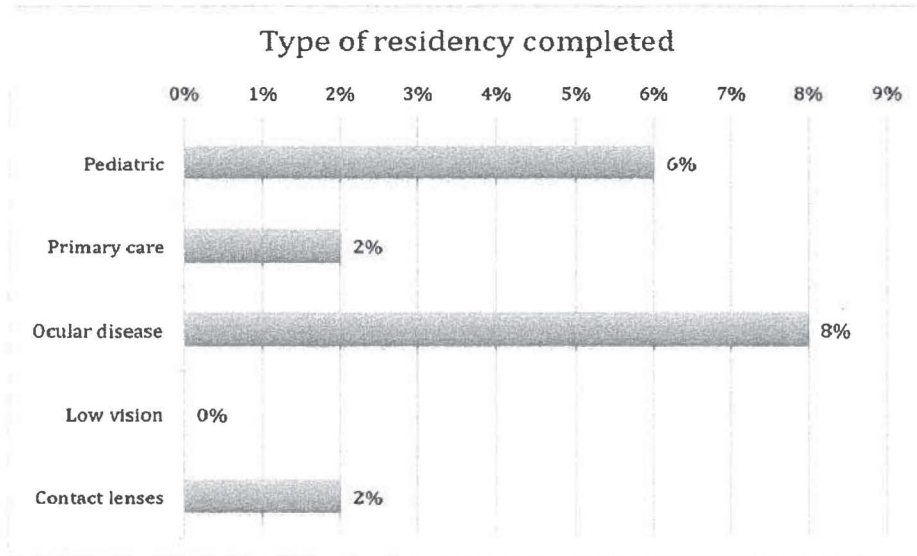


**Figure 2**

The next question determined what mode of practice the participant sees patients in. The majority, over 50%, practice in a private setting without ophthalmology. The next most numerous modes of practice are in OMD and corporate settings, respectively.



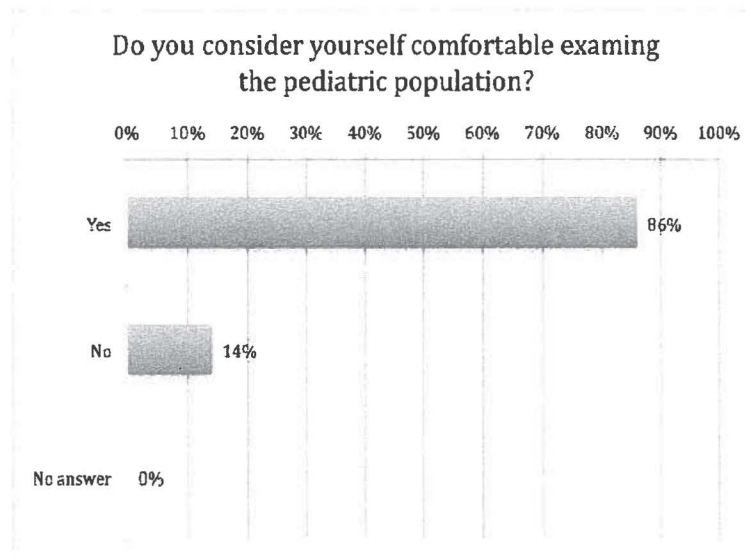
**Figure 3**



**Figure 4**

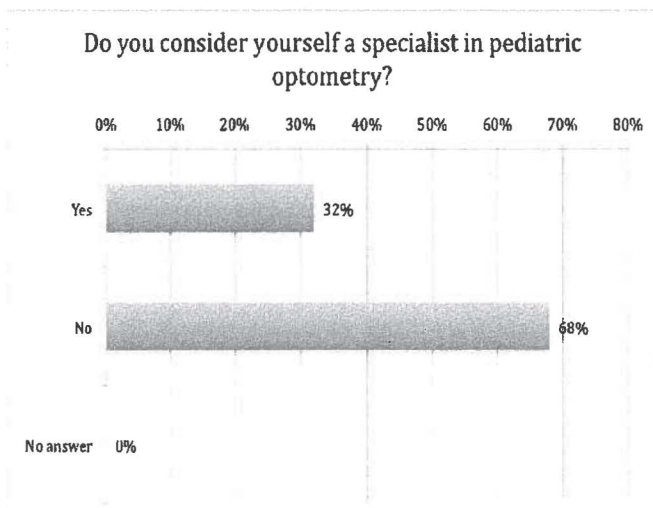
Respondents were also asked whether they had completed a residency, and if so which type. Most participants, approximately 81%, are not residency certified. For those who had completed residency training, their specialties varied. Figure 4 shows the variety of specialties which the residency-trained optometrists studied.

The fifth question dealt with Michigan optometrists' comfort level when examining the pediatric population. This straightforward question showed the vast majority of respondents believe they feel comfortable seeing pediatric patients with 86% responding favorably.



**Figure 5**

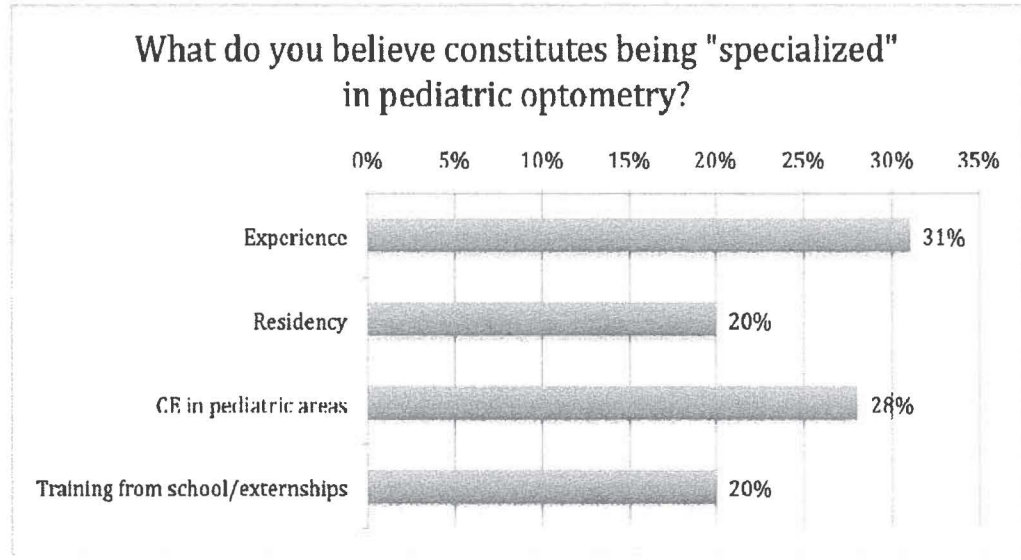
Question 6 addressed whether responding optometrists considered themselves pediatric specialists. Despite the previous 86% who answered they were comfortable



examining the pediatric population, only 32% considered themselves specialists. Each optometrist who considered himself or herself a pediatric specialist had also reported that they feel comfortable examining the pediatric population. Furthermore, the four respondents who completed

**Figure 6**

pediatric residency training were among the 20 optometrists who felt they were specialized. Interestingly, 19 of the 20 optometrists who described themselves as pediatric specialists work in optometry-only private practices, with the remaining self-proclaimed specialist working with an ophthalmologist.

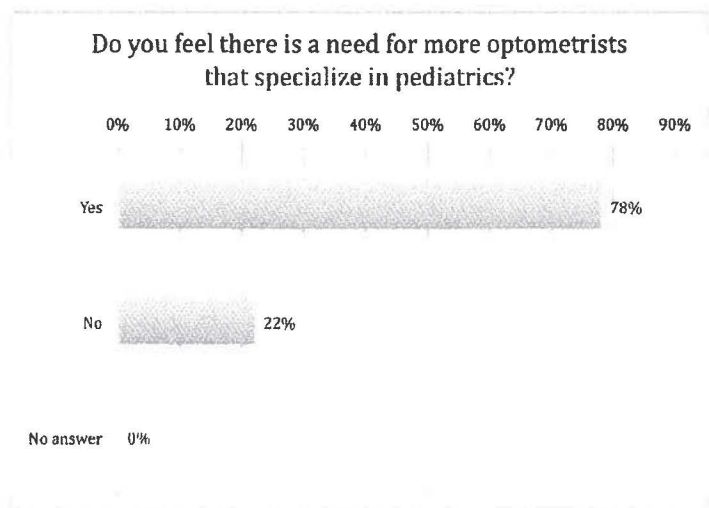


**Figure 7**

The seventh question asked what each optometrist considers as qualifications for specializing in the area of pediatric optometry. Participants were not limited to one

response; therefore, all the possible elements that help practitioners gain the knowledge and status to become “specialists” could be better understood. The largest number, with just over 85% of responders, believes clinical experience constitutes being specialized. Approximately 78% reported continuing education classes in pediatric areas, 56% reported residencies, and 54% reported training through optometry school and/or externships could be considered qualifications to be a specialist.

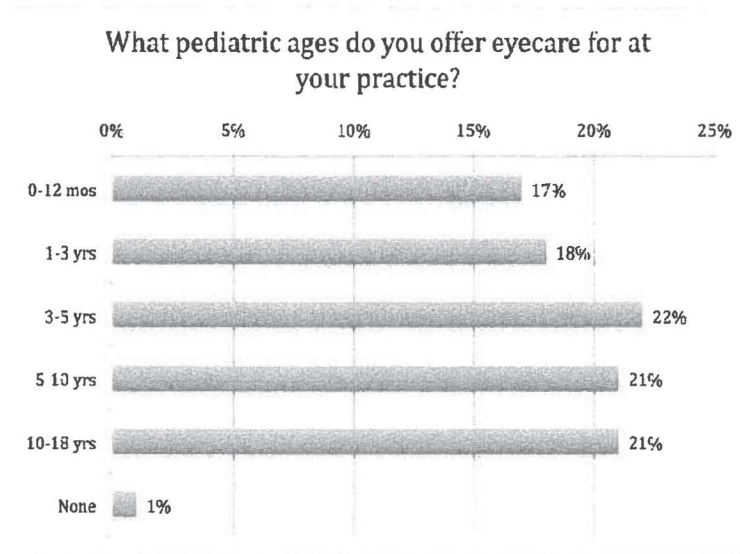
The next question inquired whether MOA members believe there is a need for more optometrists who specialize in the area of pediatrics. Approximately 78% of respondents agreed there is a need for more, whereas 22% do not perceive a need for more pediatric specialists. Of the 20



**Figure 8**

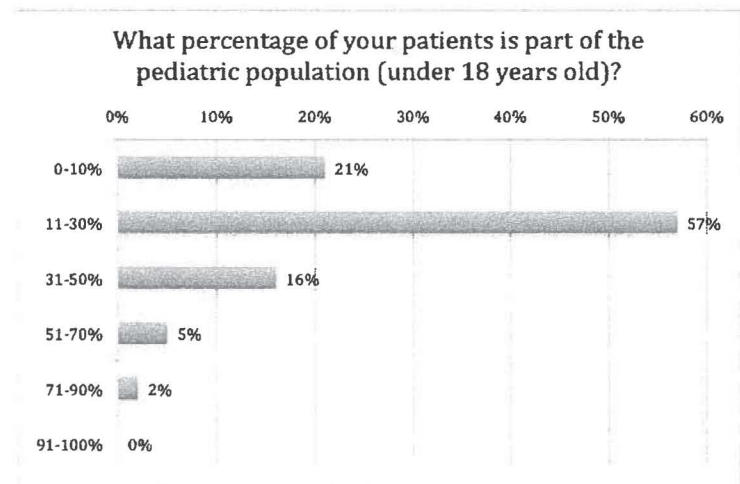
optometrists who considered themselves pediatric specialists, 17 (18%) believed there was a need for others to specialize as well.

Question 9 inquired about particular pediatric age divisions each optometrist sees in his/her respective practice. The majority of respondents see pediatric patients of all ages, with a few excluding infants and toddlers, age 0-3, in their practice. Only three participants do not see any patients in the pediatric age bracket and all work at Veterans Affairs Medical Centers.



**Figure 9**

The tenth question addressed what percentage of the respondents' practice is made up of the pediatric population. Nearly all the participants' total pediatric percentage comprises less than 50% of their practice. Of the approximately 6% of participants whose patient base is primarily under 18 years old, two are in private practice and are not residency trained, whereas the other has completed an accredited pediatric residency.

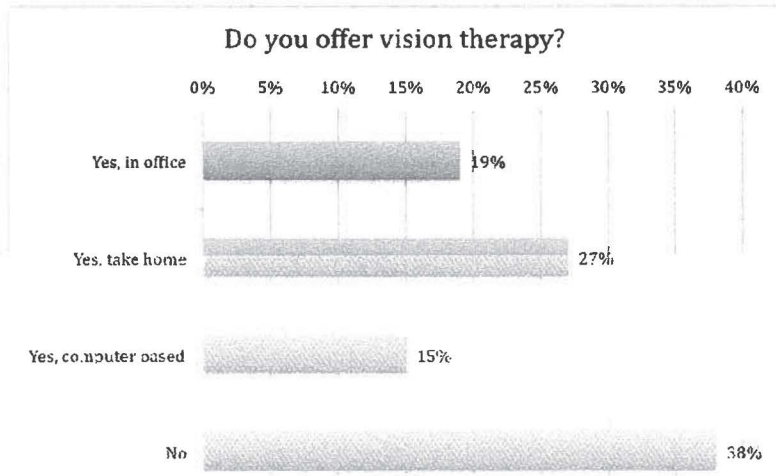


**Figure 10**

Additionally, participants were questioned regarding whether they offered certain types of vision therapy. Approximately 56% reported they do not offer any type of vision

therapy for patients. Of the 27% of optometrists surveyed who offer in-office vision therapy, all but two also use computer-based and/or take-home therapy in conjunction with in-office training. Of the optometrists who consider themselves pediatric specialists (Question 6), 85% of them offer at least one form of vision therapy. As shown in Figure 11, take-home vision therapy is being prescribed more often than in-office or computer-

based programs. Table 1 shows that the vast majority of optometrists who provide such services offer multiple modes of therapy. However, seven respondents solely offer take-home vision therapy services.



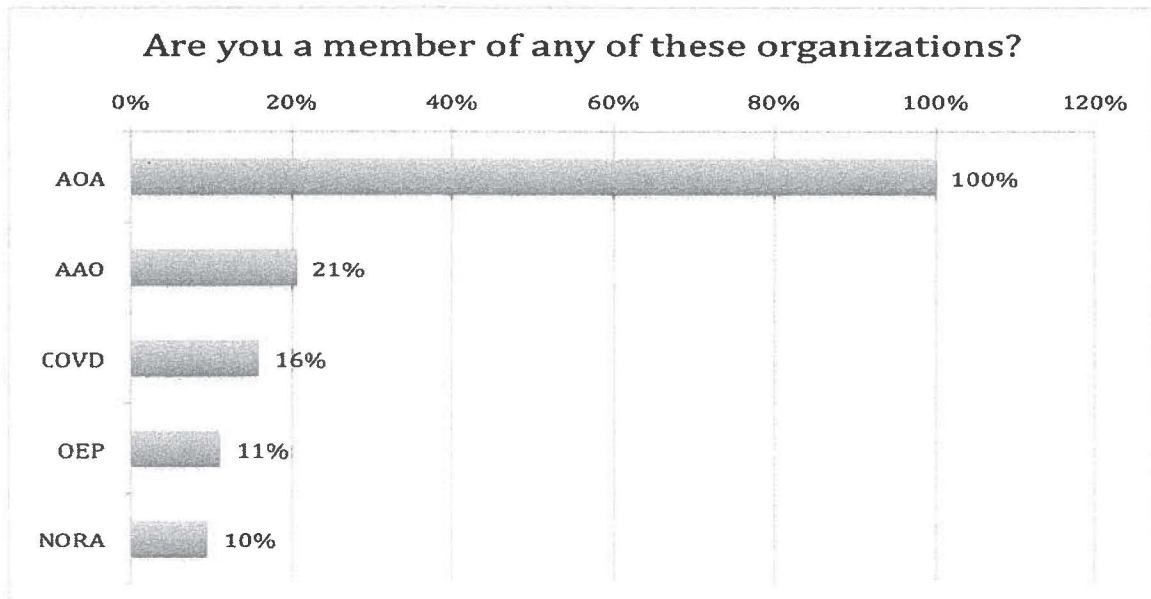
**Figure 11**

**Table 1: Types of vision therapy combinations offered**

<i>VT Services Offered</i>		<i>VT Services Offered</i>	
In-office only	2	In-office/take-home	3
Take-home only	7	Take-home/computer-based	2
Computer-based only	1	In-office/take-home/computer	13

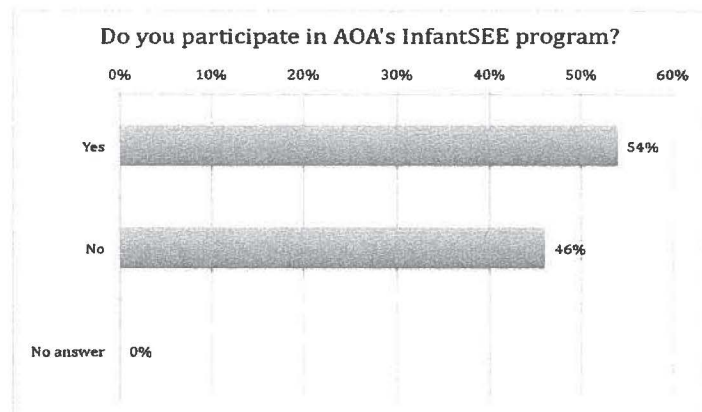
The twelfth question examines the participation of respondents in the following organizations: AOA (American Optometric Association), AAO (American Academy of Optometry), COVD (College of Optometrists in Vision Development), OEP (Optometric Extension Program), or NORA (Neuro-Optometric Rehabilitation Association). Each responding optometrists claimed membership in the AOA. Other membership

percentages included approximately 21% to AAO, 16% to COVD, 11% to OEP, and 10% to NORA.



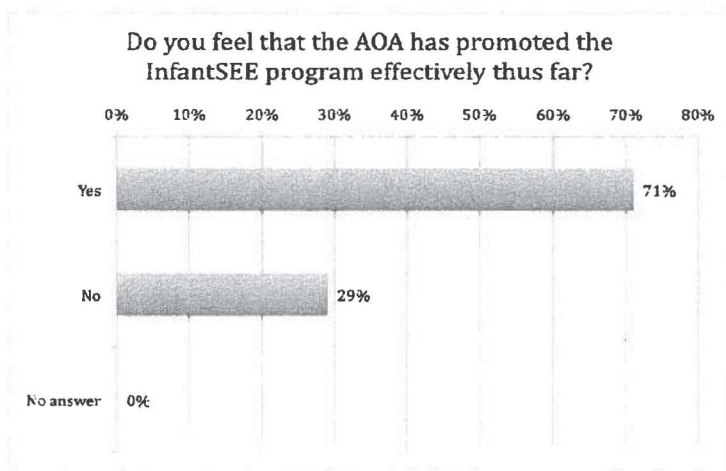
**Figure 12**

The final three questions of the survey primarily focus on AOA's InfantSEE assessments. Question 13 simply explores the level of respondents' participation in the program. Just over half are InfantSEE providers (54%), whereas the remaining 46% are not. Of the responders who considered themselves pediatric optometry specialists (Question 6), 90% do participate in the InfantSEE program.



**Figure 13**

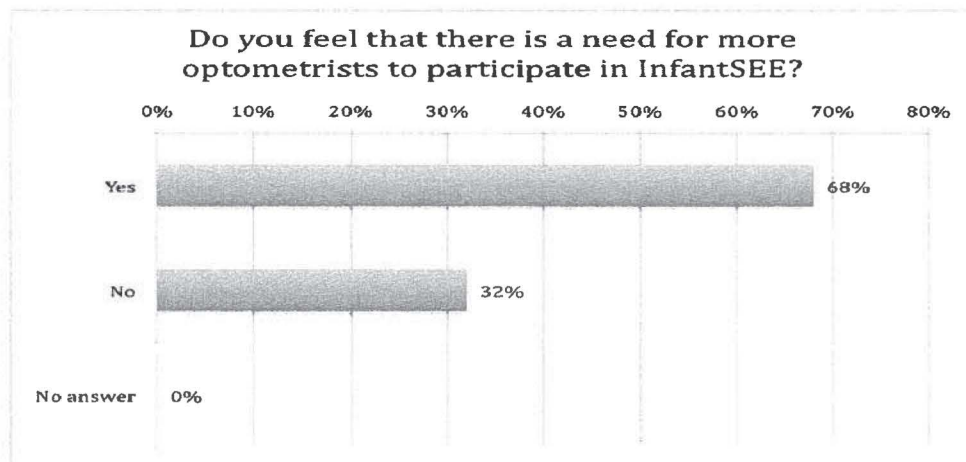
The next question addressed whether responding optometrists perceived InfantSEE as being marketed effectively. Approximately 71% thought the program had



**Figure 14**

successful marketing, whereas the remaining 29% did not. Interestingly, 72% of respondents who did not think InfantSEE was being marketed effectively were participants in the InfantSEE program.

Question 15 dealt with the need for more optometrists to participate in the InfantSEE program. Approximately 68% thought more optometrists should be participating in the program, where about 32% did not. More than 75% of the respondents who do participate in InfantSEE believe that more optometrists should be involved in the program, whereas only around 65% of those who do not participate believe more optometrists should offer the program to patients.

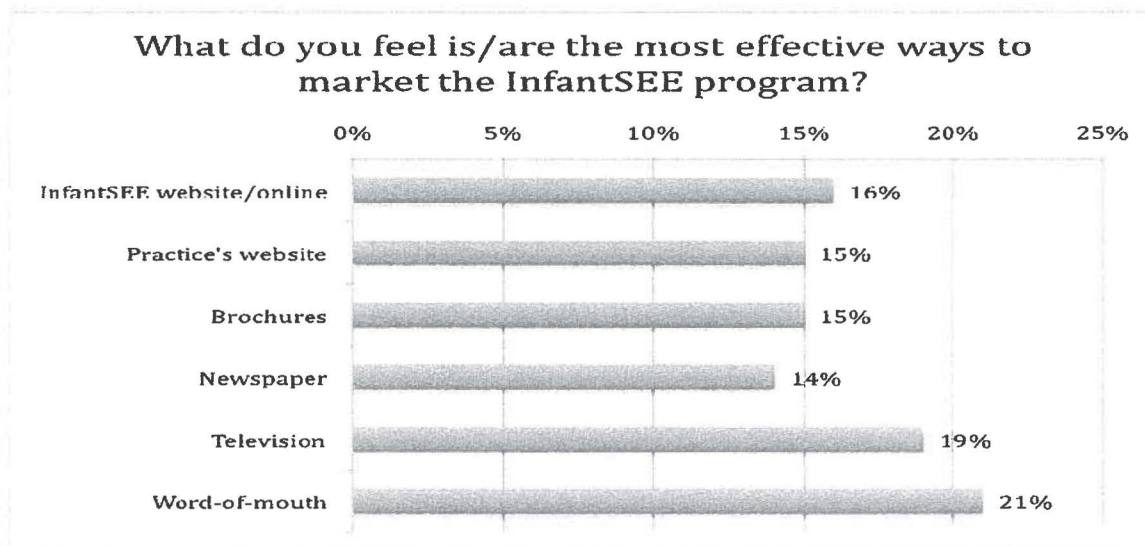


**Figure 15**

The final question queries what modes of awareness are perceived to be the most effective ways to market InfantSEE to the public. Word-of-mouth is identified as being the best marketing strategy for the InfantSEE program, with 71% of respondents agreeing



that this is effective. All the other listed alternatives including InfantSEE website/online, individual practice websites, brochures, newspaper, and television also saw significant responses indicating they may also be effective ways to advertise the program.



**Figure 16**

The data collected in this study provides a summary of the state of pediatric optometry in the state of Michigan. All complete individual responses to each survey question can be reviewed in Appendix C.

### **Analysis**

Overall, pediatric optometry appears to have a fairly positive outlook in the state of Michigan. While respondents represented a variety of practice modes and locations, approximately 86% of the responding MOA members feel comfortable examining the pediatric population. Generally, practitioners show involvement in organizations that advocate for advances in pediatric eye care and the majority of respondents see the full range of age divisions within the pediatric population. Vision therapy of different kinds is being offered and utilized. Specifically examining the InfantSEE program, roughly

half of all respondents participate and over 70% feel that the program is being effectively marketed across the state.

A concerning issue uncovered was that approximately 78% of the responding optometrists believe there is a greater need for more of their colleagues to specialize in pediatric optometry. Interestingly, there is no general agreement as to what qualifications an optometrist needs in order to be considered a pediatric specialist. Experience, residency training, continuing education courses, and training while in optometry school all received similar response rates (31%, 20%, 28%, and 20%, respectively). Typically, training received while in school provides a good base foundation of knowledge for each individual practitioner, however the opportunities for pediatric residency training and pediatric continuing education are often scarce for those seeking to expand their skills. According to the Optometry Resident Matching Service, only 20 pediatric optometry residencies and 19 vision therapy and rehabilitation residencies are available each year nationally (3). Also, unlike many state requirements mandating continuing education for ethics, pharmacology, and ocular disease, no states currently require that any pediatric courses be taken to remain licensed (4).

Alarmingly, roughly half of the survey respondents do not participate in AOA's InfantSEE program. Of those who do participate, 68% believe the AOA has promoted the program effectively and 71% feel more optometrists should participate. Accordingly, of those who do not participate, 76% believe the AOA has promoted the program effectively and 66% feel that more optometrists should participate. It appears that InfantSEE participants feel there is more room for improvement in promotion of and participation in InfantSEE across the state whereas fewer non-participants feel similarly.

Despite what is being done to serve the pediatric population, it is apparent that Michigan optometrists have varying ideas and opinions regarding specializing in pediatric eye care and AOA's InfantSEE program.

## **Discussion**

There are many reasons why Michigan needs to be more familiar with the state of pediatric optometry. According to the U.S. Census Bureau, there are over 72 million people under the age of 18 in the United States and that portion of the population continues to increase (5). According to the InfantSEE website, only 14% of children below the age of 16 have had a comprehensive eye evaluation (1). Likewise, merely 31% of children between ages 6 to 16 have had a complete eye examination (5). Studies compiled by InfantSEE continually show the limitations in vision screenings alone as a means for the detection of ocular issues in the pediatric population (1).

It is clear that children are not receiving full eye exams; unfortunately the situation may be leading to vision problems that could have been addressed and possibly avoided if detected at a younger age. For example, amblyopia affects approximately 2.5% to 4.5% of the population and strabismus is found in between 4% to 6% of individuals (1). Also, in infants alone, 1.8% have retinal disorders (1). The U.S. Department of Health & Human Services recently acknowledged the importance of preventative vision care in the publication of "Healthy People 2010" by including vision objectives for the first time (6). While the prevalence of amblyopia, strabismus, or retinal disorders is relatively uncommon, it is of utmost importance to diagnose and treat such visual problems as early as possible.

InfantSEE is a program that has been put into place to help prevent the devastating effects of many vision problems. InfantSEE is a nationally funded program from the AOA that provides free eye assessments for infants from 6 months to 12 months old (1). During the assessment, optometrists evaluate infants' ocular motility, binocular function, refraction, looking behavior, and ocular health (1). In bringing an infant in for an InfantSEE exam, there are ample opportunities for parent/guardian education on the importance of regular vision checks.

In addition to bringing awareness to infant ocular health via the InfantSEE program, the AOA provides excellent resources and guidelines on pediatric optometry and vision therapy to their 36,000+ members (1). The AAO has a specific subsection, "Binocular Vision, Perception, and Pediatric Optometry," which is solely dedicated to education and research and to support optometrists who assist the pediatric population (7). The COVD distinctively focuses on helping optometrists in children's vision development with education and board certification (8). The OEP helps further optometry's "advancement through the gathering and dissemination of information on vision and the visual processing" (9). Importantly, OEP also gathers research data on visual health and hygiene, ocular disease prevention, vision development, visual rehabilitation, and visual processing enhancement. Finally, optometrists interested in pediatrics can use records from NORA to gather details on the neurological development of patients from birth to adulthood (10). The data collected in this survey shows that MOA members participate in other organizations that center much attention on helping optometrists offer excellent pediatric care.

## **Conclusion**

Since optometrists provide more than two thirds of primary eye care services, it is vital that they take on this role with the pediatric population (5). Although this research shows Michigan has a promising start in providing eye care for children, it is important to use the data gained to further the progress in the area of pediatric optometry.

Specifically, the optometric community may benefit from addressing what constitutes being a specialist in pediatrics. In doing so, the profession can portray a united message to the general population that one pediatric specialist's credentials are comparable to another's. Also, there are varying opinions on the effectiveness of InfantSEE promotion and the need for more optometric participants. While it is unrealistic to believe that every practicing optometrist would or should participate in AOA's InfantSEE, it is obvious that those who are participating would like to have more promotion of and participation in the program. It would benefit the profession and our pediatric patients to determine why approximately half of our colleagues are not participating in hopes of increasing participation levels. In doing so, we may hope to provide infants with more access to the eye care they need.

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**APPENDIX A**  
**INITIAL EMAIL TO MOA OPTOMETRISTS**

The following is an online survey as part of a research study for Michigan College of Optometry degree completion requirements. The research will also provide useful information to the program. This study consists of a short online survey, whose purpose is to identify perception and attitudes towards pediatric optometry as a specialty.

Participation is voluntary: Results will be tabulated and reported only in aggregate; no one will be individually identified.

If you have any questions about the study, contact Dr. Dean Luplow @ 231-591-2192.

Please click the response most appropriate for your practice/perception. By participating in this survey you are giving consent to use the data obtained for student research and analysis. Thank you for your time and cooperation.



**APPENDIX B**  
**SURVEY QUESTIONS INCLUDING POTENTIAL RESPONSES**

1. How many years have you been practicing optometry?
  - a. 0-5 yrs
  - b. 6-10 yrs
  - c. 11-15 yrs
  - d. 16-20 yrs
  - e. 21-25 yrs
  - f. 25-30 yrs
  - g. 30+ yrs
  
2. Where do you practice?
  - a. Upper Peninsula
  - b. Northern Lower Peninsula
  - c. Western Michigan
  - d. Central Michigan
  - e. Thumb Area
  - f. Southeast Michigan
  - g. Other
  
3. What mode of practice do you work in?
  - a. Private practice (optometry)
  - b. OMD
  - c. Corporate
  - d. Academia
  - e. Veteran Affairs
  - f. HMO
  - g. Other
  
4. Have you completed a residency, if so which type?
  - a. Yes, pediatric
  - b. Yes, primary care
  - c. Yes, ocular disease
  - d. Yes, low vision
  - e. Yes, contact lens
  - f. Yes, other
  - g. No
  
5. Do you consider yourself comfortable examining the pediatric population?
  - a. yes
  - b. no
  
6. Do you consider yourself a specialist in pediatric optometry?
  - a. yes
  - b. no

**APPENDIX C**  
**RAW DATA**

Question 1	Question 2	Question 3	Question 4	Question 5
0-5 yrs	Southeast Michigan	Veteran Affairs	Yes, ocular disease	No
30+ yrs	Northern Lower Peninsula	Private practice (optometry)	No	Yes
16-20 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Western Michigan	Private practice (optometry)	No	No
25-30 yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Northern Lower Peninsula	Private practice (optometry)	No	Yes
11-15 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
11-15 yrs	Western Michigan	Private practice (optometry)	Yes, pediatric	Yes
6-10 yrs	Other	Private practice (optometry)	No	Yes
21-25 yrs	Western Michigan	Private practice (optometry)	No	Yes
16-20 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
21-25 yrs	Thumb Area	Private practice (optometry)	No	Yes
30+ yrs	Southeast Michigan	Private practice (optometry)	No	Yes
0-5 yrs	Southeast Michigan	OMD	Yes, ocular disease	Yes
30+ yrs	Central Michigan	OMD	No	Yes
11-15 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Northern Lower Peninsula	Academia	No	Yes
30+ yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Southeast Michigan	Private practice (optometry)	No	Yes
11-15 yrs	Northern Lower Peninsula	OMD	No	Yes
6-10 yrs	Northern Lower Peninsula	Private practice (optometry)	No	Yes
30+ yrs	Thumb Area	Corporate	No	No
30+ yrs	Southeast Michigan	Other	No	Yes
6-10 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Southeast Michigan	Corporate	No	Yes
0-5 yrs	Western Michigan	Other	Yes, pediatric	Yes
16-20 yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Central Michigan	OMD	No	No
25-30 yrs	Central Michigan	Corporate	Yes, primary care	Yes
6-10 yrs	Central Michigan	Private practice (optometry)	No	Yes
21-25 yrs	Southeast Michigan	Other	No	No
30+ yrs	Southeast Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Central Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Western Michigan	Private practice (optometry)	No	Yes
25-30 yrs	Western Michigan	Private practice (optometry)	No	Yes
21-25 yrs	Other	OMD	Yes, pediatric	Yes
30+ yrs	Southeast Michigan	Private practice (optometry)	No	Yes
21-25 yrs	Central Michigan	Private practice (optometry)	Yes, ocular disease	Yes
0-5 yrs	Northern Lower Peninsula	Private practice (optometry)	No	Yes
11-15 yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Western Michigan	Private practice (optometry)	No	Yes
30+ yrs	Central Michigan	Private practice (optometry)	Yes, other	Yes
6-10 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
25-30 yrs	Upper Peninsula	OMD	No	Yes
0-5 yrs	Upper Peninsula	Veteran Affairs	No	Yes
0-5 yrs	Upper Peninsula	Private practice (optometry)	Yes, ocular disease	Yes
11-15 yrs	Western Michigan	Veteran Affairs	Yes, ocular disease	No
0-5 yrs	Thumb Area	Private practice (optometry)	Yes, pediatric	Yes
0-5 yrs	Other	Corporate	No	Yes
16-20 yrs	Thumb Area	Private practice (optometry)	No	Yes
25-30 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
16-20 yrs	Southeast Michigan	OMD	No	No
6-10 yrs	Western Michigan	Corporate	No	Yes
11-15 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
25-30 yrs	Southeast Michigan	Private practice (optometry)	No	Yes
6-10 yrs	Western Michigan	Corporate	No	Yes
11-15 yrs	Southeast Michigan	OMD	No	Yes
0-5 yrs	Southeast Michigan	Corporate	No	Yes
16-20 yrs	Western Michigan	OMD	Yes, contact lens	No
11-15 yrs	Western Michigan	Private practice (optometry)	No	Yes
21-25 yrs	Southeast Michigan	OMD	No	No





Question 9	Question 9	Question 9	Question 10	Question 11	Question 11
		None	0-10%		
			0-10%		
5-10 yo	10-18 yo		31-50%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%		Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		31-50%		
5-10 yo	10-18 yo		11-30%	Yes, in-office	
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		31-50%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		0-10%		
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		31-50%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%		Yes, take home
			0-10%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%		Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		51-70%		Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		71-90%		Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		51-70%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%		Yes, take home
5-10 yo	10-18 yo		11-30%	Yes, in-office	
5-10 yo	10-18 yo		0-10%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		51-70%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		31-50%		Yes, take home
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		31-50%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		31-50%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		11-30%		Yes, take home
5-10 yo	10-18 yo		31-50%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		0-10%		
		None	0-10%		
5-10 yo	10-18 yo		11-30%		
		None	0-10%		
5-10 yo	10-18 yo		31-50%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		0-10%		
5-10 yo	10-18 yo		0-10%		
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
			0-10%		
5-10 yo	10-18 yo		0-10%		
5-10 yo	10-18 yo		11-30%		
5-10 yo	10-18 yo		31-50%	Yes, in-office	Yes, take home
5-10 yo	10-18 yo		11-30%		
			11-30%		Yes, take home
5-10 yo			11-30%		
5-10 yo	10-18 yo		11-30%		Yes, take home
5-10 yo	10-18 yo		11-30%	Yes, in-office	Yes, take home
			0-10%		









Question 13	Question 14	Question 15	Question 16	Question 16	Question 16
No	Yes	Yes	InfantSEE website/online	Practice's website	
No	No	Yes			Brochures
Yes	Yes	No		Practice's website	Brochures
No	Yes	No			
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	No			
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	No	Yes			Brochures
Yes	Yes	Yes			
No	Yes	No	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes	InfantSEE website/online		
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes	InfantSEE website/online		
No	Yes	Yes	InfantSEE website/online		Brochures
No	Yes	Yes	InfantSEE website/online	Practice's website	
Yes	No	No			
Yes	No	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	No	InfantSEE website/online		
Yes	No	Yes	InfantSEE website/online	Practice's website	Brochures
No	Yes	No			
No	Yes	Yes	InfantSEE website/online		
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	No			
No	Yes	Yes			
No	Yes	Yes		Practice's website	Brochures
Yes	No	Yes		Practice's website	
Yes	No	Yes	InfantSEE website/online	Practice's website	Brochures
No	No	Yes	InfantSEE website/online		Brochures
Yes	Yes	No	InfantSEE website/online		
No	Yes	No	InfantSEE website/online	Practice's website	Brochures
No	Yes	Yes			
No	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	No	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
No	No	Yes		Practice's website	Brochures
Yes	No	No			
No	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
No	Yes	No	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes			
No	No	No		Practice's website	
No	No	No			Brochures
No	Yes	Yes	InfantSEE website/online	Practice's website	
No	Yes	Yes			
Yes	Yes	Yes			
No	No	No			
Yes	Yes	Yes		Practice's website	
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
No	Yes	No			
No	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
Yes	No	Yes			
No	Yes	No		Practice's website	
Yes	Yes	No			Brochures
No	Yes	Yes	InfantSEE website/online	Practice's website	
No	Yes	Yes	InfantSEE website/online		Brochures
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
No	Yes	Yes			
Yes	Yes	Yes	InfantSEE website/online	Practice's website	Brochures
No	Yes	Yes			

Question 16	Question 16	Question 16
	Television	Word-of-mouth
	Television	Word-of-mouth
		Word-of-mouth
		Word-of-mouth
	Television	Word-of-mouth
	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
		Word-of-mouth
Newspaper	Television	Word-of-mouth
	Television	Word-of-mouth
Newspaper	Television	
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
	Television	
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
	Television	
Newspaper	Television	
		Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
	Television	
		Word-of-mouth
Newspaper	Television	Word-of-mouth
		Word-of-mouth
		Word-of-mouth
		Word-of-mouth
		Word-of-mouth
		Word-of-mouth
		Word-of-mouth
	Television	Word-of-mouth
	Television	
	Television	Word-of-mouth
Newspaper		Word-of-mouth
Newspaper	Television	
	Television	
	Television	
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper	Television	Word-of-mouth
Newspaper		Word-of-mouth