

Survey of New Graduates Readiness to Provide InfantSEE Exams

Cassidy Kesler, Laura Langford, Alissa Proctor, OD, FAAO Northeastern State University Oklahoma College of Optometry



Abstract

The goal of this research was to assess the preparedness of recent graduates to evaluate infants in the InfantSEE program in an effort to help the AOA improve and expand the program. Debilitating visual system disorders are screened for and detected early in the InfantSEE exam so as to prevent negative sequelae on the infant's life and development. Survey Monkey was utilized to create and distribute a survey to alumni of optometry schools and members of the U.S. state optometric associations.

Introduction

InfantSEE was developed by the AOA in 2005 with the express purpose of evaluating children aged 6-12 months with a comprehensive eye exam. This program provides a one-time, no charge, visual assessment to any infant. Three main vision disorders are documented at length that can affect quality of life if not addressed at an early age. Strabismus, misalignment of the eyes, is one such disorder that affects one out of twenty-five children in America. Amblyopia, a perceived loss of vision in one or both eyes due to amblyogenic factors, is another common disorder that affects one out of thirty children and is virtually undetectable without proper examination. A third common disorder is uncorrected refractive error, with hyperopia being the most prevalent. Without InfantSEE many of these disorders would not be detected early enough for appropriate treatment and management. When vision disorders persist into adulthood, they can affect many aspects of life. Overall health, job choices, and social factors are greatly affected by visual dysfunctions overlooked during infancy and childhood.

Prevalence of Vision Disorders in Children		
	<u>Age</u>	
Disorder	6 mo – 5.11 yrs	6-18 yrs
Hyperopia	33%	23%
Astigmatism	22.50%	22.50%
Myopia	9.40%	20.20%
Nonstrabismic binocular disorders	5%	16.30%
Strabismus	21.10%	10%
Amblyopia	7.90%	7.80%
Accommodative disorders	1.00%	6.00%
Peripheral retinal abnormalities		
(requiring referral or follow-up care)	0.50%	2%

TABLE 1.Prevalence of Vision Disorders in A Clinical Pediatric Population

Methods

The survey posed twenty-three questions and was emailed to all optometry schools, U.S. state optometric associations, and shared via social media. The primary correspondent for each optometry school and state association was asked to distribute the survey link to alumni and members. Responses were collected and compiled by Survey Monkey into separate categories to be further analyzed. Categories the responses were organized into are as follows:

•Graduation Year
•Graduation Year versus Comfort
•Gender versus Comfort
•Percentage of InfantSEE Providers by Gender and Graduation Year
•Town Size versus InfantSEE Provider

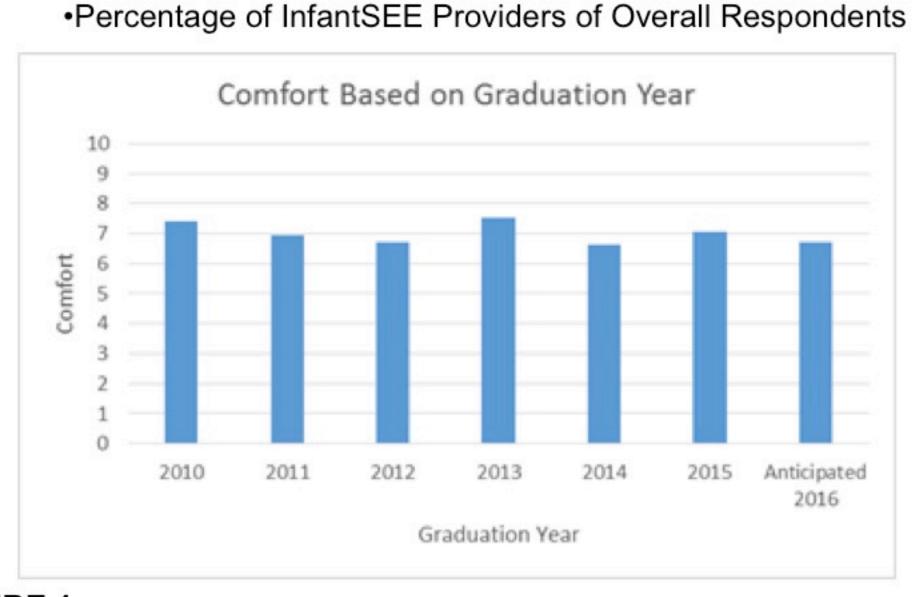


FIGURE 1.
Comfort Based on Graduation Year Bar Graph

Results

216 optometrists participated in the survey. The majority of respondents were female. Interestingly, male respondents rated their comfort level with infants higher than their female counterpart. A chart summarizing the distribution of female versus male respondents and an average valuation of their preparedness to see infants on a scale of zero to ten is shown in FIGURE 2. 92.52% of participants are members of the AOA. 47.89% are registered InfantSEE providers. Lack of financial incentives, lack of appropriate equipment, and lack of staff preparedness were the most frequently listed reasons new graduates are not InfantSEE providers. 88.06% of InfantSEE providers see 0-5 cases of treatable ocular disease diagnosed during an InfantSEE examination. Newly graduated optometrists were asked to rate (on a scale from 1 to 10) how prepared they were to be an InfantSEE provider. The largest amount of optometrists answered 8 (19.58%), with 7 (18.18%) and 10 (16.78%) responses being close behind.

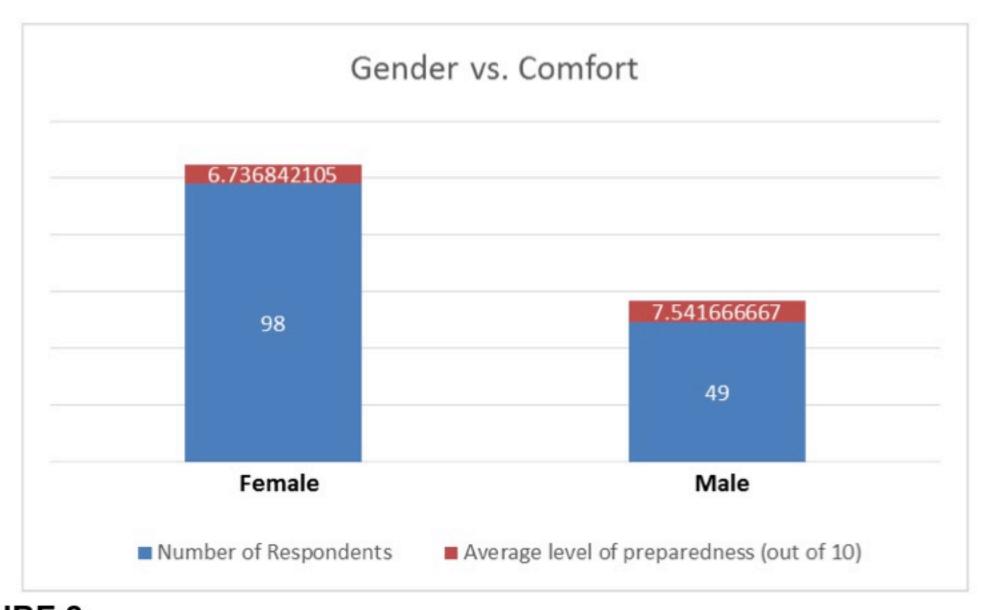


FIGURE 2.
Comfort Based on Gender Bar Graph

Discussion

This survey attempted to investigate how prepared recent graduates felt to provide infant vision services and recommend to the AOA how they can better serve new optometrists in their quest to become InfantSEE providers. While the survey posed pointed questions regarding preparedness, results indicate preparedness is not the primary concern amongst new graduates. Education was the primary response to how the American Optometric Association can help their members. Optometric physicians requested educational materials and informational videos in an easy-to-access format, along with continuing education courses in order to better serve their pediatric population. Some suggested a welcome packet for new InfantSEE providers, webinars, a list of equipment, and official published guidelines. The need for organized, easy-to-access information and expectations was the consensus gathered by newly graduated optometrists attempting to grow their clinical skills.

References

Schwartz M, Steele G, Bowyer N, Lowe P, Morton W, Spangler J. InfantSEE: A Public Health Effort to Provide Comprehensive Vision Assessments to Infants Across the United States. Optometry 2010;81:304–5.

Scheiman M, Gallaway M, Coulter R. Prevalence of vision and ocular disease conditions in a clinical pediatric population. J Am Optom Assoc 1996;67:193–202.

Luebbert JL. InfantSEE and Paraoptometry. Optometry 2005;76:359-61.

Birch EE, Holmes JM. The clinical profile of amblyopia in children younger than 3 years of age. J AAPOS 2010;14:494–7.

For More Information: Cassidy Kesler- winkler@nsuok.edu Alissa Proctor- proctor1@nsuok.edu Laura Langford- langforl@nsuok.edu