SURVEY METHODOLOGY

The 2017 Survey of Optometric Practice was sent to a random stratified sample of professionally active optometrists in April 2017 who graduated from optometry school in 2015 or earlier.

A. POPULATION AND SURVEY SAMPLE

The distribution population of the 2017 Survey of Optometric Practice was identified from the AOA membership records and the state board of optometry databases as of December 31, 2016. Optometrists who were professionally active with a mailing address, currently employed in the profession of optometry, and who graduated from optometry school in 2015 or earlier comprised the survey population. The population was estimated to be 45,0331 practicing optometrists. A random stratified sample of 4,150 optometrists was selected. A total of 2,158 invitations were sent to AOA member optometrists and 1,992 were sent to non-AOA member optometrists.

B. DATA COLLECTION

The 2017 Survey of Optometric Practice was mailed to the optometrist sample on April 11, 2017. Data collection was completed on July 31, 2017.

The population was adjusted by removing optometrists who were retired, deceased, no longer practicing, or not locatable, resulting in 1,507 respondents and a final adjusted overall response rate of 36%. The overall error level associated with the data is 3% at the 95% confidence interval.

C. CALCULATIONS

The chi-square test for independence was used to evaluate relationships between multiple variables within our sample population. The null hypothesis used for all chi-square tests was that the two variables were independent of one another; that is, for each individual, the value obtained for one variable was not related to (or influenced by) the value for the second variable. Significance was determined using the .05 alpha level.

Questions designed to collect quantitative data (i.e., those in which the respondent provided income, hours worked, gross billings, etc.) were analyzed using means and medians. An independent t test, or two sample t test, was used to determine if the reported mean of one group of participants was equal to the mean of another, unrelated group. The null hypothesis used to test for significant differences between two independent sample means was that the population means from the two unrelated groups were equal. Significance was determined for all independent t test calculations using a two-tail test at the .05 alpha level. Analysis of variance (ANOVA) was used to compare means between more than two independent, or unrelated, groups (i.e. optometrists in different practice types). The null hypothesis used to test for significant differences between three or more independent sample means was that the population means from all unrelated groups were equal. Significance was determined for all ANOVA using .05 alpha level.

1The population of practicing optometrists in the United States workforce obtained from the AOA Doctor of Optometry Master Data File – accessed January 2017