



Scleral lens fitting strategies of practitioners with various levels of experience.

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PURPOSE

To evaluate fitting strategies for practitioners with various levels of experience in fitting scleral lenses

METHODS

- An 22 question electronic survey (REDCap) was distributed to attendees of the 20107 Global Specialty Lens Symposium.
- De-identified data was collected regarding practitioners' fitting methods and practices, including the technologies used in the process of fitting a scleral lens, and the number of years of experience in fitting scleral lenses.
- Respondents were asked if they had been fitting scleral lenses for ≤ 5 years, 6-10 years, 11-15 years, 16-20 years, or greater than 20 years.
- Evaluation of the data was conducted for this study in order to determine if fitting techniques vary depending upon the experience of the scleral lens practitioner.

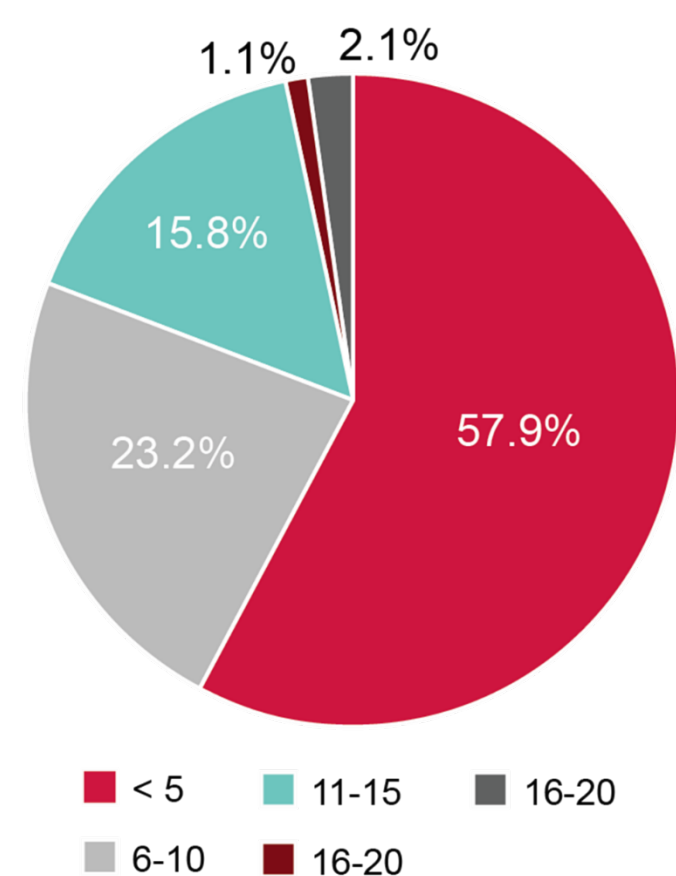


Figure 1. Years of experience fitting scleral lenses (58% ≤ 5 years, 24% 6-10 years, 19% ≥ 11 years)

STATISTICS

A Chi-square test found a significant difference between the fitting experience groups for several scleral lens fitting strategies

RESULTS

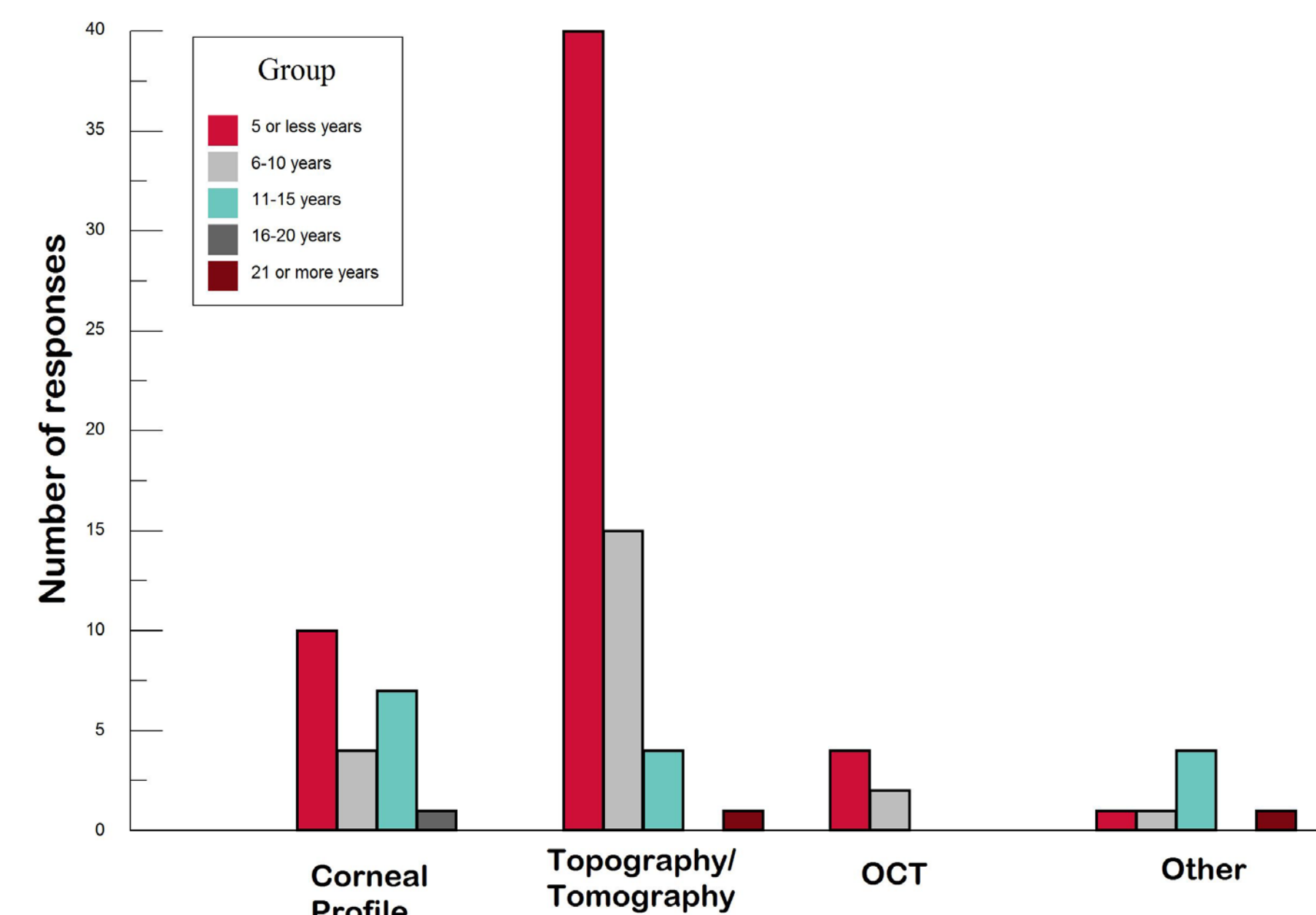


Figure 2. Technology used to determine which lens to be used first, divided by years of practitioner experience. Practitioners with 10 or less years of experience generally used topography or tomography to determine the initial diagnostic lens, while those with greater than 10 years are more likely to use corneal profile technology.

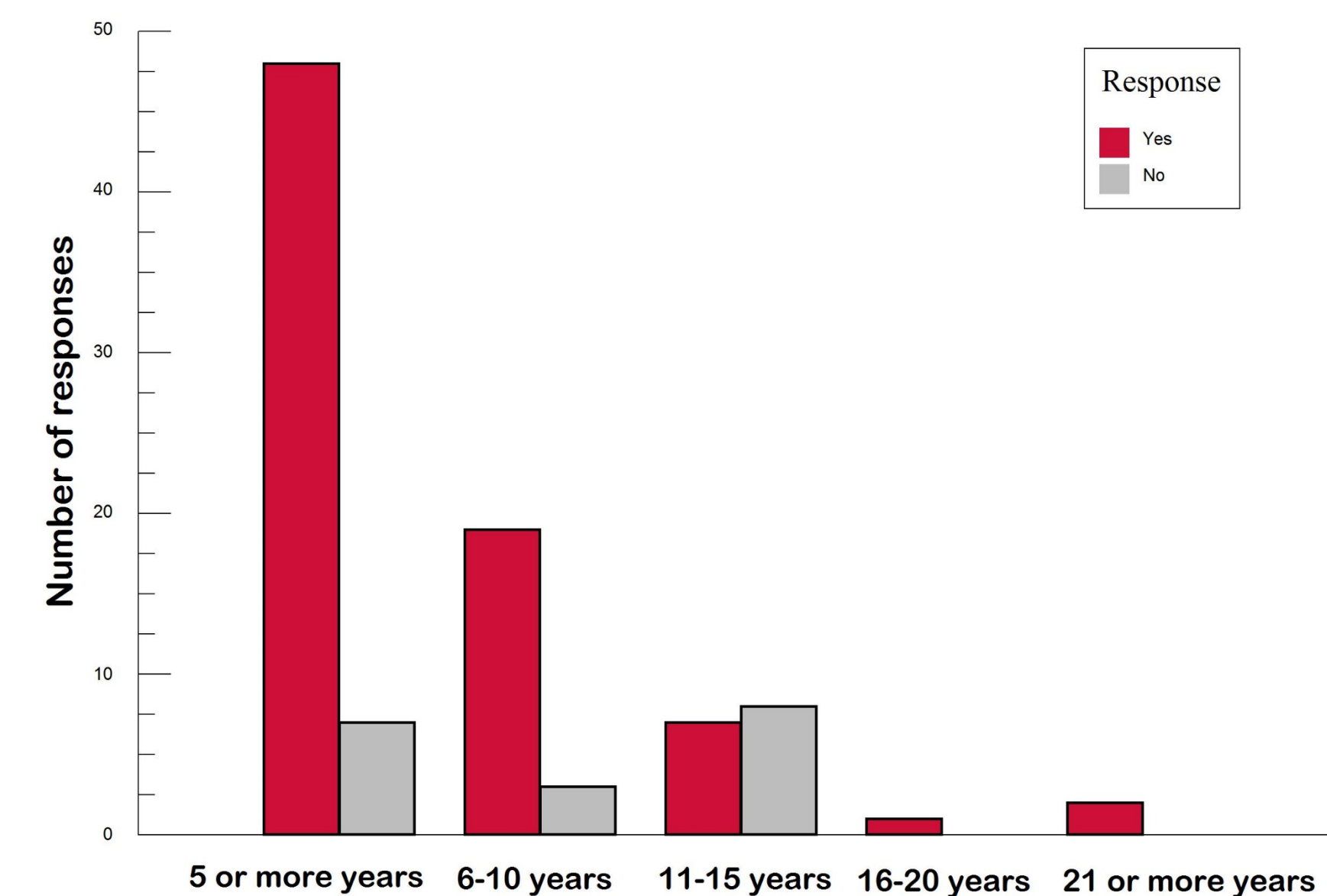


Figure 3. Number of respondents who assess lens fit by filling the bowl of a scleral lens with fluorescein. When evaluating lens fit, practitioners with ≤ 10 years experience generally used fluorescein in the bowl of a scleral lens in order to evaluate the fit of a lens while those with >10 years of experience used fluorescein in the bowl only about half the time.

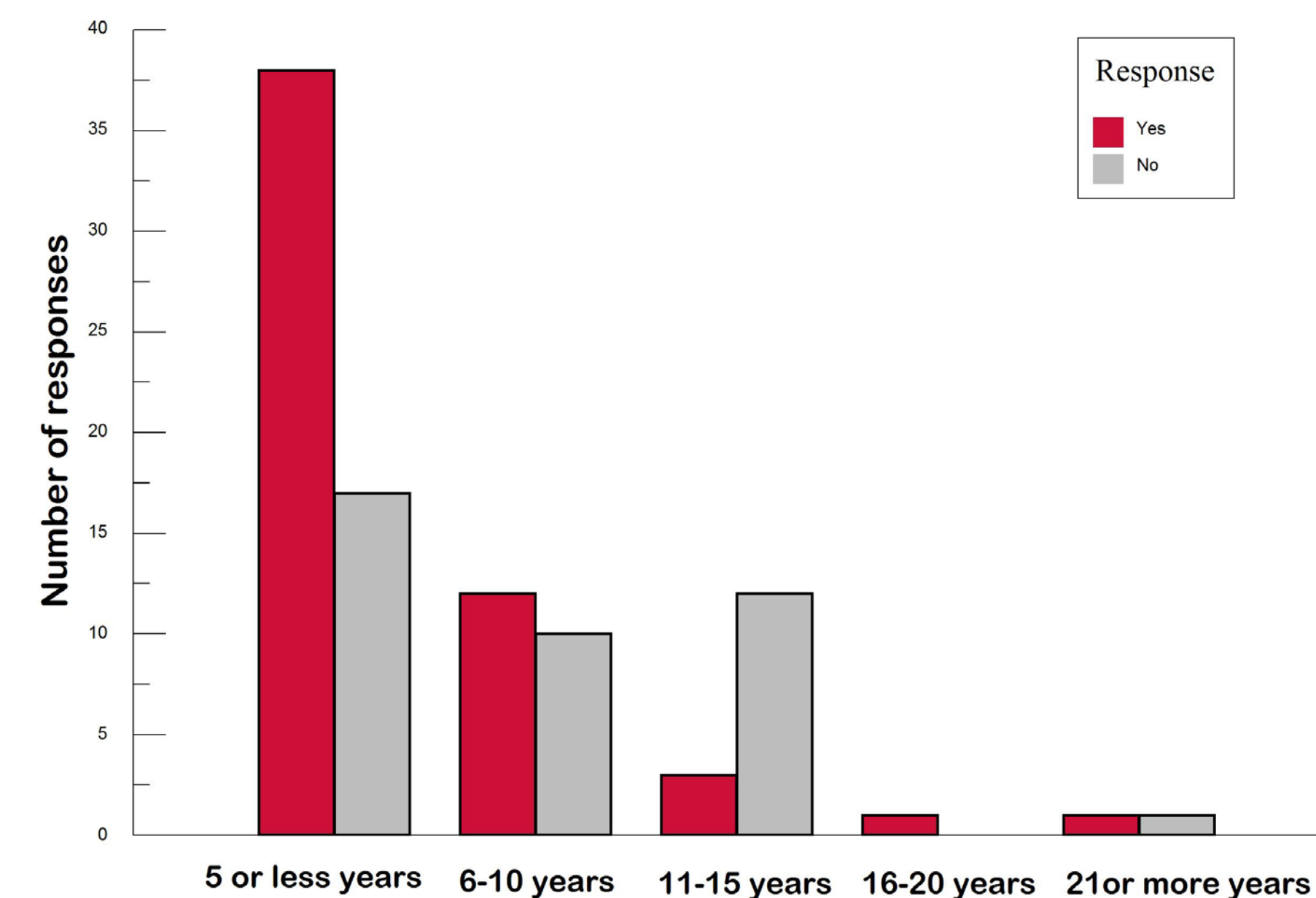


Figure 4. Number of respondents who routinely use OCT in scleral lens evaluations Practitioners with 10 years or less experience were more likely to use an anterior segment OCT to aid in fitting.

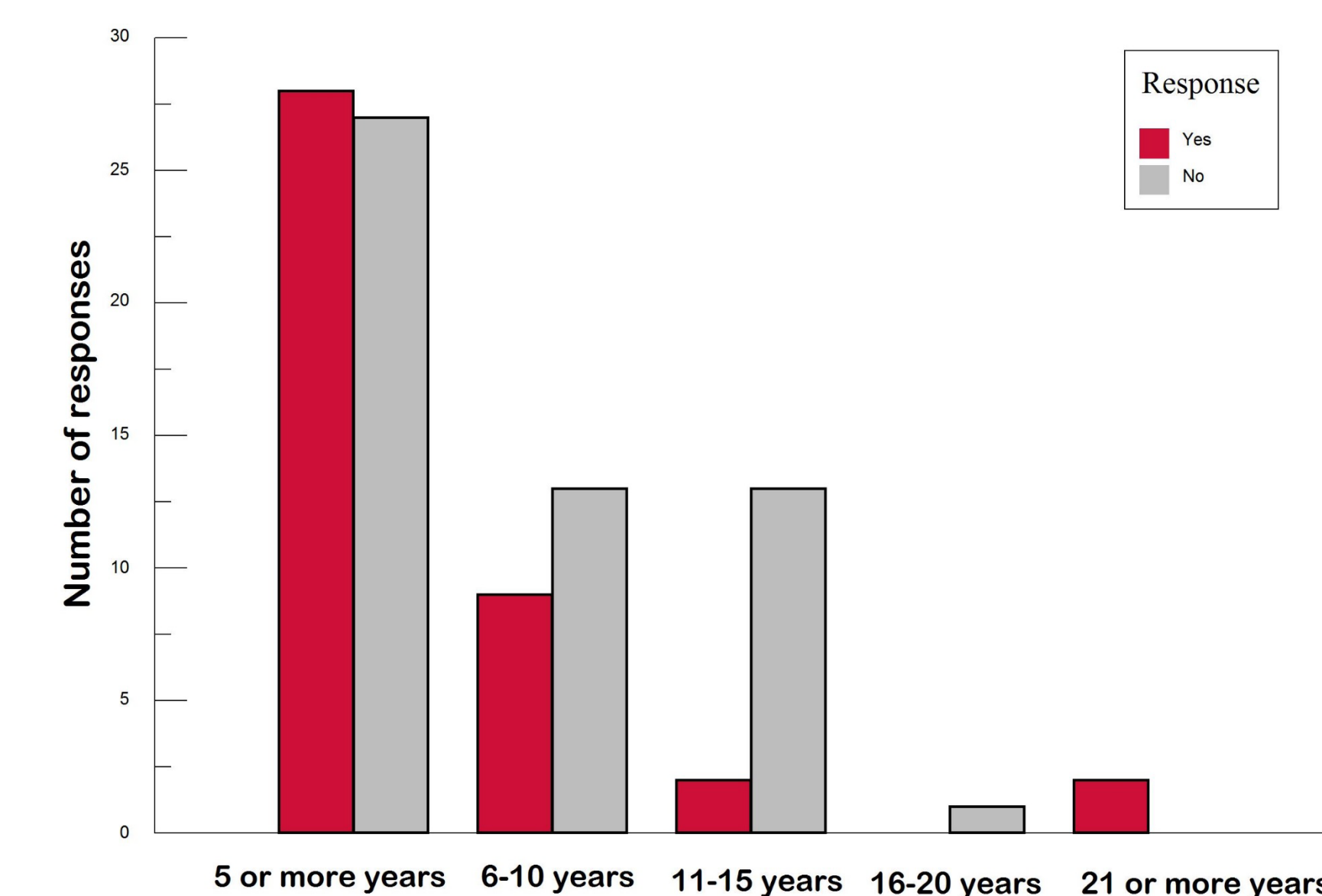


Figure 5. Number of respondents who use OCT or Scheimpflug imaging to assess conjunctival alignment. Fitters with 5 years or less experience were more likely to use OCT to evaluate conjunctival alignment of a scleral lens.

CONCLUSIONS

95 participants responded to a 22 question survey. Respondents were asked if they had been fitting scleral lenses for ≤ 5 years, 6-10 years, 11-15 years, 16-20 years, or greater than 20 years. Over half of the respondents (58%) had been fitting lenses for >5 years.

Statistical analysis found a significant difference between fitting experience groups in the following fitting strategies:

- Practitioners with 10 or less years of experience generally used topography or tomography to determine the initial lens, while those with greater than 10 years are more likely to use corneal profile technology to select the first lens.
- When questioned about technology used in the process of fitting, practitioners with 10 years or less experience were more likely to use an anterior segment OCT to aid in fitting.
- When evaluating lens fit, practitioners with 10 years or less experience generally used fluorescein in the bowl of a scleral lens in order to evaluate the fit of a lens while those with more than 10 years of experience used fluorescein in the bowl only about half the time.
- Fitters with 5 years or less experience were more likely to use OCT to evaluate conjunctival alignment of a scleral lens.

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SUPPORT



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