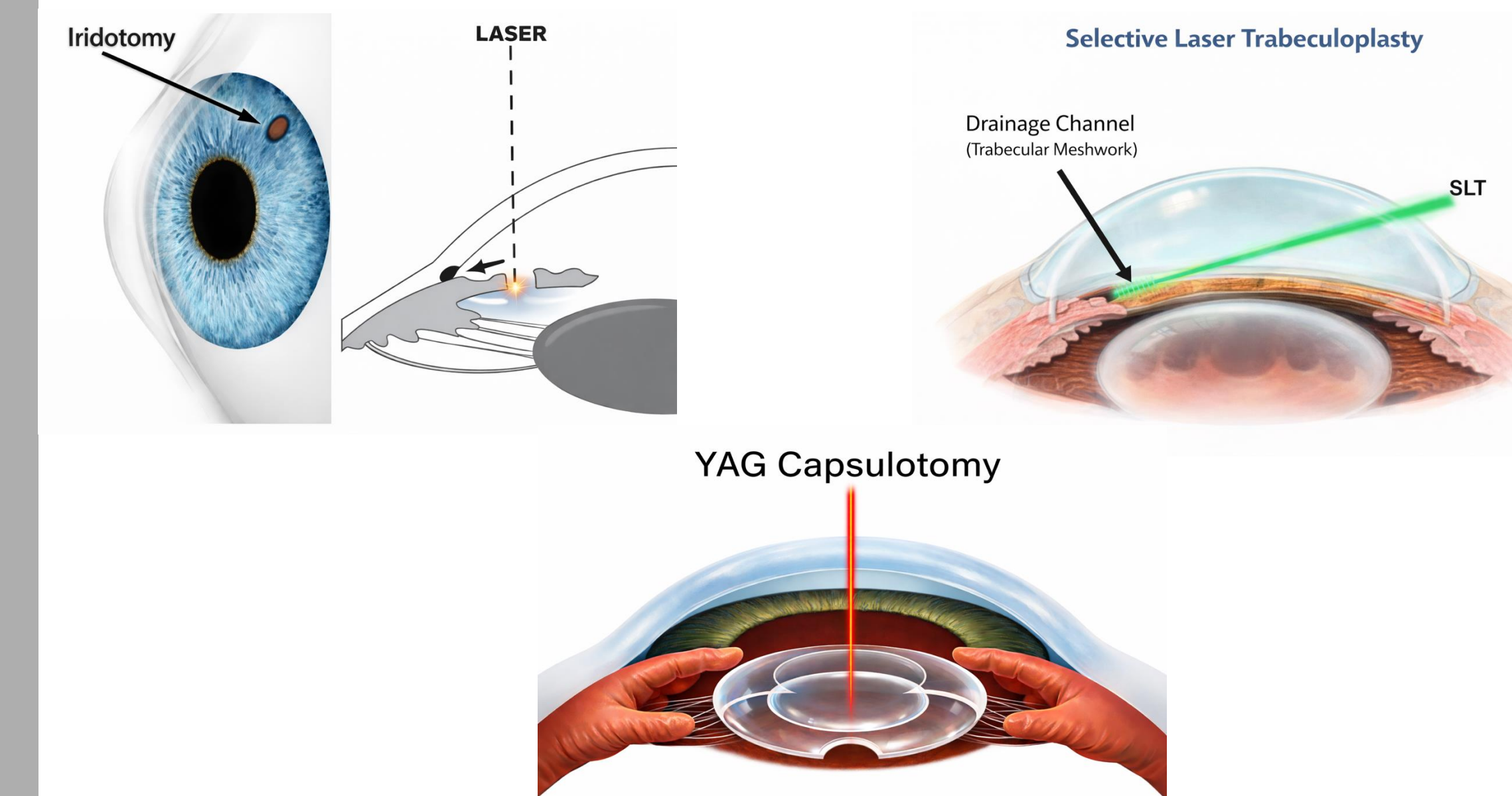


The Implementation of a Hybrid Teaching Model for Ophthalmic Laser Skills: Integrating Practical, Pre-Recorded, and Online Learning for YAG Capsulotomy, Peripheral Iridotomy, and Selective Laser Trabeculoplasty

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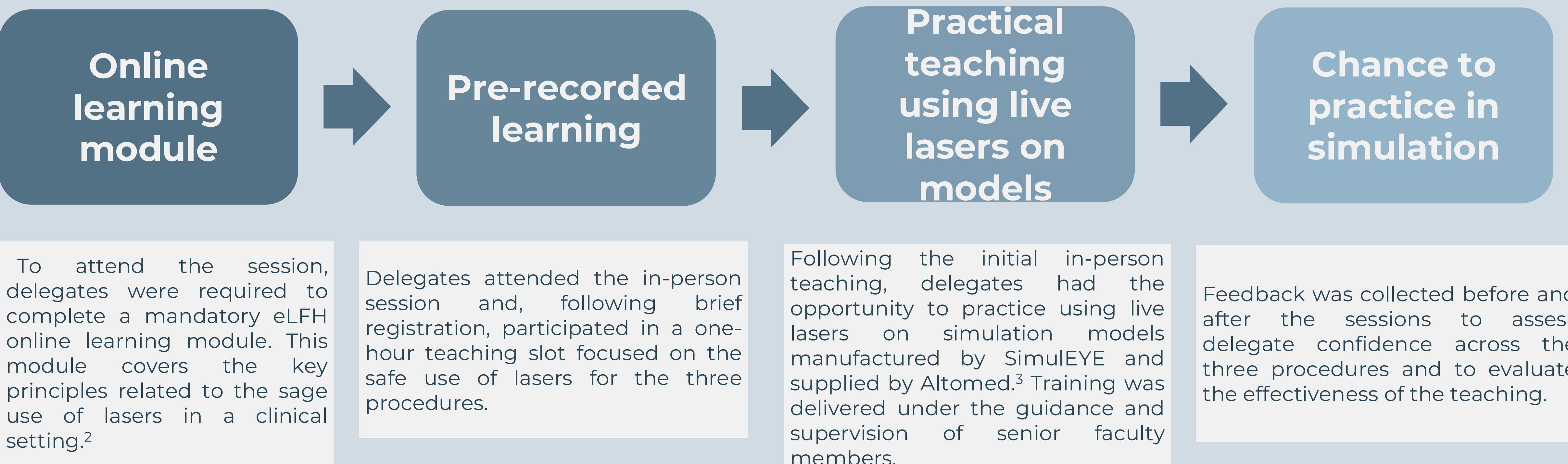
Introduction:

In the United Kingdom, many doctors enter Ophthalmology training with limited prior experience in the safe use of lasers for clinical procedures. The safe and effective application of lasers for YAG capsulotomy, peripheral iridotomy, and selective laser trabeculoplasty is a mandatory component of the training curriculum set by the Royal College of Ophthalmologists.¹

However, many trainees report a lack of confidence when first performing these procedures in clinical practice. This course aims to provide the knowledge and foundational skills required to support the safe and effective use of ophthalmic lasers. It also seeks to improve trainee confidence in these three procedures, enabling them to perform laser treatments more assuredly in real clinical settings.

The course adopts a hybrid teaching approach. Delegates gain essential background knowledge prior to attendance through an online learning module and a pre-recorded lecture. This allows the in-person session to focus on practical skill development.

Methods:



DISCUSSION & CONCLUSION:

Our findings demonstrate that implementing a hybrid approach to teaching practical skills can be beneficial for delegates, particularly in supporting the safe clinical use of ophthalmic lasers. The course was associated with improved self-reported confidence across all three targeted laser procedures.

Future directions and limitations:

We aim to continue developing the course by expanding teaching on gonioscopy (the use of specialised lenses) to further support skill acquisition among more junior trainees. In addition, we plan to evaluate procedural numbers and clinical outcomes among course participants and compare these with non-attendees. Such evaluation would allow a more robust assessment of real-world impact and may support progression towards higher levels of the Kirkpatrick training evaluation model.⁴

Aims:

- To provide delegates with the knowledge required for the safe use of lasers in Ophthalmology.
- To enable hands-on learning through simulation using live lasers and models.
- To improve the delegate confidence in performing three key procedures
- To encourage delegates to perform further procedures following the course.

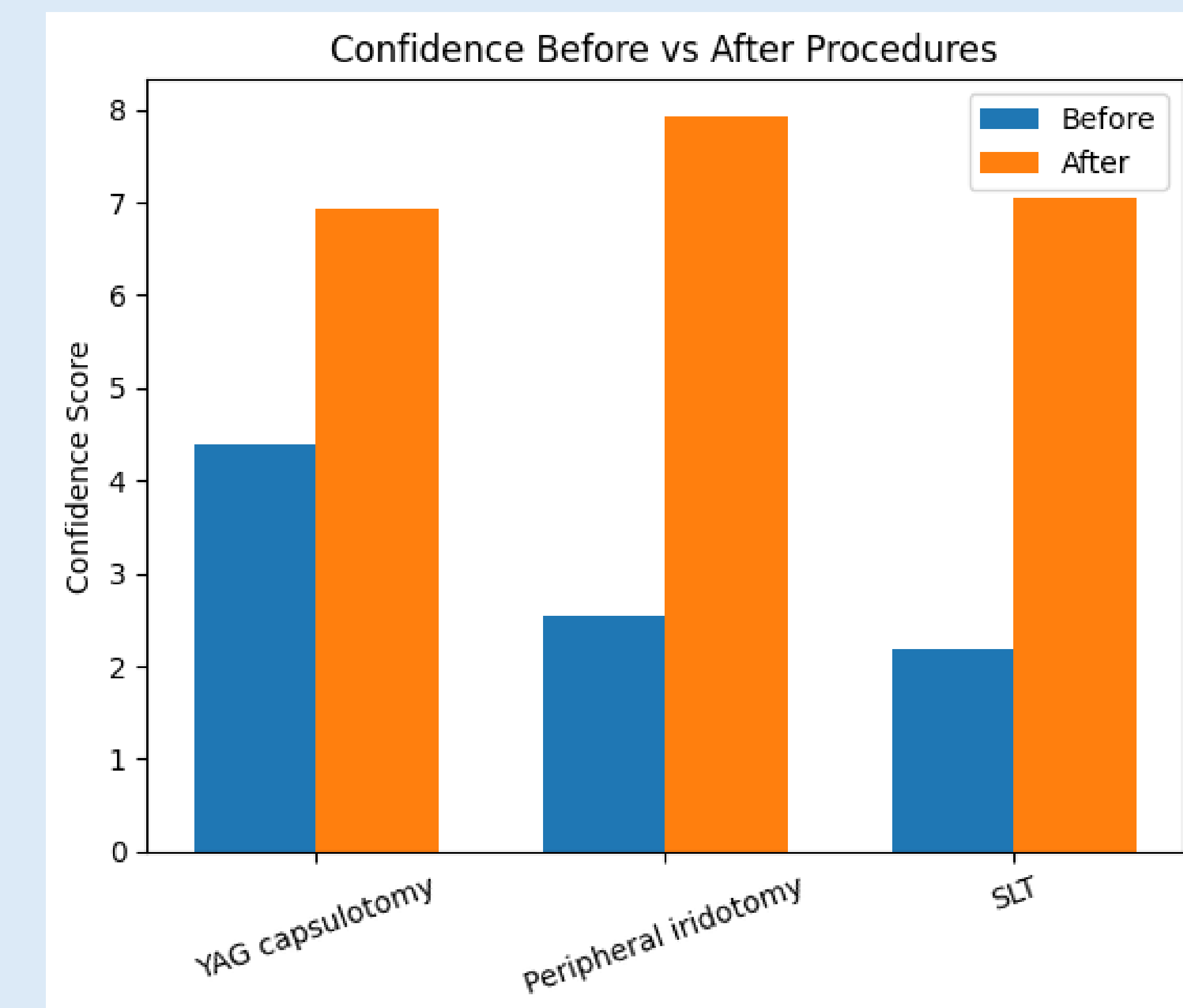
Results:

Over multiple iterations:

- 54 trainees attended, 47 were in the first year of surgical training
- 51 responded to the pre and post course feedback
- Confidence levels for the three procedures was measured using a 10-point likert scale.
- YAG Capsulotomy: 4.39 -> 6.94
- Peripheral iridotomy: 2.55 -> 7.93
- Selective laser Trabeculoplasty: 2.18 -> 7.04

In the most recent iteration:

- Respondents rated the course 8.92/10 for improving procedural confidence.



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