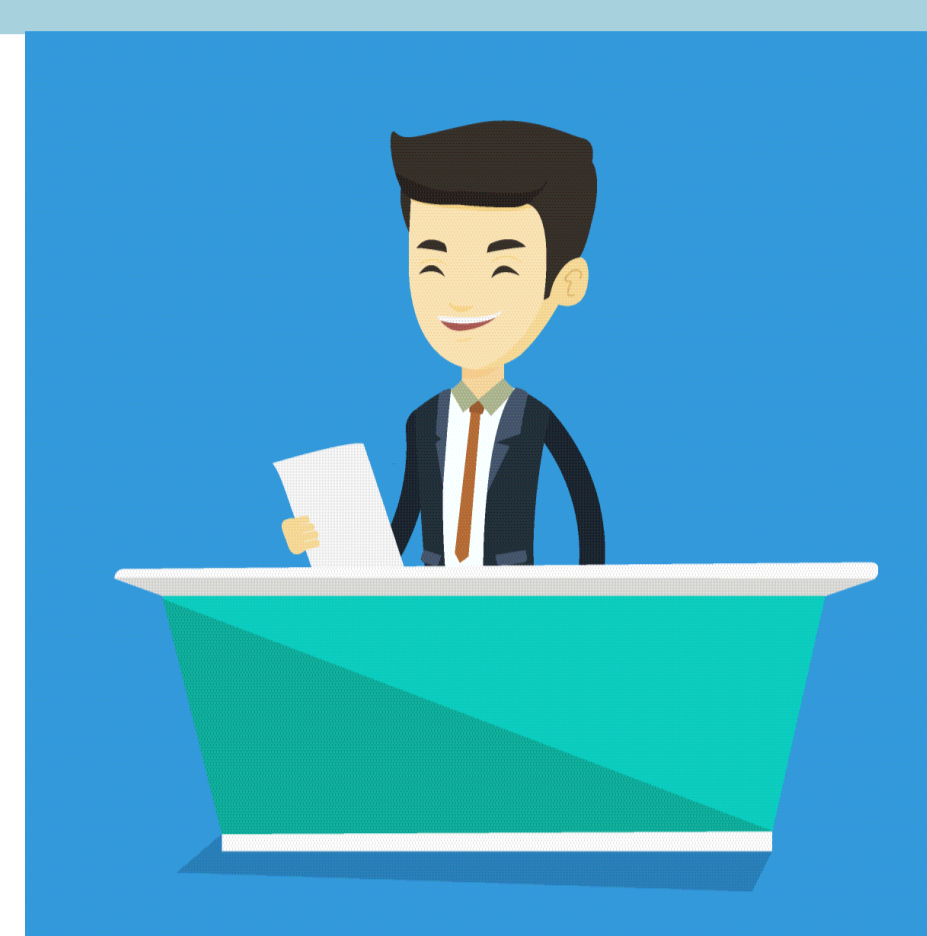


Evaluating the impact of further education and training on referral optimisation to the Emergency Macular Assessment Clinic (EMAC) at Manchester Royal Eye Hospital (MREH)

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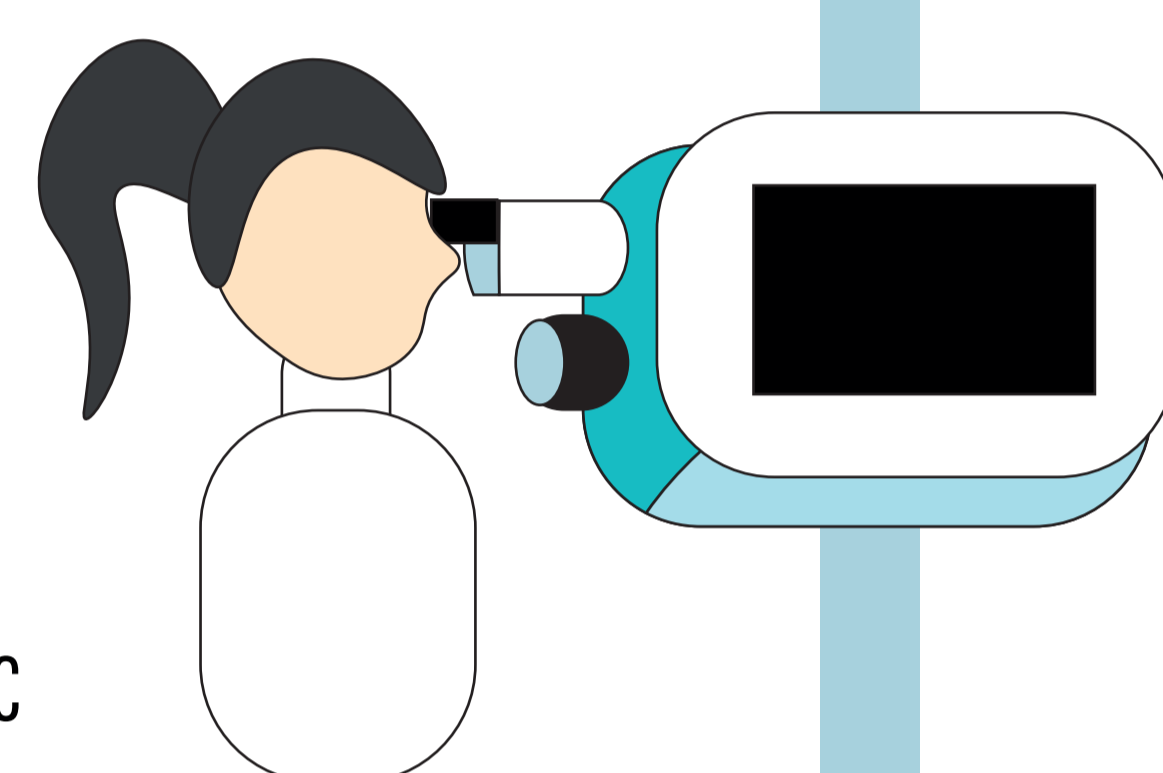
INTRODUCTION

As the burden on Hospital Eye Services (HES) in the government sector continues to escalate, it has become increasingly important patients are only referred when necessary, and referrals directed to the appropriate department.



AIMS

Evaluate the impact of enhanced training on optometrists' confidence levels in diagnosing macular conditions using optical coherence tomography (OCT) and making appropriate referrals to the Emergency Macular Assessment Clinic (EMAC) at Manchester Royal Eye Hospital (MREH). Optometrists' understanding of the EMAC referral criteria was also assessed.



METHODS

An educational event remotely delivered by 2 Advanced Clinical Optometrists comprised of 3 elements: a 90-minute educational workshop and 2 identical surveys, labelled 'Pre-Workshop' and 'Post-Workshop'.

Using a five-point Likert scale (limits specified in brackets), optometrists were asked to appraise their confidence in assessing macular OCT ('very confident' to 'not confident at all') and their understanding of EMAC referral criteria ('understand very well' to 'do not understand at all').

Optometrists were also presented with five clinical case scenarios and asked for their management decision.



RESULTS

1 A total of 147 optometrists completed all elements of the event. Optometrists' confidence levels in assessing macular OCT significantly improved post-workshop ($p < 0.001$); an increase of 37.5% and 50% for optometrists answering, 'very confident' and 'confident', respectively. Results are illustrated in figure 1.

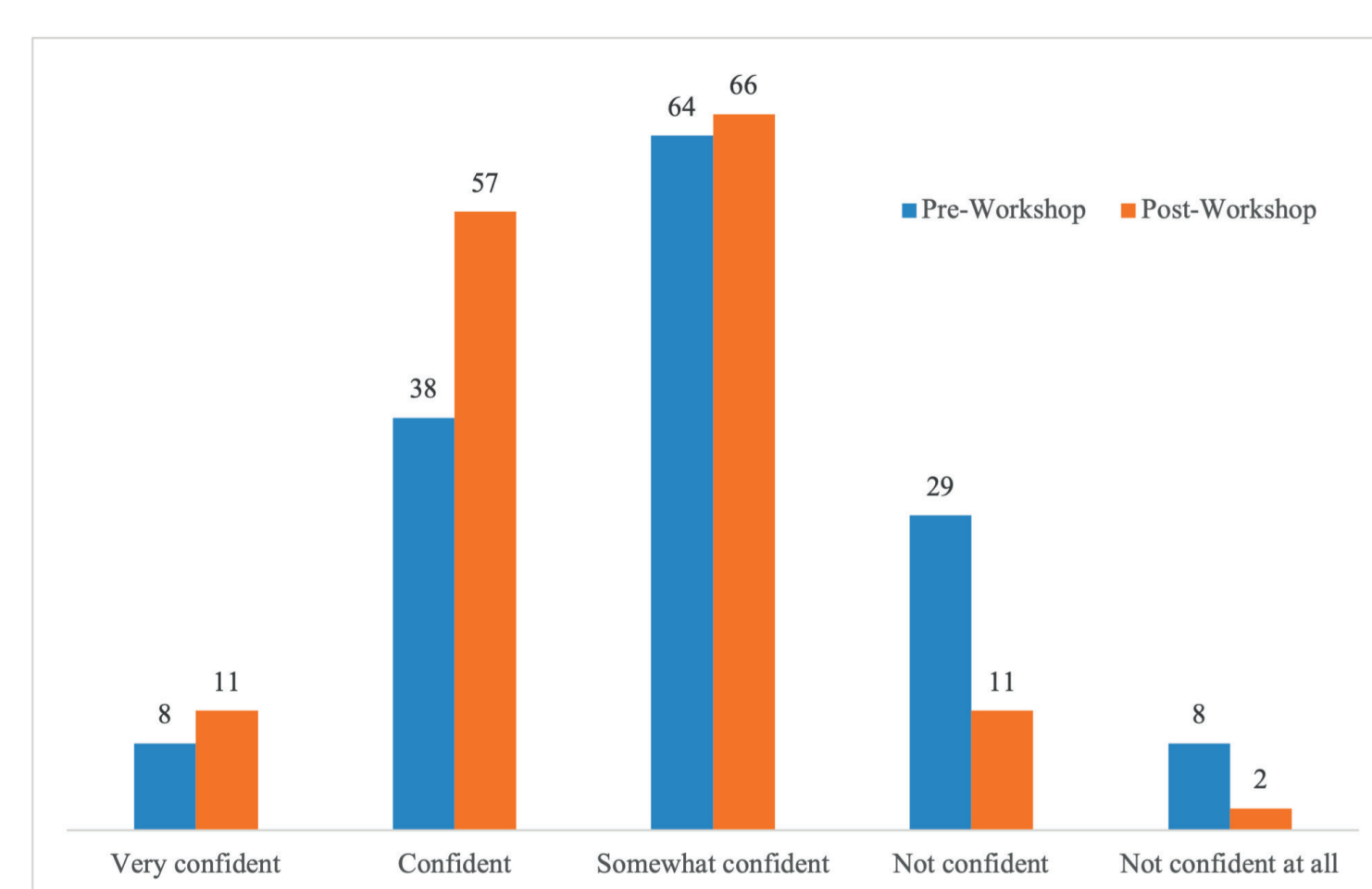


Figure 1. Optometrists' confidence levels in assessing macular OCT scans (n= 147).

2 Optometrists' understanding of the EMAC referral criteria significantly improved post-workshop ($p < 0.001$); no optometrist answered, 'do not understand' or 'do not understand at all'. Full results are illustrated in figure 2.

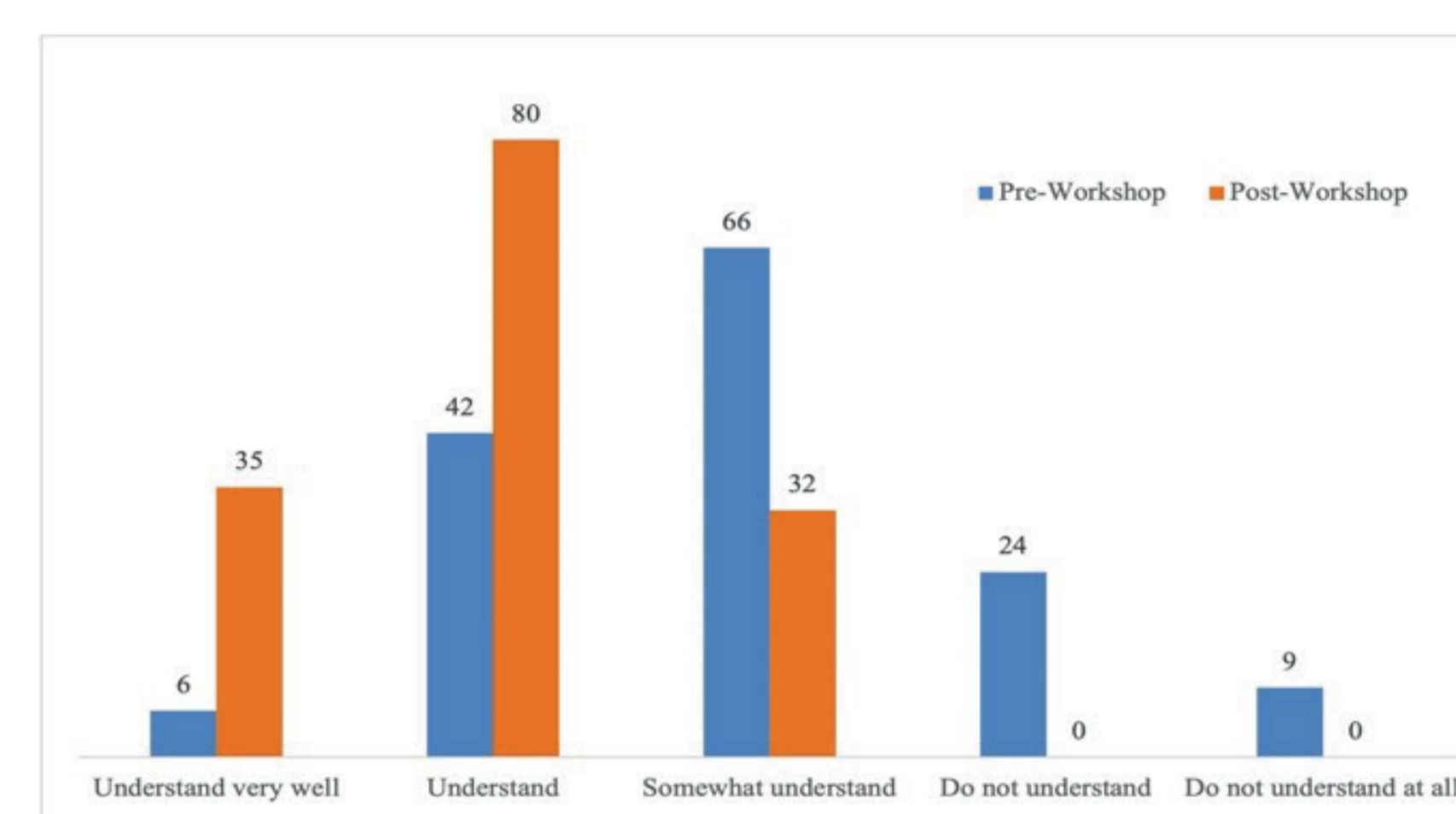


Figure 2. Optometrists' levels of understanding of the EMAC referral criteria (n= 147).

3 Optometrists' performance level for all clinical cases combined significantly improved by 28% post-workshop ($p < 0.001$). Optometrists' mean correct scores for individual clinical cases are illustrated in figure 3.

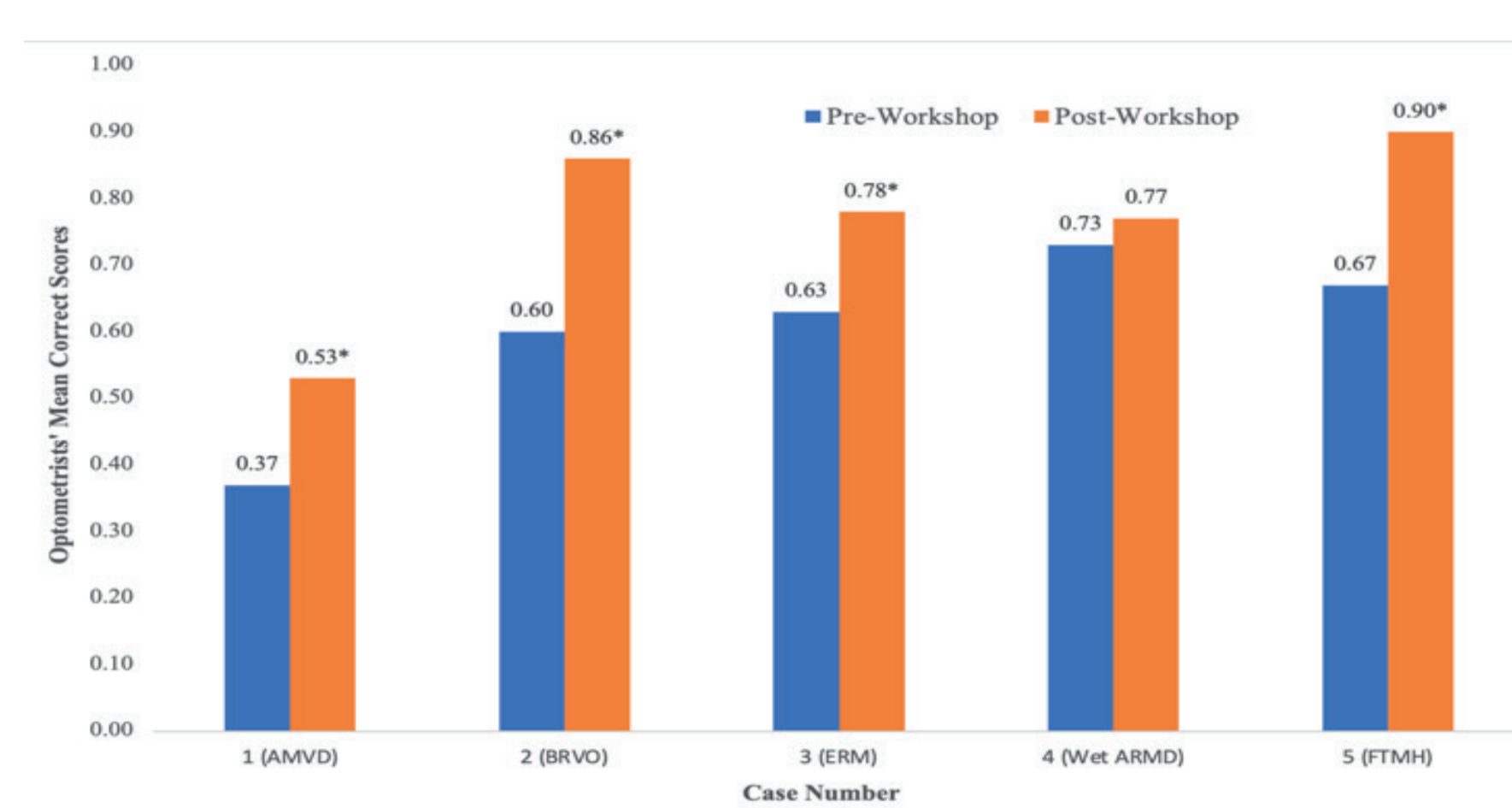


Figure 3. Optometrists' mean correct scores for clinical cases. *statistically significant

4 Average correct scores improved for all clinical cases and were statistically significant for all cases but case 4. More than 60% of optometrists' scores improved by at least 1 answer post-workshop compared to their pre-workshop results, as seen in figure 4

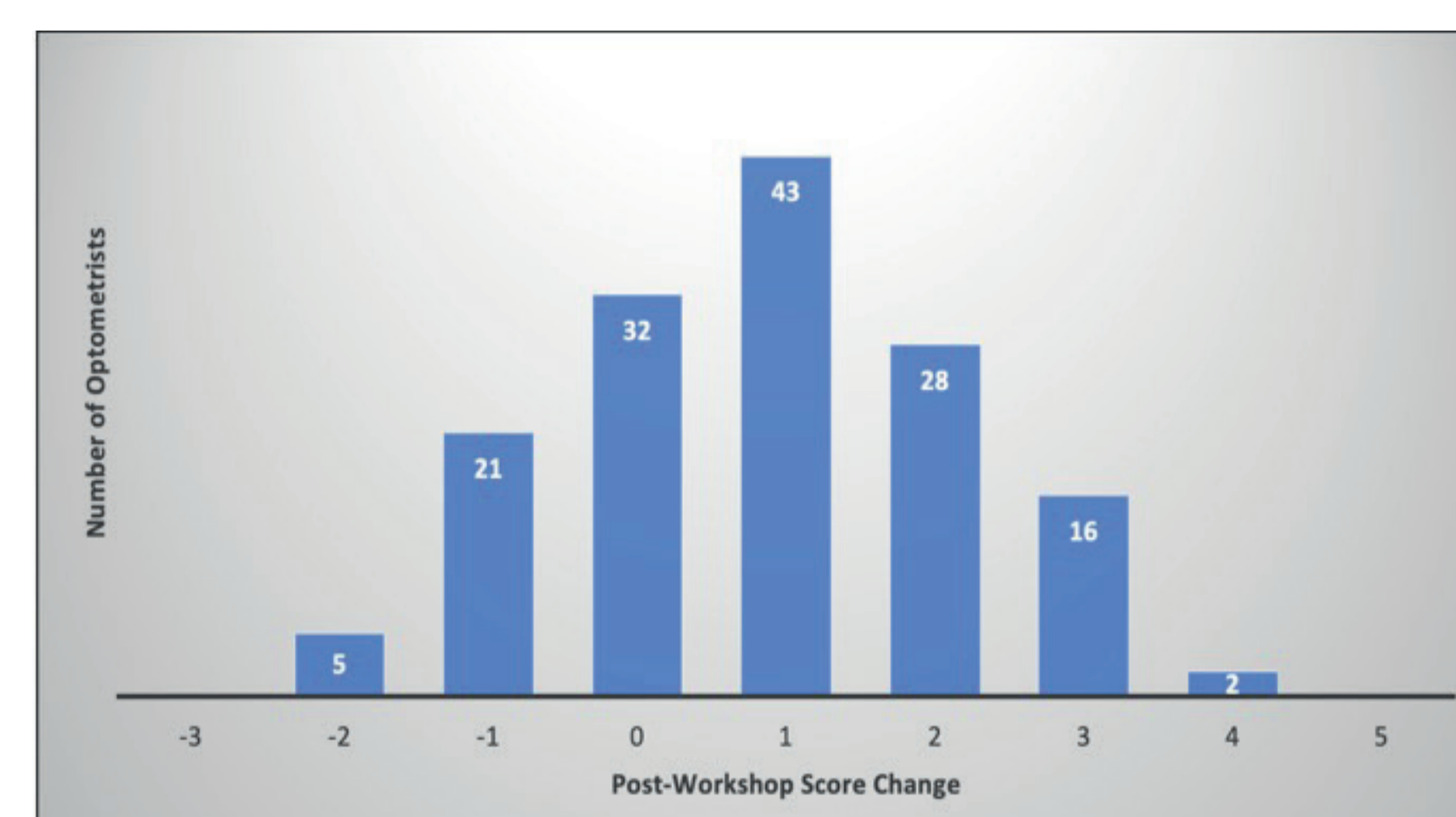


Figure 4. Optometrists' post-workshop score changes for all clinical cases.

CONCLUSION

Further education and training has a significant positive impact on optometrists' confidence levels in assessing macular OCT and their overall diagnostic performance, which in turn, can optimise referrals to the EMAC service. Similar training may help in other ocular services.