

ADVANCING LAPAROSCOPIC TRAINING IN UGANDA: IMPLEMENTATION OF THE GLOBAL LAPAROSCOPIC ADVANCEMENT PROGRAM (GLAP) OF THE SOCIETY OF AMERICAN GASTROINTESTINAL AND ENDOSCOPIC SURGEONS (SAGES)

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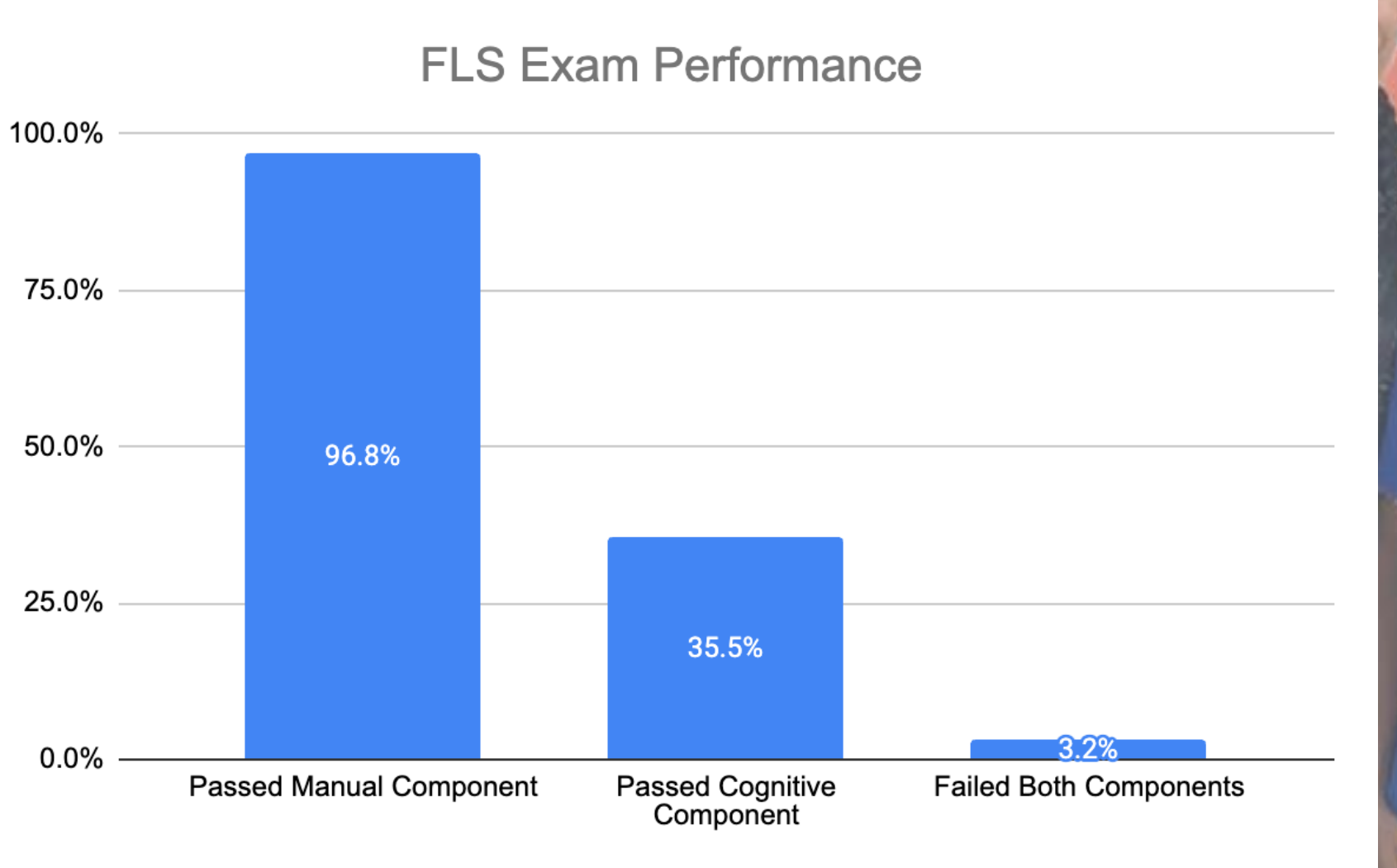
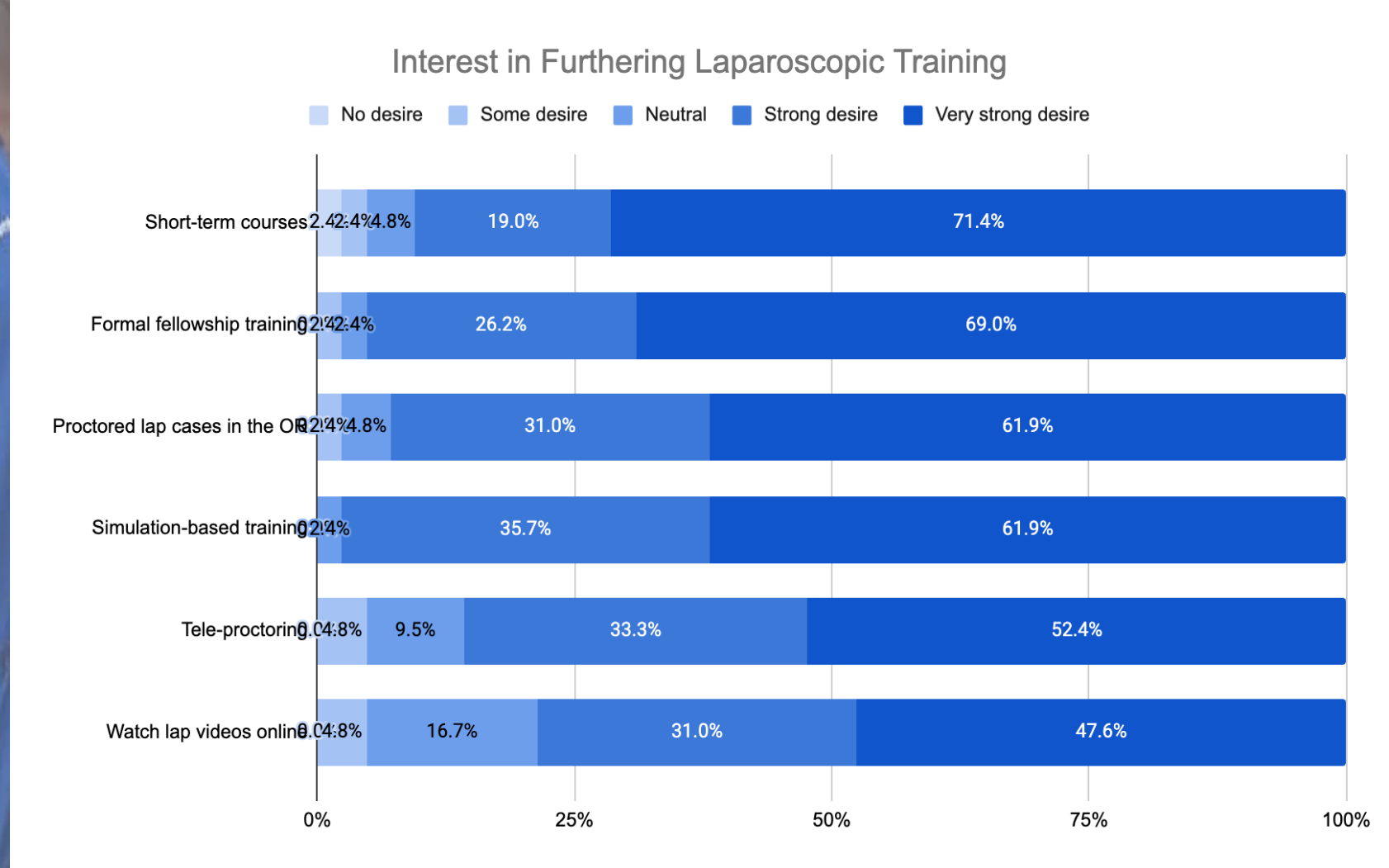
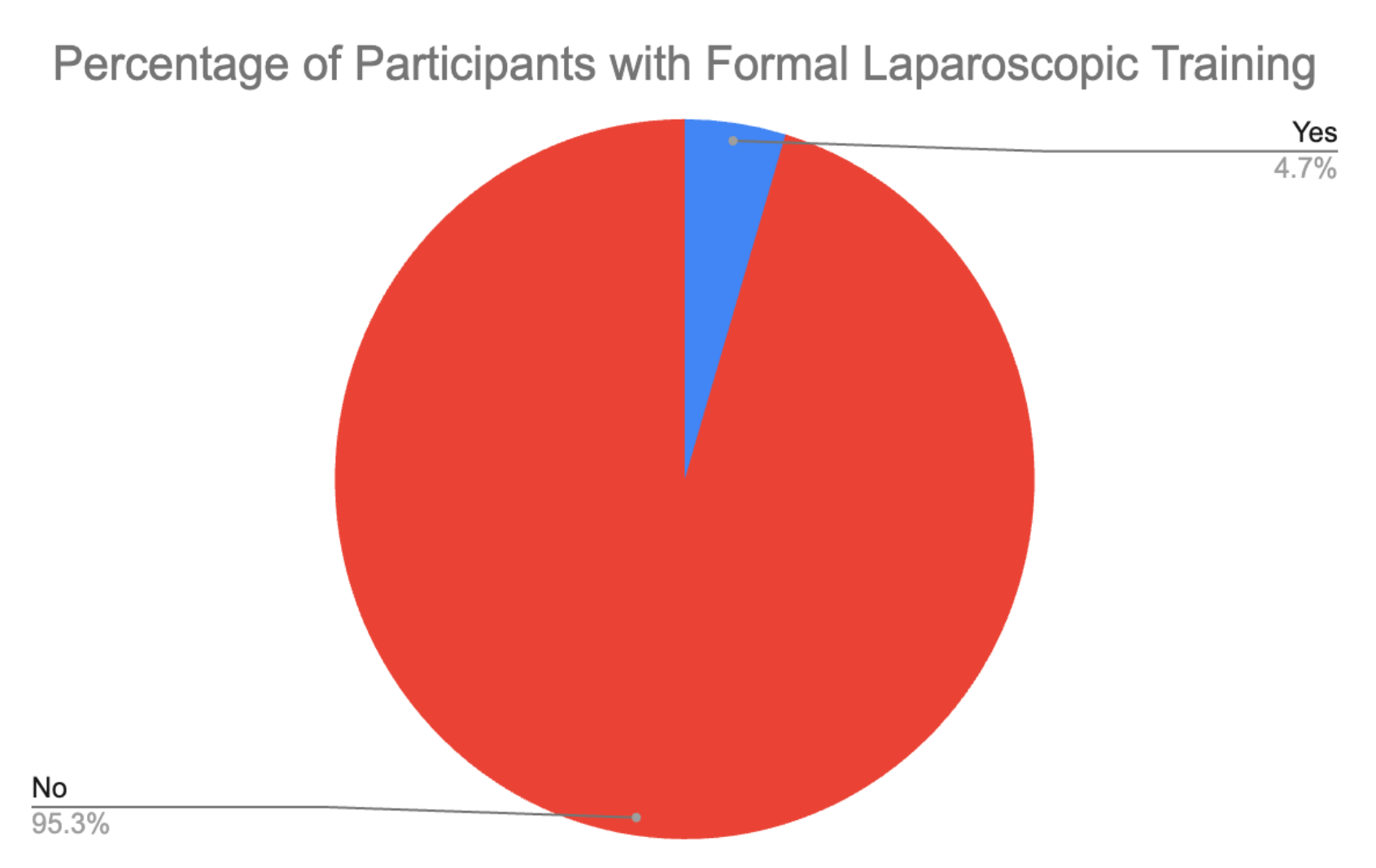
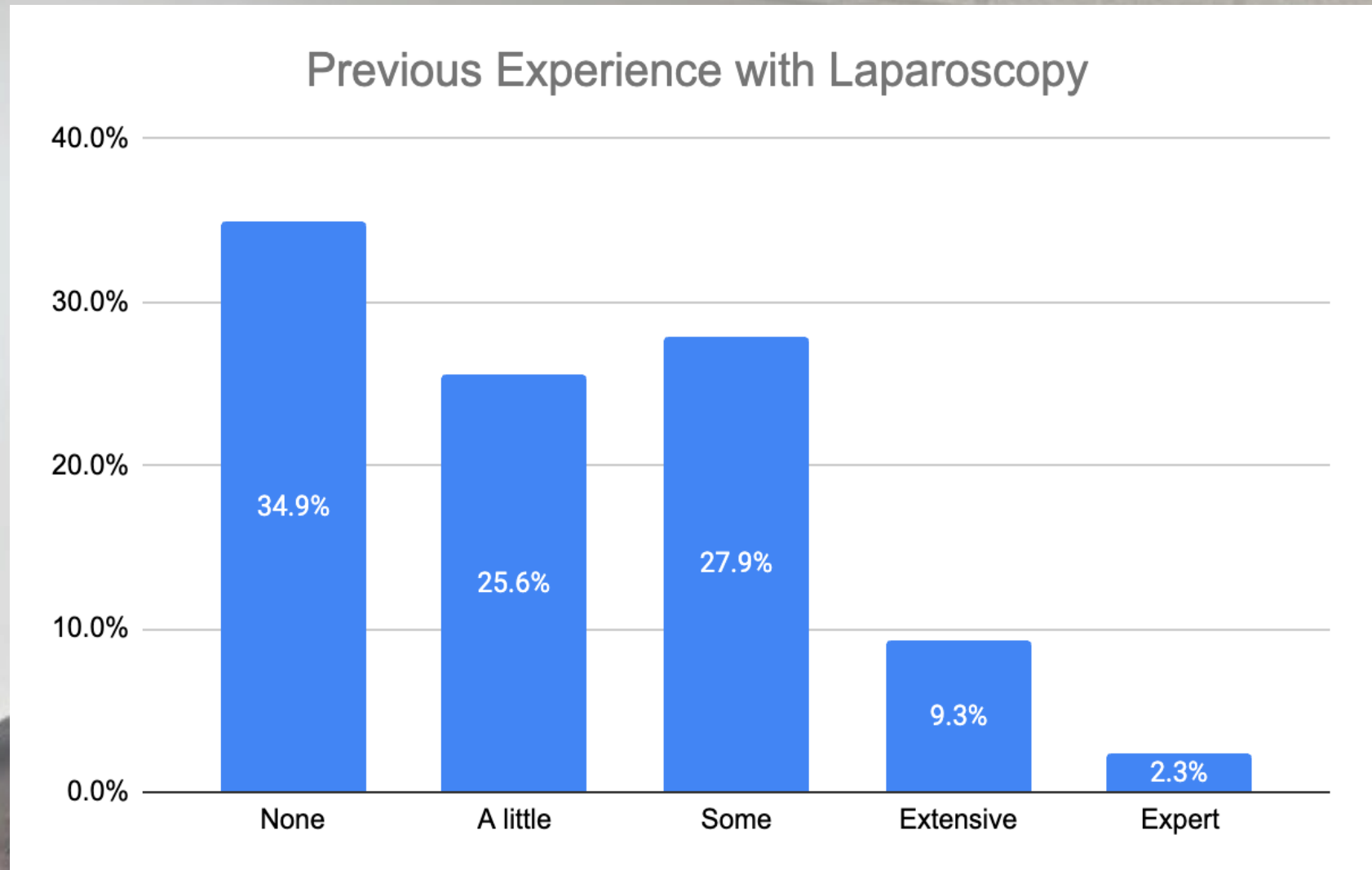
BACKGROUND

- Introducing laparoscopic surgery in low- and middle-income countries (LMICs) is challenging due to limited equipment and shortage of experienced trainers.
- The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) developed the Global Laparoscopic Advancement Program (GLAP) to provide sustainable partnership and training in safe laparoscopic surgery.
- This study evaluated GLAP's training in Uganda and FLS exam performance.

METHODS

- In December 2024 and August 2025, GLAP conducted two programs consisting of six 2-hour virtual sessions followed by 5-day onsite courses in Uganda, emphasizing basic laparoscopic procedures, FLS didactics, and hands-on simulation.
- Participants completed surveys on prior laparoscopic experience and access to equipment and training resources.
- FLS exams were administered at program completion.

RESULTS



- Total of 43 surgeons across 5 African countries took part in this training; the vast majority of whom are general surgeons (N=32).
- Only 5% of participants had formal laparoscopic training, while 25 (58%) learned through observation.
- Over half (N=22, 58%) identified lack of equipment as the top barrier. Most participants expressed strong interest in short-term courses (71.4%), formal training (69%), simulation-based learning (61.9%), proctored OR cases (61.9%), and tele-proctoring (52.4%).
- Thirty-one participants took the FLS exam: 30 (96.7%) passed the manual portion, 11 (35.5%) passed the cognitive portion, and 1 (3.2%) failed both—yielding a 32.3% overall passing rate (N=10).

CONCLUSIONS

- This study highlights barriers to laparoscopic surgery training and adoption in Uganda and the strong potential for GLAP to expand capacity.
- While participants showed high success rates in the FLS manual skills component, limited prior laparoscopic experience, language barriers, and unfamiliarity with Western test-taking conventions may have contributed to lower success rates on the cognitive portion.
- This study also highlighted the strong desire for more formal and standardized laparoscopic surgery training by surgeons in LMICs.

