

# Hands-on Mastery: Cultivating Surgical Interest Through Enjoyable Low-Pressure Skills Sessions

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## INTRODUCTION

Surgical skills workshops have been shown to increase students' interest in pursuing surgical careers, and are associated with increased student satisfaction and enjoyment [1,2]. We developed two interactive surgical skills sessions (laparoscopic and open) to cultivate a low-pressure learning atmosphere, enabling students to develop an interest in surgery without the burden of examination or assessment.

## PARTICIPANTS

- 23 participants completed both the pre and post course surveys
- 8 female (35%), 15 male (65%)
- 15 students (65%) were in the final year of medical school, 8 (35%) were in the penultimate year
- All 23 (100%) students were undergraduates who did not hold a previous degree

## MATERIALS

- 4x perspex boxes topped with foam layers of the abdomen
- 4x model uteri recycled from a registrar training session
- Balloons and lego heads
- 4 sets of needle holders, forceps and scissors
- 4 sets of sutures and scalpels
- 2x manual laparoscopic training boxes
- 1x Inovus training box with camera (pictured)
- Laparoscopic graspers, dice, shoelaces, polo mints

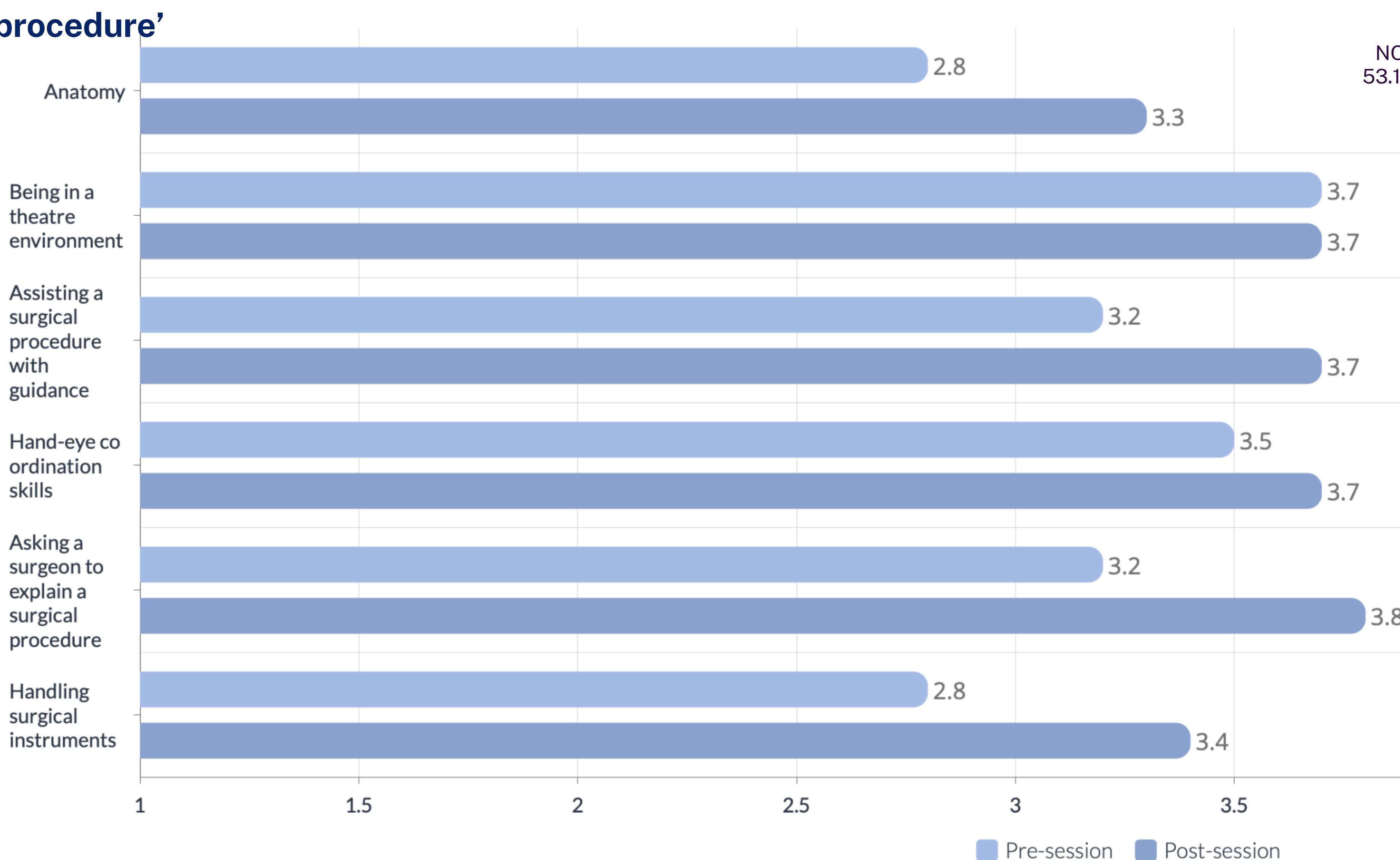
## PROCEDURE

- Each session lasted 2h
- Students were given a short powerpoint presentation before starting the practical tasks in pairs
- Caesarean Section - Students were asked to make an incision into the abdomen and uterus, deliver the lego head and close the relevant layers
- Laparoscopic Session - Students completed various tasks such as dice stacking and threading a shoelace through a polo mint

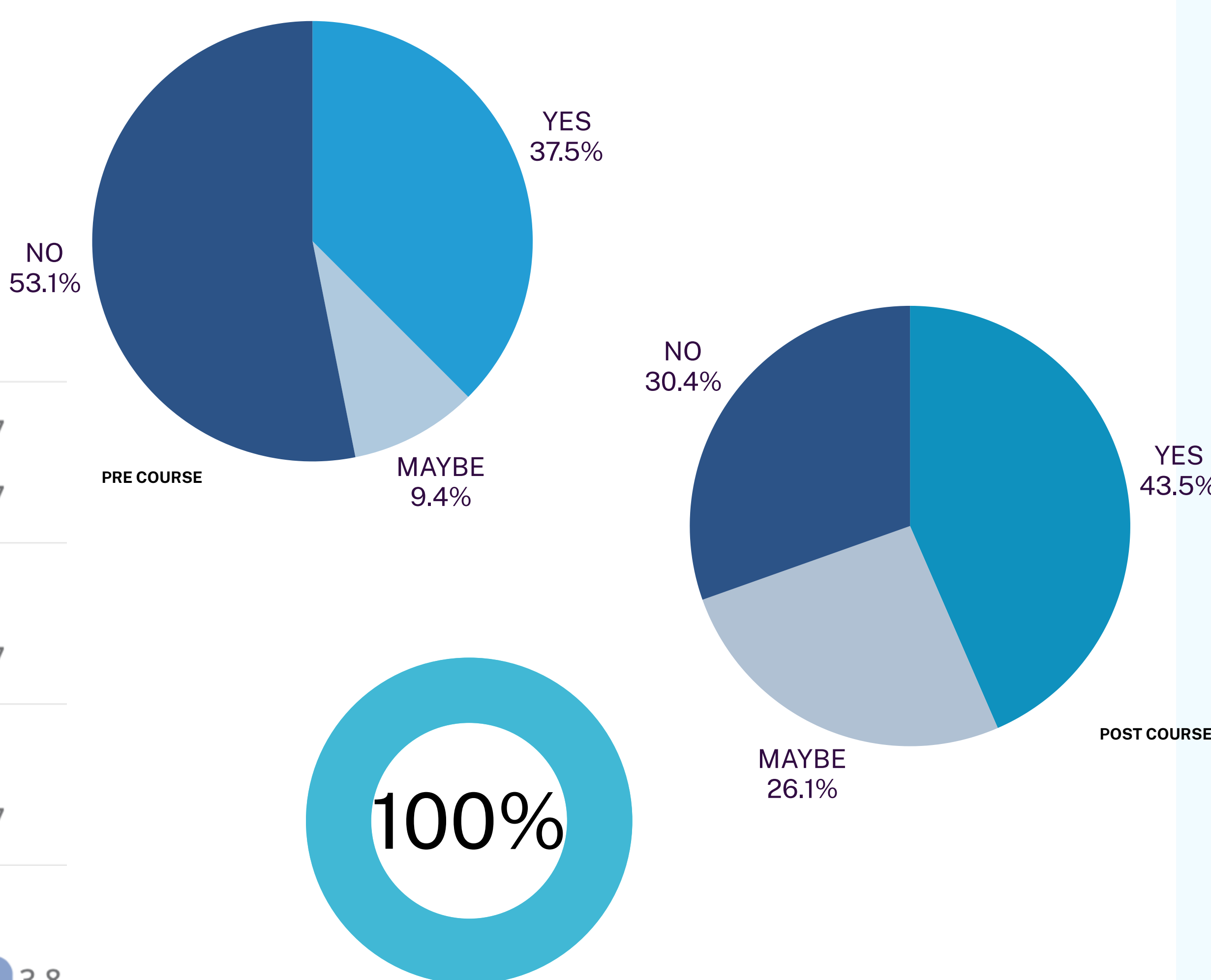
## RESULTS

Students reported increased confidence post-course in 5 of the 6 domains assessed, most notably in 'anatomy', instrument handling' and 'ability to ask a surgeon to explain a surgical procedure'

Mean confidence in surgical skills  
Rated on a scale of 1-5



46% of students were considering, or maybe considering a career in surgery pre-course, increasing to 70% post-course



100% of students found the sessions enjoyable, and that they increased their understanding of the surgical placement without adding to their workload in a negative way

## CONCLUSION

Our initial findings highlight the enjoyable nature of our surgical skills sessions, which not only stimulate students' interest in surgical specialties but also enhance their enjoyment and comprehension of surgical placements. These practical sessions offer a promising avenue for broadening access to surgical career pathways.

## REFERENCES

1. Seo HS, Eom YH, Kim MK, Kim YM, Song BJ, Song KY. A one-day surgical-skill training course for medical students' improved surgical skills and increased interest in surgery as a career. BMC medical Education. 2017 Dec;17:1-7.
2. Zhang J, Zilundu PL, Zhang W, Yu G, Li S, Zhou L, Guo G. The use of a surgical boot camp combining anatomical education and surgical simulation for internship preparedness among senior medical students. BMC Medical Education. 2022 Jun 15;22(1):459.