

Understanding Perceived Barriers to a Career in Orthopaedics

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1 Introduction

Exposure to the Trauma and Orthopaedics specialty is limited for medical students within the UK and it is acknowledged that there are several perceived barriers to pursuing a career in Orthopaedics. Our aim was to identify and elucidate specific perceived barriers at an undergraduate level and evaluate whether a three-week undergraduate placement in Orthopaedics changes these perceptions.

2 Methods

A prospective study was undertaken, collecting qualitative data from third year medical students using two online anonymous questionnaires, one prior to their three-week orthopaedic placement and one afterwards.

Each questionnaire contained an identical series of 15 statements and, using a Likert scale response, assessed the extent to which each statement was a perceived barrier to becoming an orthopaedic surgeon. Results were collated onto Excel.

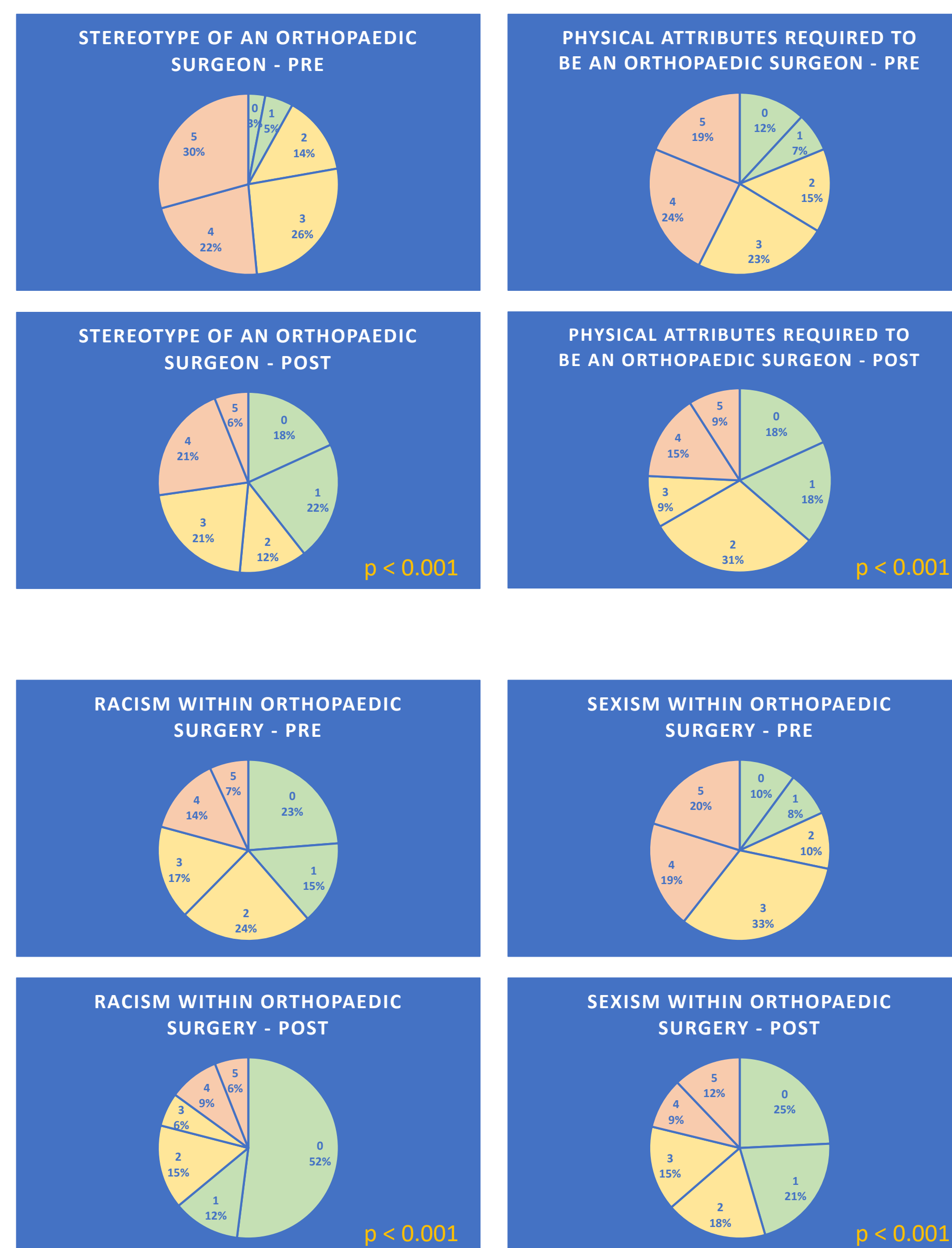
To enable statistical comparison between the pre- and post-placement responses, results were combined as follows: 0-1 (not at all/slightly); 2-3 (somewhat); 4-5 (significant/very significant).

A chi-squared test of independence was used with the null hypothesis of: The distribution of 0-1 / 2-3 / 4-5 responses is the same before and after a three-week placement in Orthopaedics. The null hypothesis was rejected if there was a p -value < 0.05 .

3 Results

59 students completed the pre-placement questionnaire and 33 completed the post-placement questionnaire. The most common recurring barriers identified pre-placement were: the stereotype of alpha-males; competitive speciality; male-dominated; and poor work life balance. Pre-placement, 9% of students were considering a career in Orthopaedics, which rose to 15% post-placement. Post-placement, 84% of students felt that the placement changed their perception of working in Orthopaedics.

10 of the 15 potential perceived barriers showed a statistically significant reduction ($p < 0.05$), meaning students considered them to be less of a barrier. For example, as shown in the pie charts: the stereotype of an orthopaedic surgeon; the need for certain physical attributes such as strength; and the presence of racism and sexism in the specialty were all considered to be less of a barrier. Male-dominance remained a perceived barrier post-placement. The perception of a poor work life balance did not change after the placement.



4 Discussion and Conclusion

Perceptions are changeable, particularly around outdated stereotypes – however, a three-week period may not be sufficient time for students to fully engage with the speciality and to create a positive change in their opinion across all themes. Increased exposure to the specialty at medical school may therefore be crucial to encourage and lead undergraduates to pursue a career in Orthopaedics.