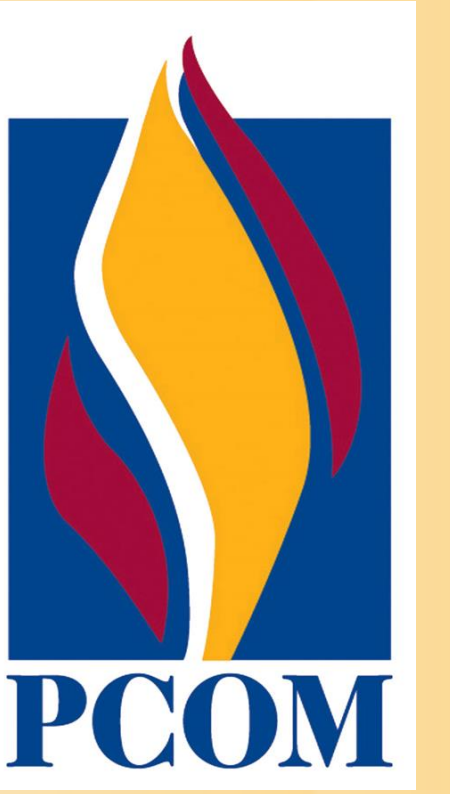


Student Perception of First-Person Point of View Video for Learning Osteopathic Manipulative Treatment



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INTRODUCTION

Osteopathic medical students are required to learn principles and practices of osteopathic manipulative medicine. Students best retain information through materials and approaches they find engaging. First-Person Video provides a perspective that uniquely represents the experience of the clinician and has potential value to enhance learning of clinical skills.

OBJECTIVE

To ascertain current methods used by medical students to learn and study osteopathic manipulative medicine and elicit perceptions on the usefulness of First-Person View (FPV) video as an additional tool for learning skills utilized in osteopathic structural assessment and performance of osteopathic manipulative therapy (OMT).

METHODS

We conducted a pilot study to explore student perceptions of the usefulness of FPV video in undergraduate osteopathic medical education. We created a FPV video to demonstrate assessment and treatment of a right-sided innominate dysfunction on a mock patient. A short survey was designed to assess current methods utilized for teaching and studying OMT and to elicit perceptions of FPV video as a useful tool for OMT education. An email containing links to the video and survey was sent to all undergraduate osteopathic medical students at three campuses. We calculated descriptive statistics on multiple choice and Likert scale responses and reviewed open-ended questions to gain greater insight into student perceptions of FPV.

DISCUSSION

The study does yield several notable results despite the poor response rate and technological limitations. It is important to note that student responses in the survey yielded a high degree of consistency, with 90% or more of students endorsing the same answer on several questions. For example, almost all students reported using similar methods for receiving OMM instruction and studying for OMM examinations. This implies a certain degree of uniformity in educational practices among professors and students. Our study reinforces that video resources are very popular as study tools for students especially for clinical subjects such as OMT. The only study method more popular than video-based resources was hands-on practice with a partner and this method of studying was limited during remote learning in the lockdown phase of COVID. FPV has the potential to meld these two common approaches to learning OMT: it is an immersive video-based experience that demonstrates the practice of OMT from the clinician's perspective and it is a resource that can be utilized as students are studying and practicing these techniques without a partner.

DISCUSSION

We designed this study to assess medical student perceptions of a potentially useful technology for learning and studying OMT. This study was conducted during the COVID-19 pandemic which altered usual methods of medical school instruction and on-campus access for learning and studying OMT. This shift in academic practice resulted in half of our respondents experiencing virtual OMT lab instruction. Student positivity toward First Person Video suggests this tool could be useful as a complementary teaching modality for instruction related to OMT and other clinical skills in class and in situations when campus access is restricted, and virtual laboratory instruction is necessitated. Limitation of this study include self-selection bias and poor response rate. Self-selection bias may have been influenced by the title of the study resulting in respondents who have a greater interest in OMT than other students. Another limitation of our study was the use of lower quality resolution technology to produce the pilot video. The technology used was chosen for low-cost and the ability to place a small radio-controlled remote camera on a set of eyeglasses to simulate the FPV in the exact perspective of the osteopathic practitioner. This eye-level camera angle is important and distinct from other body mounted camera devices (helmet or chest mounted cameras). Students expressed dissatisfaction with media specific constraints of the videos such as the aspect ratio, lens field-of-view, and the video recording quality. Addressing these technological issues is very important for future implementation of FPV resources for students, however, this aspect was less critical for this proof-of-concept study to elicit student perceptions.

CONCLUSION

FPV video technology is currently being explored in medical education to provide students and residents with a new perspective for learning clinical skills. The results of this pilot study lend support for the potential use of FPV video as an adjunct tool in teaching OMT in undergraduate medical education and as an additional study modality to prepare for practical examinations.

Study originally presented at AACOM Education Leaders Conference April, 2023

Figure 1. Perception of Usefulness of First-Person Video as a Study Method for OMM

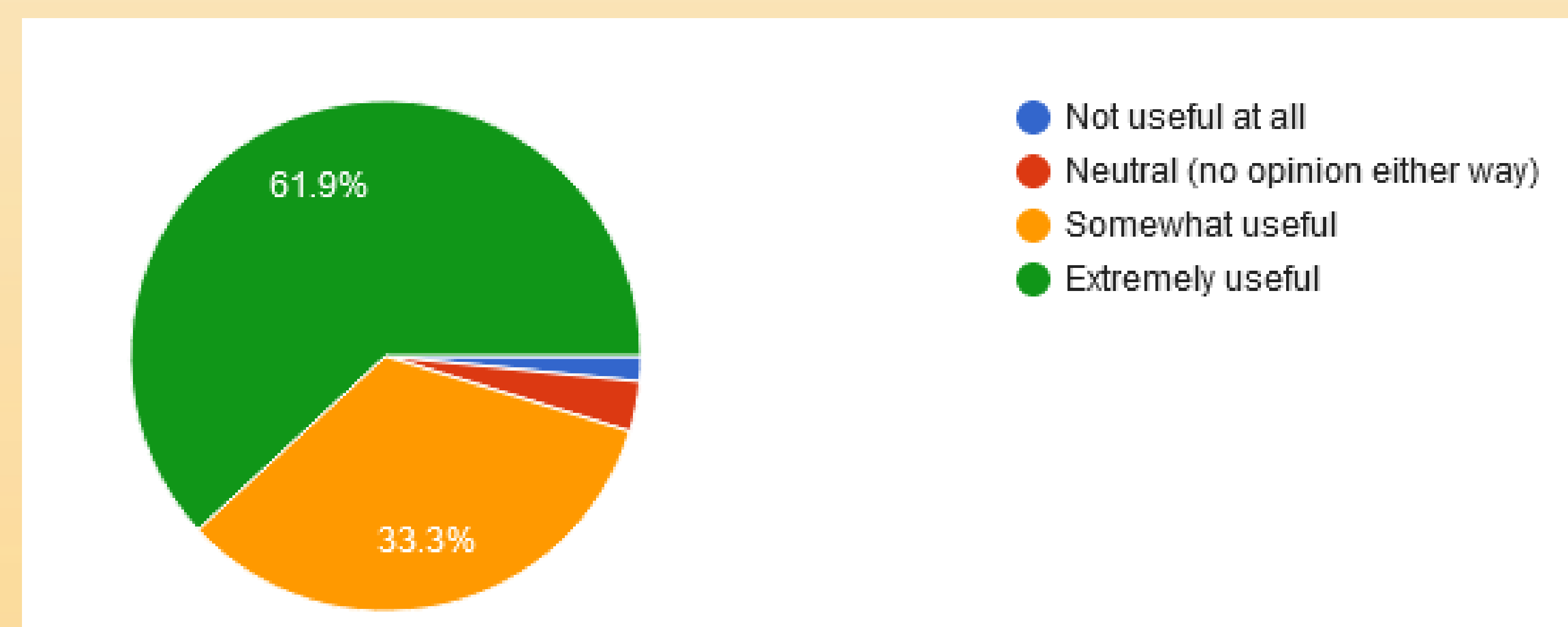
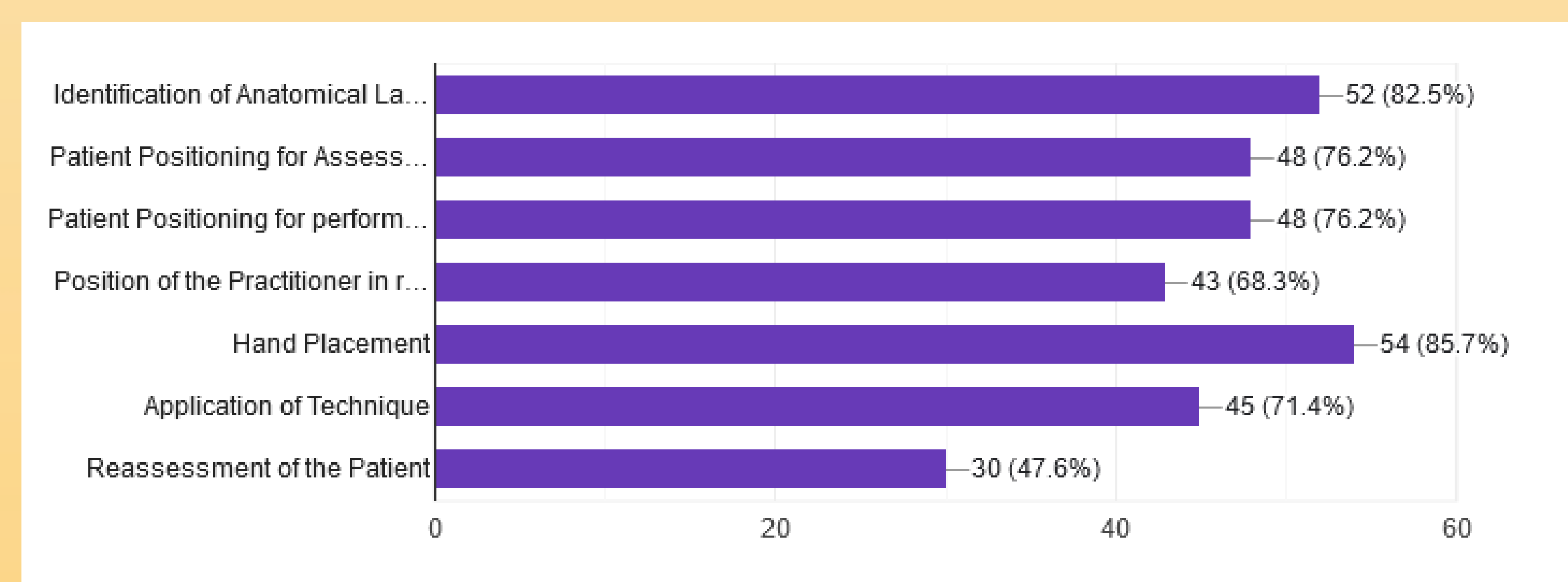


Figure 2. Aspects of Learning OMM Enhanced by First Person Video



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