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### MAPS-SNMA ShaD.O.w D.O. Day Rowan SOM Pipeline Program: A Pilot Study

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# MAPS-SNMA ShaD.O.w D.O. Day Rowan SOM Pipeline Program: A Pilot Study

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## Background

By 2050, racial minorities are projected to constitute more than 50% of the US population, but according to the American Association of Medical Colleges, minorities make up only 16% of physicians in America[1].

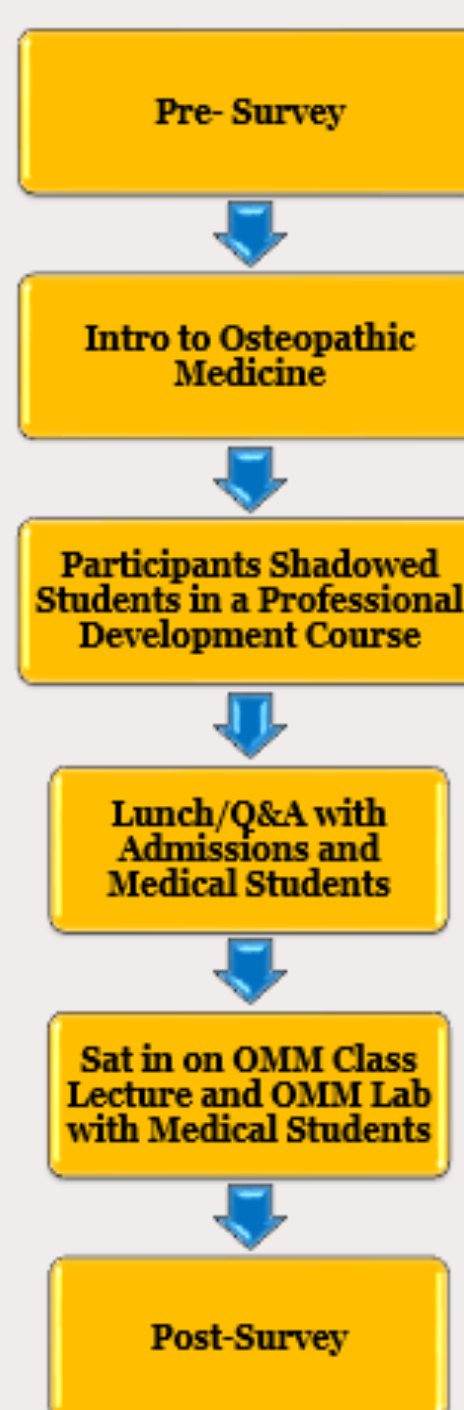
A 2015 study on national post-baccalaureate programs found that these programs play a critical role in increasing the number of underserved populations in medical school who later on go back to practice medicine in underserved regions as physicians[2].

A 2014 study showed that despite osteopathic medical schools being around for over 100 years in America, 29% of people did not know that osteopathic physicians practice medicine, 33% did not know that osteopathic physicians could prescribe pharmaceutical drugs, and 66% did not know that osteopathic physicians could perform surgeries[3].

## Purpose

The goal of this pilot study is to qualitatively and quantitatively assess how a pipeline program focused on providing post-baccalaureate pre-medical students exposure to an osteopathic medical school, changes their understanding and interest in the role of osteopathic physicians in the healthcare field as well as in Osteopathic Manipulative Medicine.

## Method



A total of 23 students from the Rowan University Graduate Students of Biomedical Sciences (RowanGSBS) Minority Association PreMedical students (MAPS) chapter, took part of the Rowan ShaDow DO MAPS Day event.

Pre- and post-program assessments were given to participants. The questions in the assessments were based on the, "A Brief Guide to Osteopathic Medicine For Students, By Students" by Patrick Wu, DO, MPH and Jonathan Siu, DO which is on the American Association of Colleges of Osteopathic Medicine (AACOM) website [4].

## Results

We were able to accomplish six goals with this pilot project.

Demographics of Participants in Pilot Study	
Age of participants	18-22 years old: 3/14 (21.4%) 23-26 years old: 11/14 (78.6%)
Participant consider themselves first-generation American?	Yes: 9/14 (64.3%) No: 5/14 (36.7%)
Gender Distribution	Male: 2/14 (14.3%) Female: 12/14 (85.7%)
Residency Status	In-state: 8/14 (57.1%) Out of state: (6/14) 42.9%
Highest degree currently obtained?	Bachelor's degree: 14/14 (100%) Master's, PhD, etc. 0%
What is your current medical school application status?	Not yet, Applying for future cycles APTLR 2018-2019 Academic year: 10/14 (71.4%) Currently filling out applications for 2018-2019 Academic year: 1/14 (7.1%) Already submitted applications for 2018-2019 Academic year: 3/14 (21.4%) Not applying 0%
Month participant did program	September: 2 October: 2 November: 4 January: 3 February: 2

Table 1. Demographics of Participants in Pilot Study

Goal #1) Attract students from diverse backgrounds to this ShaDow DO MAPS program

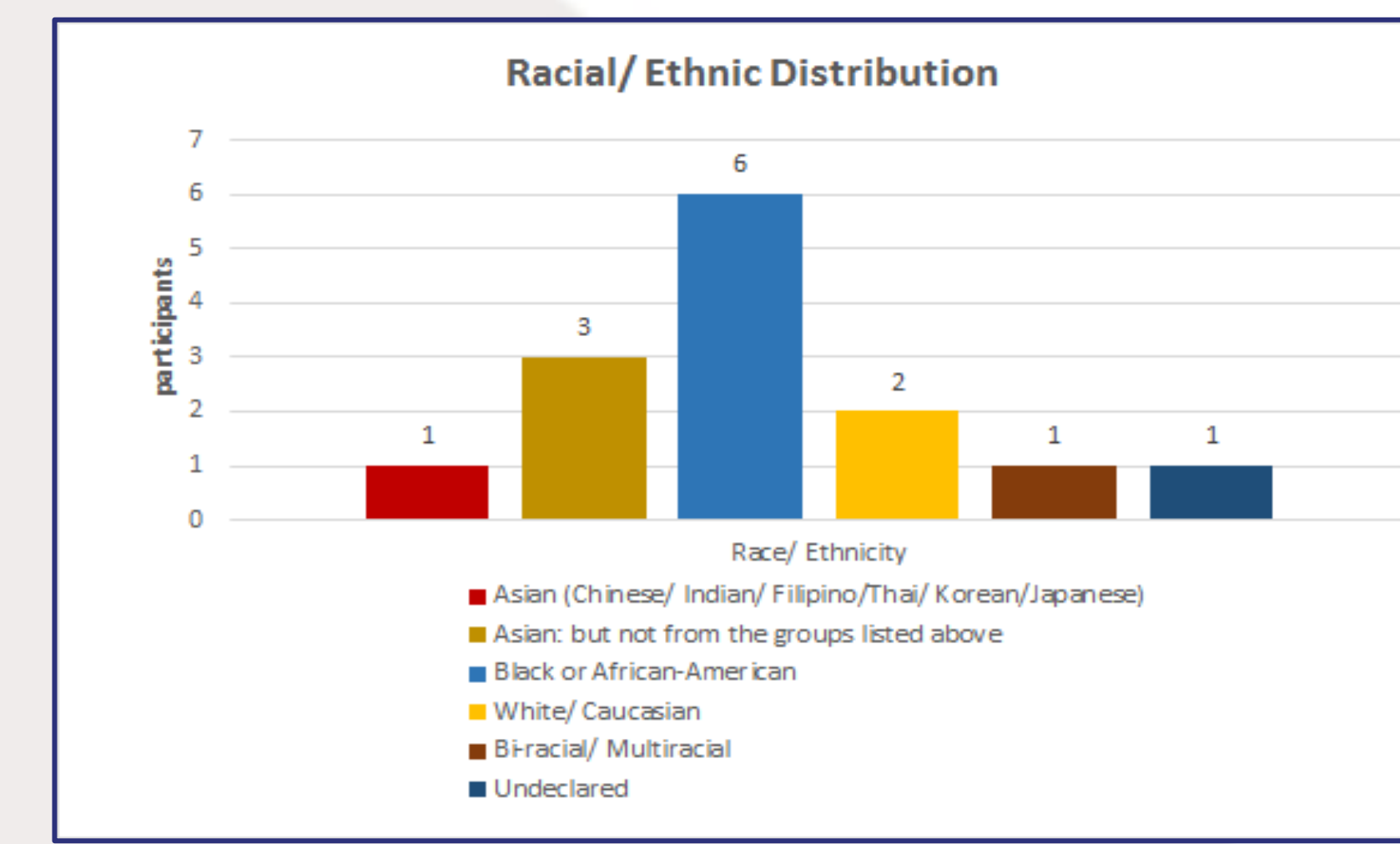


Figure 1. A wide distribution of ethnicities and races.

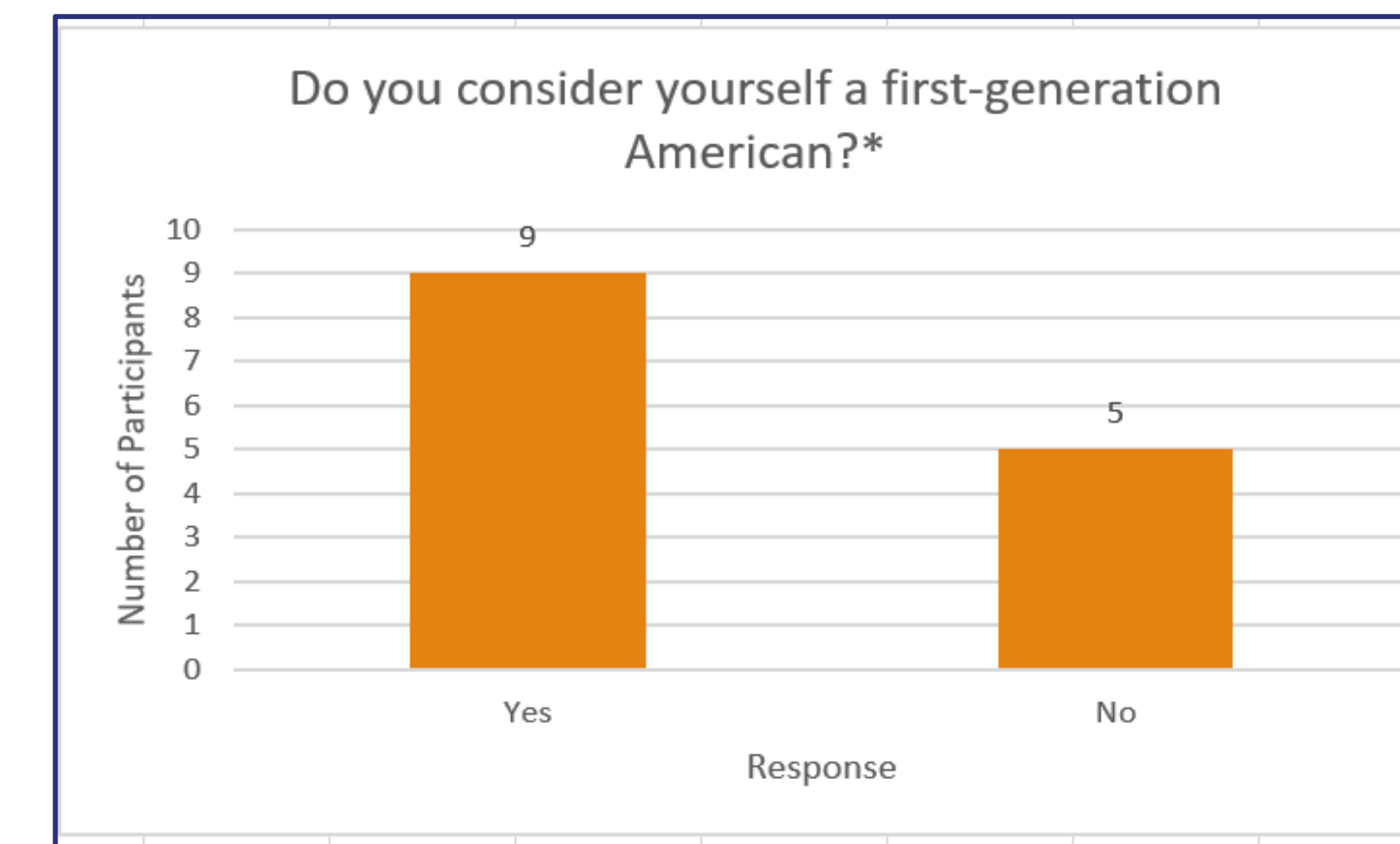


Figure 2. Diversity of Participants. \*we defined "first generation American" as someone who was the first in their family born and raised in America OR is first person in their family to have graduated from a high school in America"

Goal #2) Expose participants to what osteopathic medical students learn in medical school on a daily basis

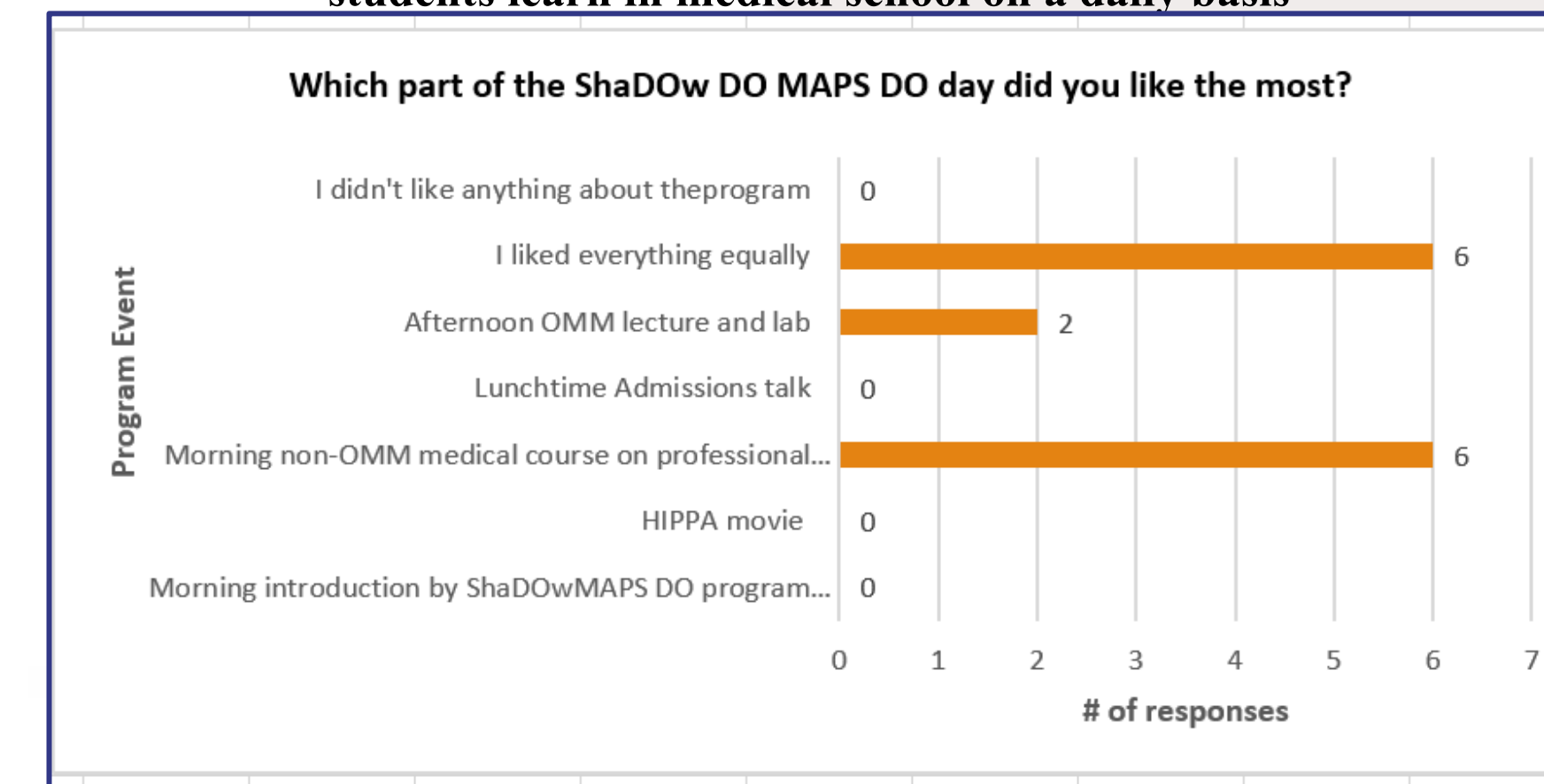


Figure 3. Majority of participants shared that they enjoyed attending the non-OMM Professional Development Course the most or that they enjoyed all segments of the program equally.

Goal #3) Increase participant interest in the Osteopathic Medicine philosophy

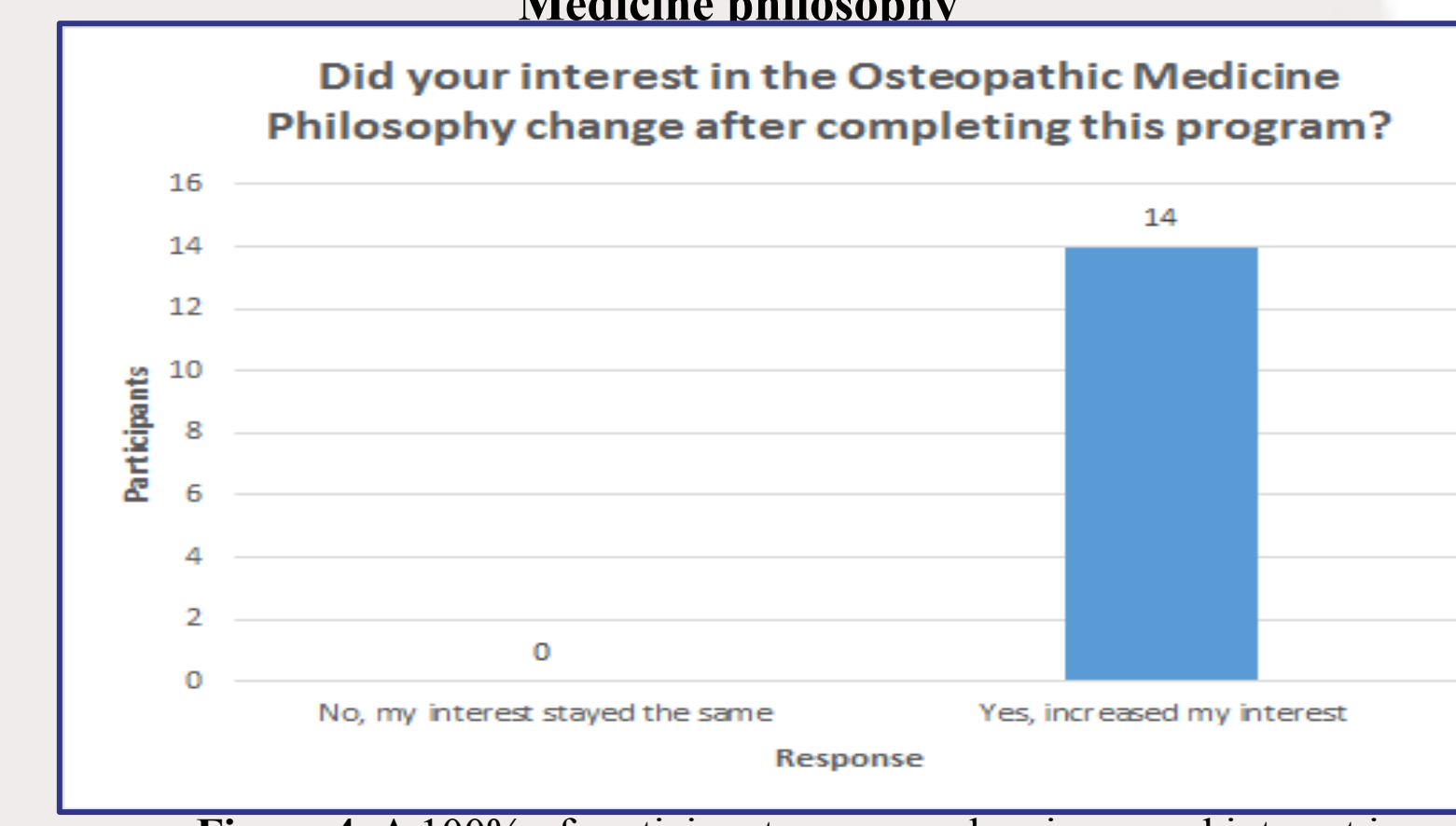


Figure 4. A 100% of participants expressed an increased interest in the Osteopathic Medicine philosophy.

Goal #4) Increase participants' understanding of what OMM/OMT is and how osteopathic physicians are able to use it to expand care in the field of medicine.

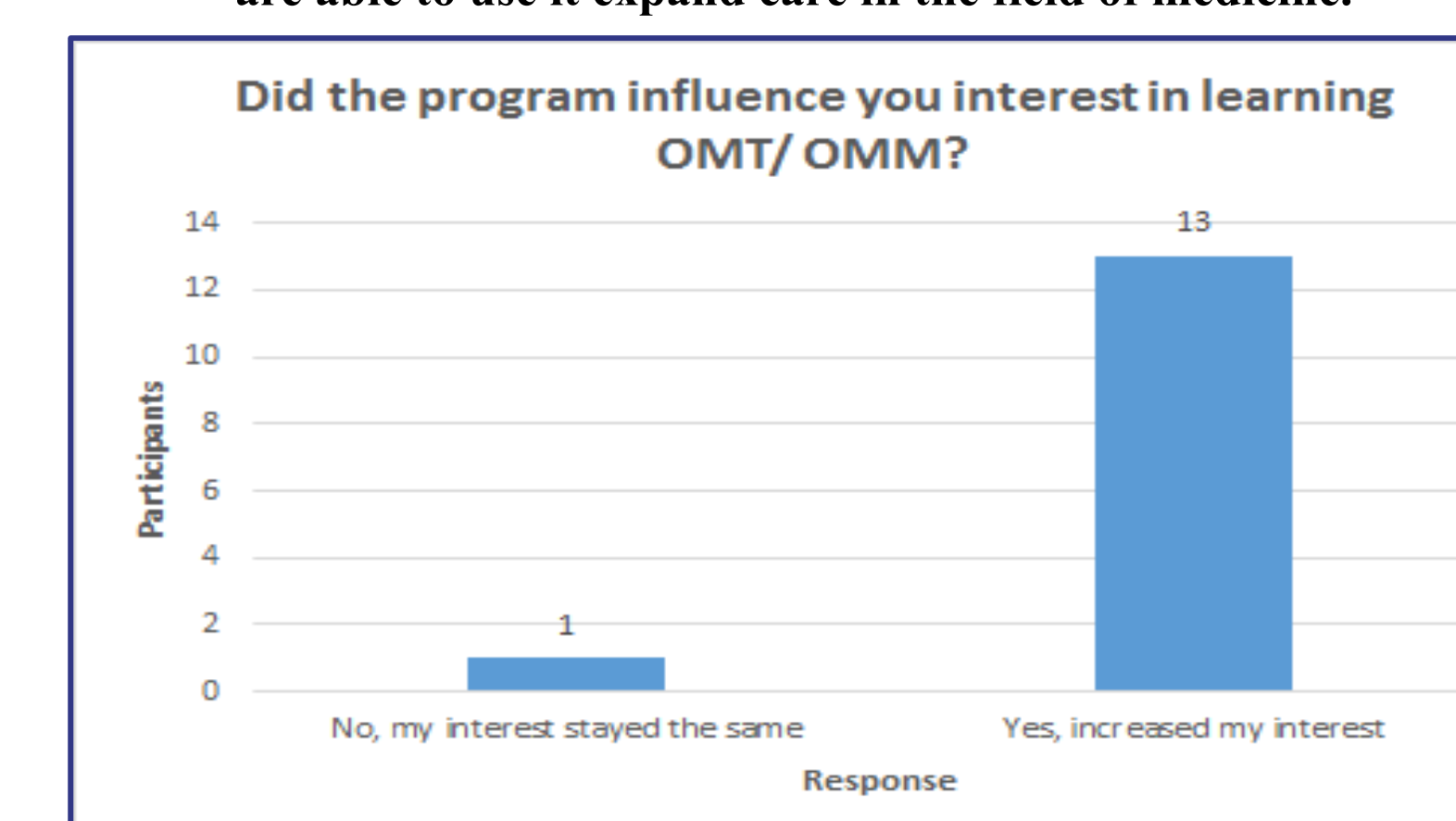


Figure 5. Participants expressed an increased interest in learning Osteopathic Manipulative Medicine and Treatment.

Goal #5) Increase participant interest in applying to Osteopathic medical schools in the future.

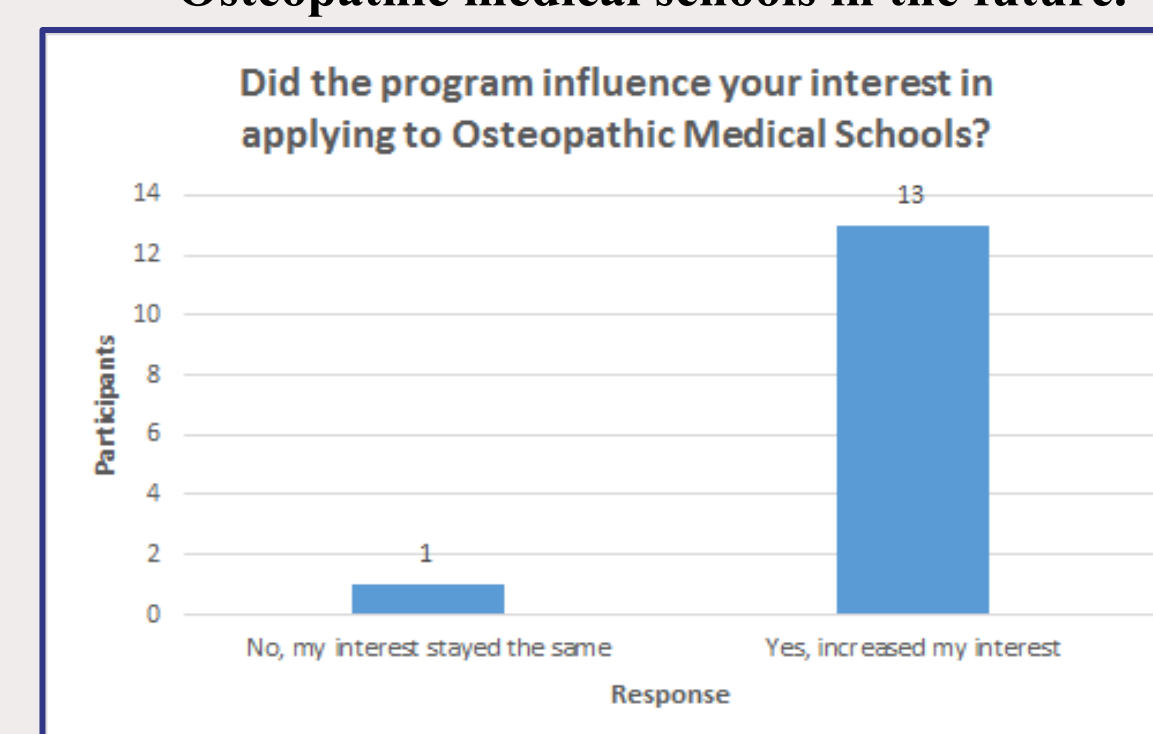


Figure 6. Participants shared an increased interest

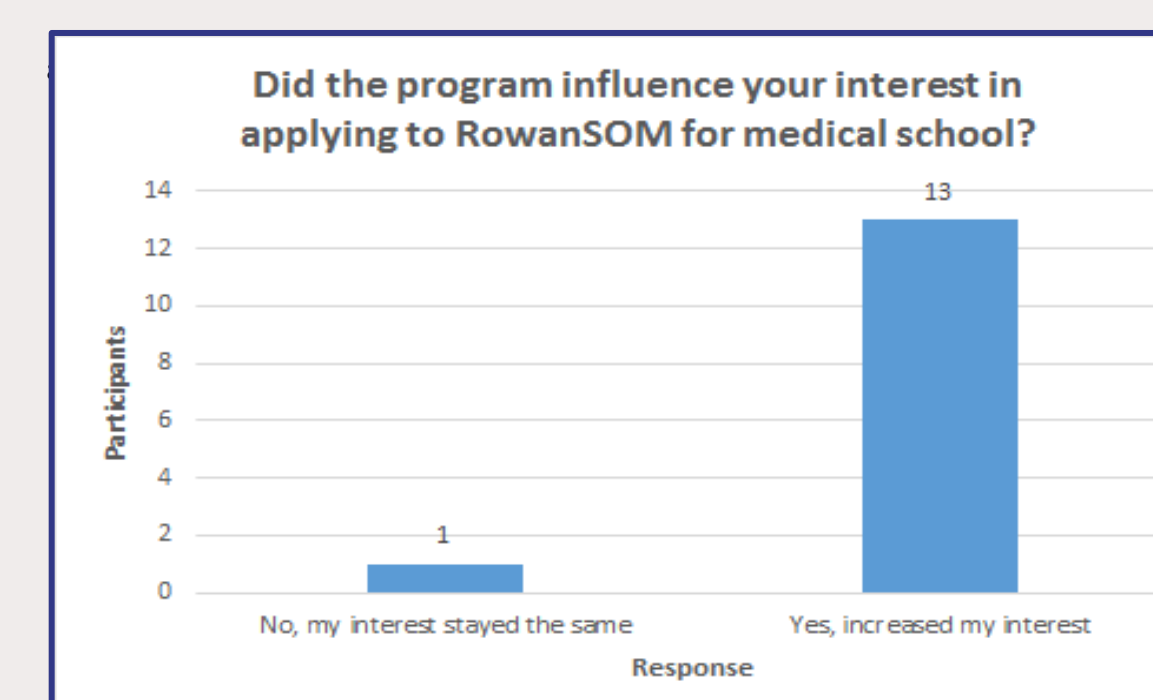


Figure 7. Participants shared an increased interest in applying to Osteopathic medical schools.

Goal #6) Increase participants' knowledge on the scope and practice of osteopathic physicians as well as help debunk popular myths on the field

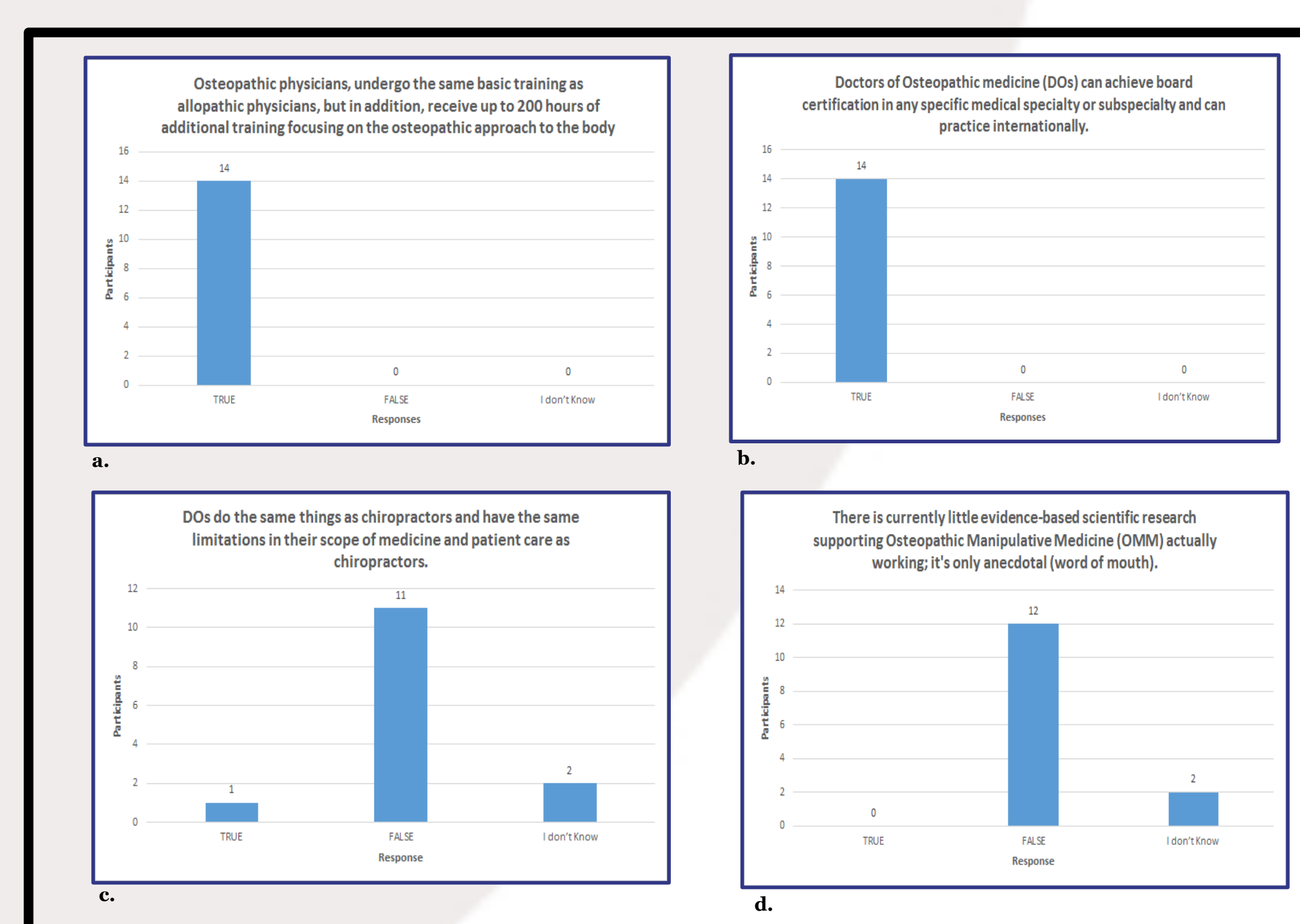


Figure 8. Post assessment follow up survey results reflect that participants were more knowledgeable when asked about the scope and practice of osteopathic physicians.

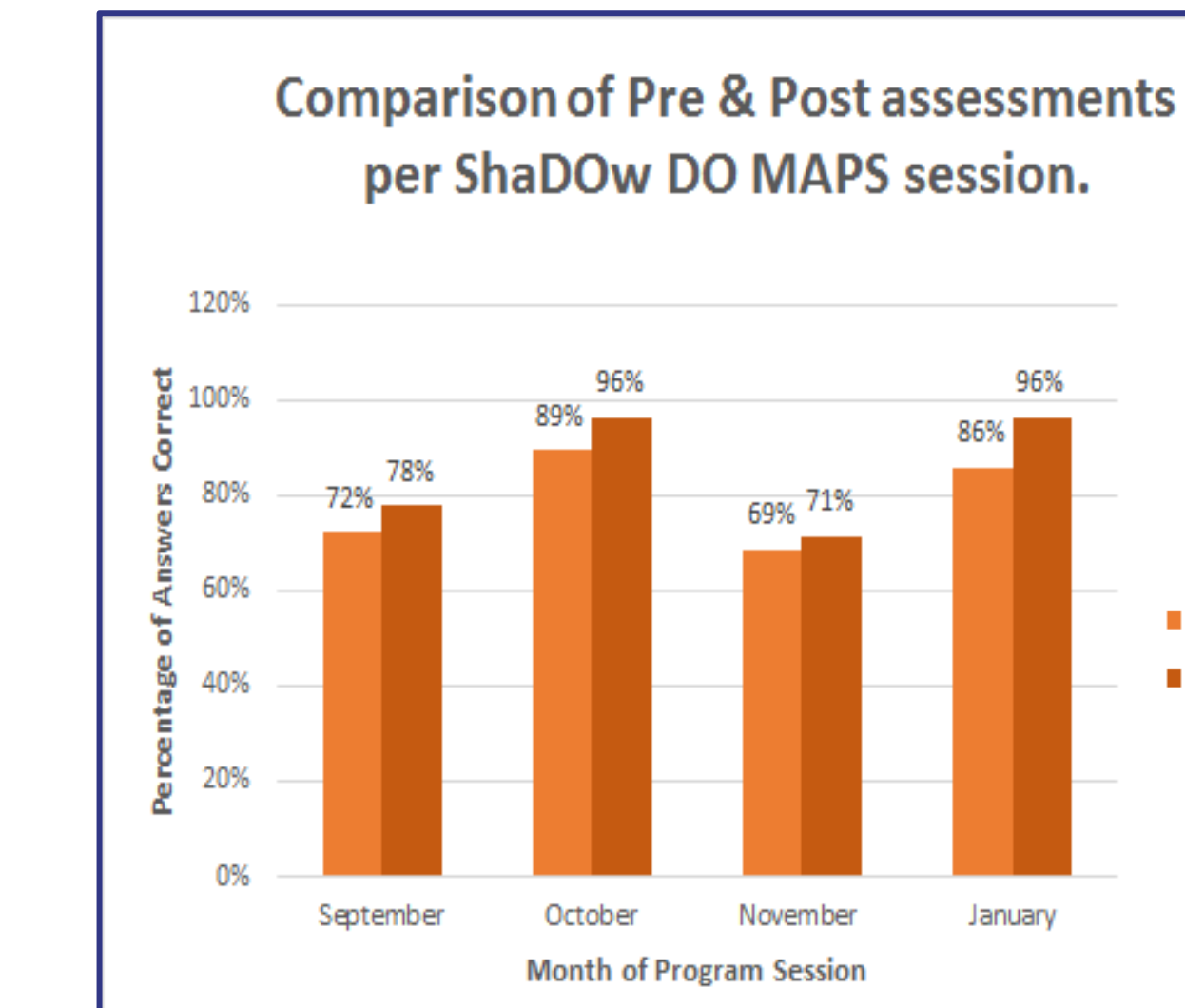


Figure 9. Survey results reflect an increase in the number of questions correctly answered by participants before and after each ShaDow DO Day program.

## Discussion

This program is also RowanSOM's first pipeline program that targets demographics underrepresented in medicine who have completed have already obtained Bachelor's degree but are still interested in applying to medical school.

This program is one of the few programs in the American Association of Colleges of Osteopathic Medicine (AACOM) community to target post-baccalaureate pre-medical students which is important to note given the fact that, in comparison to the allopathic medical school counterparts, students that enroll in osteopathic medical schools are on average older non-traditional students who have already completed their bachelors degree and have either obtained or completing a graduate degree or have worked a few years before matriculating [5,6].

## Future Direction

Continue with ShaDow DO program with Rowan University SOM MAPS students for 2018-2019 school year. The goal would be to expand program duration from Sept-Feb to Aug-Mar.

Continue to do further data-analysis to evaluate the effectiveness of the program on perceptions and interest of osteopathic medical school programs and osteopathic medicine as a healthcare field.

Increase size of participants per session from four to seven to give more students opportunity to experience program

Provide students the choice to shadow medical students in the traditional medical curriculum or in the Problem-Based Learning medical curriculum since both are offered at RowanSOM

Promote more interactions between medical students and graduate students outside the one day program through collaborative programming with RowanSOM SNMA chapter and the Rowan GSBS MAPS chapter such as student-panels and mixer opportunities.

Consider future expansion of program in the year 2021 to allow students from nearby universities to participate

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