

# Does Remote and/or Virtual Learning Prepare First-Year PA Students for Clinical Rotations as Effectively as In-Person Learning?

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## Background

- The COVID-19 (SARs-COV2) pandemic that started in the United States in 2020, has profoundly affected many lives, and the aftermath is still uncertain.<sup>1</sup> Many aspects of life have been affected, including Physician Assistant (PA) education.
- On March 17, 2020, the Association of American Medical Colleges (AAMC) supported the decision to pause medical student clinical rotations and PA Programs followed this protocol.<sup>3</sup>
- The collective efforts of students and faculty, perseverance, and optimism have allowed the uninterrupted preparation of the next generation of PAs.

## Objectives

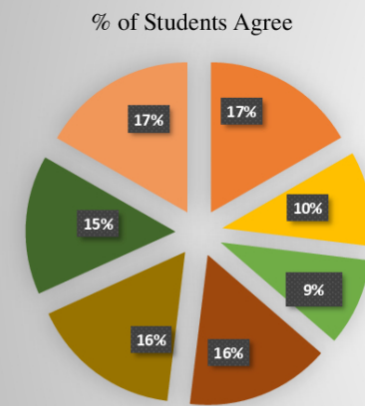
- The primary objective of this study is to understand PA students' perceptions of the effectiveness of remote and/or virtual learning in preparing for clinical rotations.
- To understand PA students' perceptions of the flexibility and life/school balance that remote and/or virtual learning can provide.
- To understand PA students' perceptions of remote and/or virtual learning as a viable option for the didactic phase of PA education.

## Methods

- IRB approval was obtained through Lincoln Memorial University (LMU) and the University of South Dakota (USD).
- The survey was conducted as a Mixed Method with quantitative and qualitative data.
- Qualitative data was collected using a 5-point Likert scale: 5-Strongly agree; 4-Agree; 3-Neutral; 2-Disagree; 1-Strongly disagree.
- The survey was disseminated in February 2022 and was closed in March 2022.
- 94 individuals from three accredited Physician Assistant (PA) programs responded to the 16-item survey with a response rate of 46.8%.

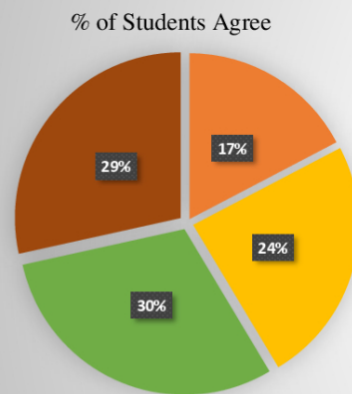
## Results

### Remote/Virtual Learning vs In-Person Learning Preparing for Clinical Rotations



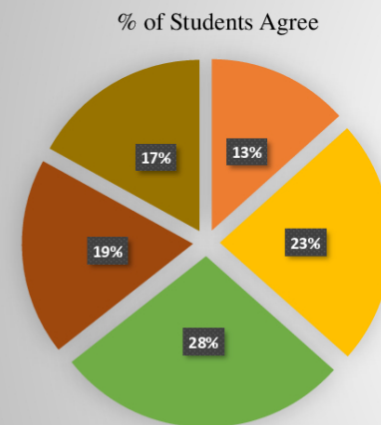
- Concepts are difficult to understand through remote/virtual learning
- Learning px exam skills with pre-recorded videos & zoom sessions with faculty was as effective as in-person learning
- Simulated encounters with standardized patients through videoconferencing were as effective as in-person encounters
- I feel confident with my px exam skills learned remotely/virtually
- Remote/Virtual learning prepared me well for clinical rotations
- In-person and remote/virtual learning have similar learning outcomes
- Switching to remote/virtual learning had a negative impact on my educational experience

### Remote/Virtual Learning vs In-Person Learning Students' Perceptions on Flexibility and Life/School Balance



- Remote/Virtual learning allows for self-paced learning better than in-person learning
- Remote/Virtual learning allows more time to prepare for written exams and skills lab
- Remote/Virtual learning allows the student more flexibility than in-person learning
- Remote/Virtual learning increases students' opportunity to balance school and family life

### Remote/Virtual Learning vs In-Person Learning A Viable Option for the Didactic Phase of PA Education



- Remote/Virtual learning limits social interactions with peers and instructors
- Remote/Virtual learning affects the development of skills like professionalism
- Remote/Virtual learning is cost-effective (tuition, travel expense etc.)
- I favor remote/virtual learning vs in-person learning
- I recommend remote/virtual learning for PA Programs

## Conclusions

- The COVID-19 pandemic necessitated the restructuring of PA education from traditional in-person learning to remote and/or virtual learning to prepare students in the didactic phase for clinical rotations.
- Overall, students felt in-person learning is more effective in preparing them for clinical rotations.
- Respondents highlighted the advantages of flexibility and an opportunity to balance school and family life with remote and/or virtual learning, however, they did not agree that it allowed better self-paced learning.
- Even though virtual and/or remote learning can be cost effective, overall, students felt in-person learning is the better option.
- More research is warranted to study students' perceptions on a larger scale to study the effectiveness of remote and/or virtual learning in preparing first-year PA students to progress into the second year to gain clinical experience.

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## Acknowledgements

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