



Research Productivity in Global Surgery: A Comparison of Medical Students in North America and Africa

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Disclosures

None

Overview

- Introduction
- Study objective
- Methodology
- Results
- Conclusion

Introduction



What are the benefits of research involvement for medical students?



Research affords medical students' development of transferable skills, gaining a sense of shared achievement within a research group, contribution to the improvement of patient care



Limited research investigating the productivity of medical students, in both higher income countries (HIC) and Low-middle income countries (LMIC), involved in international research teams.



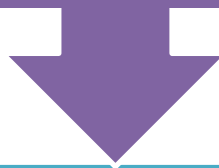
No research exists, to our knowledge, about the barriers and facilitators of international research involvement

Study Objectives

Explore medical students' barriers and facilitators of international research collaboration.



Assess the difference in research education, opportunities between medical students in between HICs and LMICs.



Attitudes toward research and productivity between medical students in higher income countries (HIC) and Low-middle income countries (LMIC) counterparts.



Methods



- Social media outlets
- IRB approved Qualtrics survey
- Closed and open-ended questions
 - Demographics
 - Research experience
 - Attitudes toward research



- Respondents represented 3 countries (USA, Uganda, Zambia)

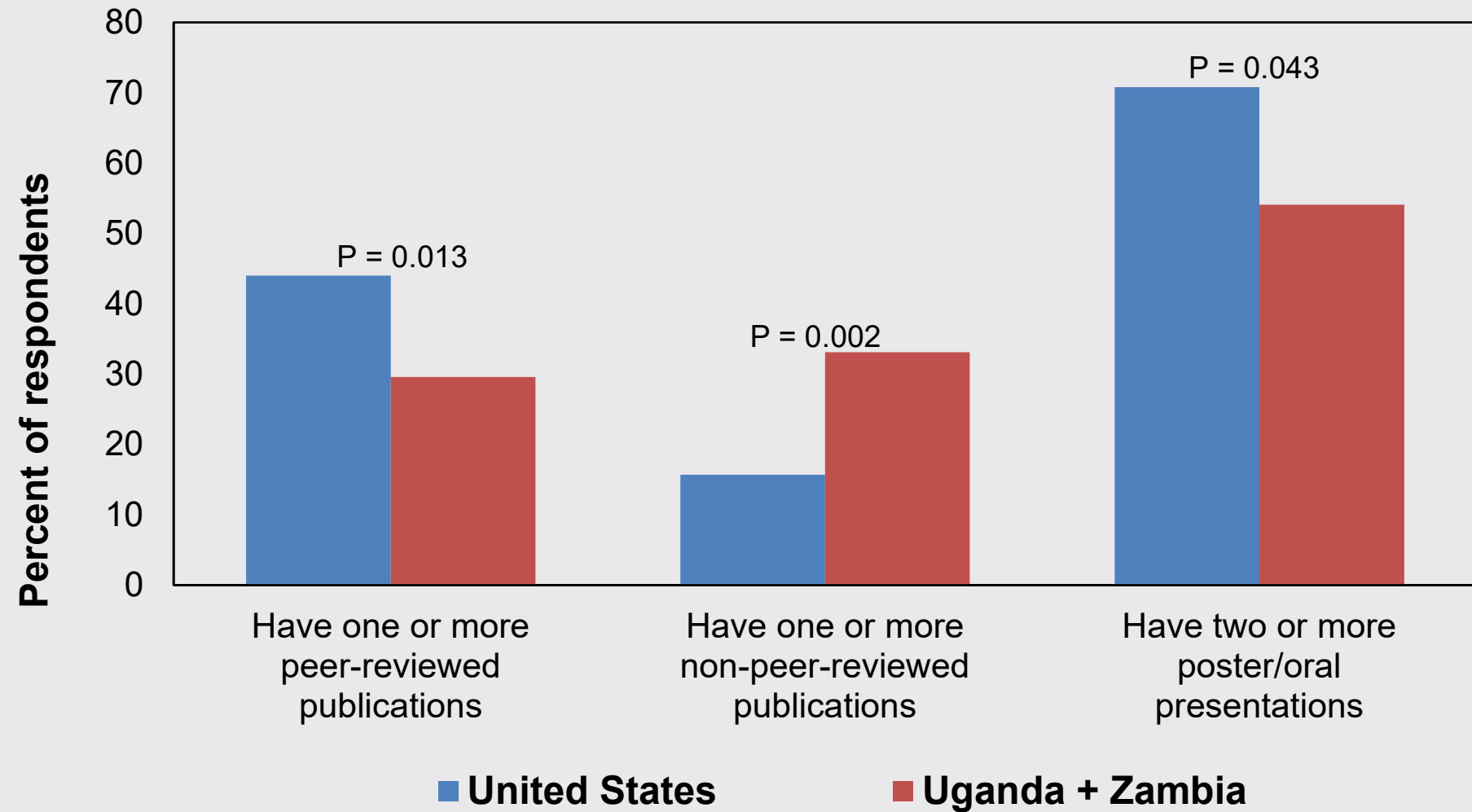
Results

Demographics			
	United States	Uganda + Zambia	P value
Age (years), mean (SD)	27.0 (3.5)	23.6 (3.2)	<0.001
Male sex, n (%)	28 (20.9)	97 (68.3)	<0.001
Current academic level, n (%)	50 (37.3)	53 (37.3)	0.107
Pre-Clinical years	76 (56.7)	76 (53.5)	
Clinical Years	8 (6.0)	13 (9.1)	
Other			

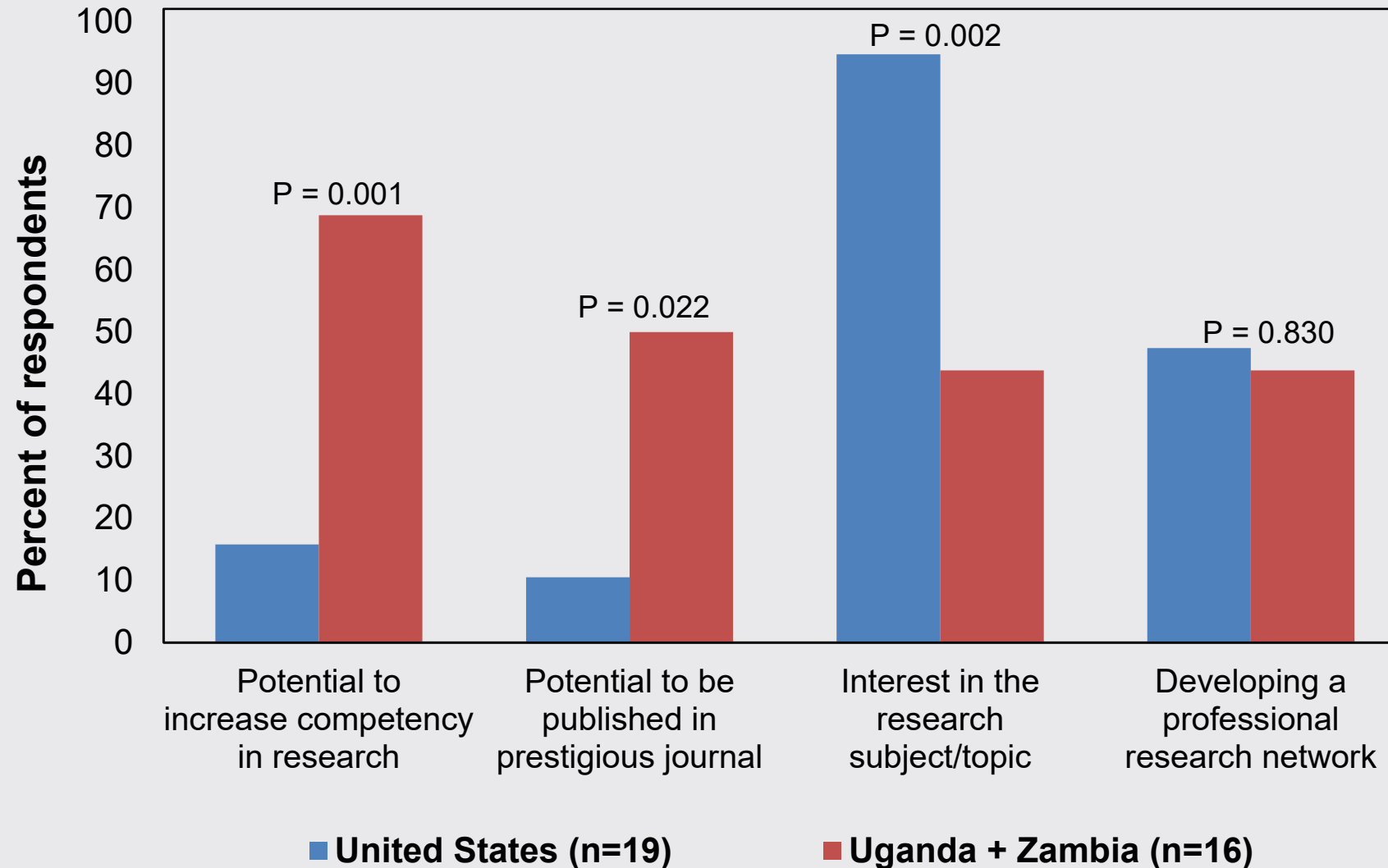
Results: Research involvement

	United States	Uganda + Zambia	P value
Institution offers research course, n (%)	94 (70.1)	103 (72.5)	0.531
Have conducted/participated in research during medical school, n (%)	110 (82.1)	74 (52.1)	<0.001
Have conducted/participated in research with international collaborators during medical school, n (%)	19 (14.2)	16 (11.3)	0.468

Results: Research Productivity During Medical School



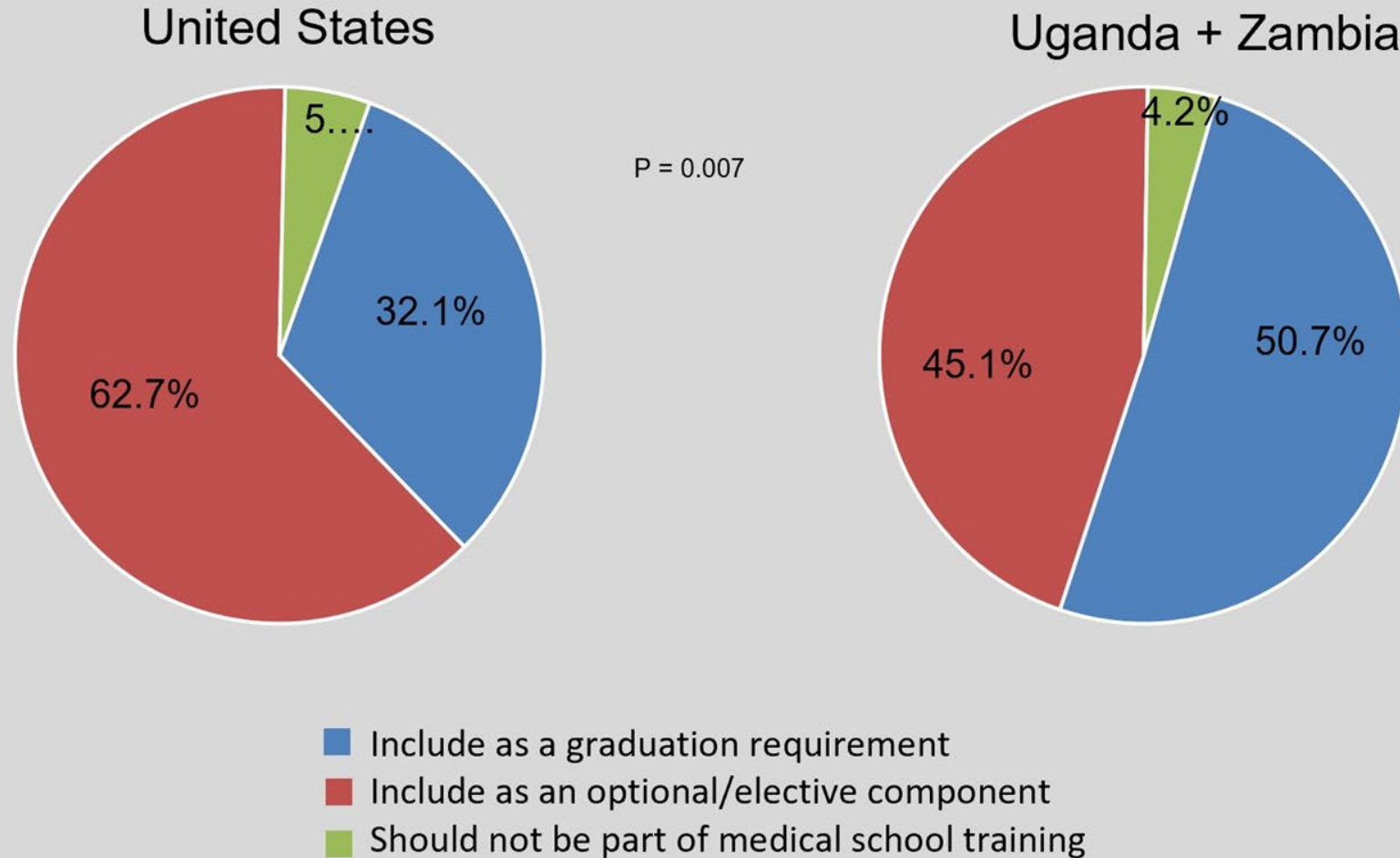
Results: Motivation for Conducting/Participating in International Research



Results: Barriers and facilitators to international research collaboration

	United States	Uganda + Zambia	P value
High cost of publication, n (%)	1 (5.31)	6 (37.55)	0.017
Limited access to funds to conduct research, n (%)	2(10.5)	9 (56.3)	0.009
Lack of research team, n (%)	0(0.00)	5 (31.3)	0.002
Lack of research mentor, n (%)	0(0.00)	5 (31.3)	0.022
Limited access to statistician, n (%)	0(0.00)	6(37.5)	<0.001
International research collaborator	7 (36.8)	1313 (81.3)	0.008

Results: Opinion About the Role of Research in Medical School



Conclusions

- US students have more research opportunities and therefore are more productive
- US students have more Peer Reviewed Publications, whereas Uganda and Zambia Students had more **Non-peer reviewed** publications
- Students from Uganda and Zambia faced barriers that impacted their participation in international research

Next Steps

- Increase proportion of first authors among medical students in Sub-Saharan African countries by coordinating dedicated research mentors
- Engage faculty in COSECSA, UNAMS, ACS
 - Include medical students on research teams
 - Create a database of faculty willing to serve as mentors on projects and share that within our group student group
 - Travel grants for medical students to attend conferences

Page 10 of 10



Thank you UNAMS and Team!



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Questions ?