Would an Entry-Level Doctoral Degree Cause More Harm Than Good to the PA Profession? Findings from a National Mixed-Methods Study

Violet Kulo, EdD, MS, Shani Fleming, MPH, PA-C, Karen Gordes, PhD, PT, DSc, Gerald Kayingo, PhD, PA-C, Hyun-Jin Jun, PhD, MSW, James Cawley, MPH, PA-C, DHL(hon) University of Maryland, Baltimore







No relevant commercial relationships to disclose





Learning Objectives

At the conclusion of this session, participants should be able to:

- Discuss stakeholder perceptions on transitioning to a PA entrylevel doctoral degree.
- Describe the impact of a transition to the PA profession, PA scope of practice and patient-related outcomes.



Background

- Other health professions have adopted entry-level clinical doctorates
- Motivated by specific practice goals
 - Expanding scope of practice
 - Advancing clinical competency
- PAs only prescribing practitioners who have not transitioned to an entry-level doctorate



Background

- Some expressed need for a transition
 - To achieve parity with others health professions
 - Increase career opportunities for PAs
- Some concerned about a transition
 - Would it signal abandoning team-based care for greater autonomy?
 - Would it enhance clinical competency of PAs?





Debate on PA doctoral education

- PA Clinical Doctorate Summit in 2009
 - Master's degree endorsed
 - Non-PA-specific post-professional doctorates supported
- Research to investigate an alternative entry-level doctoral degree in 2020
- This study examined perceived risks, benefits, and impact of transitioning to an entry-level PA doctoral degree



Research Design & Instrumentation

- Multi-prong, mixed-methods approach
 - Cross-sectional survey
 - 28 Likert scale and open-ended questions
 - Semi-structured interviews
 - 11 questions



Sample

- Survey
 - 1368 PA clinicians and PA students recruited via the AAPA's PA Observations service
- Interviews
 - 38 interprofessional stakeholders (PAs and Physicians; non-PA academic Deans, Provosts, and Presidents; PA association leaders and members; PA Program Directors and PA faculty)



Data Analysis

- Quantitative data
 - Descriptive statistics
 - Bivariate analyses using chi-square tests
 - Binomial logistic regression analyses
- Qualitative data
 - Deductive content analysis



Results: Respondents' demographic characteristics

	nª	%
Sex		
Female	433	68.5
Male	199	31.5
Hispanic/Latinx		
Yes	47	7.4
No	584	92.6
Race		
White	523	82.2
Black/African American	39	6.1
American Indian/Alaska Native	6	0.9
Asian	41	6.4
Native Hawaiian/Pacific Islander	2	0.3
Multirace	18	2.8
Others	19	3.0

Note. ^aVariations existed in the number of respondents by question.





Results: Respondents' demographic characteristics

	nª	%
Educational attainment		
Associate degree	2	.3
Bachelor's degree	97	15.3
Master's degree	475	74.9
Doctorate degree	60	9.5
Occupation		
Student	109	17.2
PA clinician	524	82.8
Length of practice as PA		
Current student	107	16.9
< 5 years	172	27.1
5–10 years	148	23.3
11–25 years	169	26.7
> 25 years	37	5.8
Non-PA	1	.2

Note. ^aVariations existed in the number of respondents by question.





Results: PA doctoral degree should be the required entry level credential





Results by occupation: PA doctoral degree should be the required entry level credential





Student

Faculty

PA Leader (NCCPA, ARC-PA, PAEA, AAPA)









Results by demographics: PA doctoral degree should be the required entry level credential









Results: An entry-level doctoral degree should be offered but not required as the terminal credential



Results: The current credits/depth/breadth of PA training are sufficient for a doctoral degree





Results: An entry-level PA doctoral degree will negatively impact the PA-Physician relationship





Results: An entry-level PA doctoral degree will negatively impact availability of clinical training sites





Results: The entry-level PA doctoral degree will cause more harm than good to the PA profession





Results by occupation: The entry-level PA doctoral degree will cause more harm than good to the PA profession





Faculty









Results by demographics: The entry-level PA doctoral degree will cause more harm than good to the PA profession









Results: How feasible is it for the PA profession to transition to an entry-level doctoral degree?





Results: Bivariate analyses regarding perception of the entry-level doctoral degree causing more harm to the PA profession

	Disagree		Neutral		Agree			
	n	%	n	%	n	%	χ² (df)	p
Sex								
Female	97	22.4	66	15.2	270	62.4	4.56 (2)	.10
Male	60	30.3	28	14.1	110	55.6		
Hispanic/Latinx								
Yes	15	31.9	5	10.6	27	57.4	1.60 (2)	.45
No	144	24.6	89	15.2	353	60.2		
Race								
Black/African American	10	25.6	13	33.3	16	41.0	12.07 (2)	.00
Non-Black/non-African American	149	25.1	81	13.6	364	61.3		
Educational attainment								
Master's degree or lower	130	22.6	88	15.3	356	62.0	19.98 (2)	.00
Doctorate degree	29	49.2	6	10.2	24	40.7		
Occupation ^a								
Student	23	21.1	8	7.3	78	71.6	8.60 (2)	.01
PA clinician	136	26.0	85	16.3	302	57.7		
Length of practice as PA ^b								
< 5 years	30	17.4	32	18.6	110	64.0	9.57 (2)	.01
≥ 5 years	106	30.0	54	15.3	193	54.7		

Note. ^aOther than students or PA clinicians (faculty, hospital administrator, higher education administrator, PA leader, and non-PA clinician) were excluded based on the distribution. ^bCurrent students and non-PAs were excluded for data analytical purpose.





Results: Bivariate analyses regarding perception of the entry-level doctoral degree causing more harm to the PA profession

	Disagree		Neutral		Agree		2 (10)	
	n	%	n	%	n	%	χ² (df)	р
To be required								
Disagree	47	10.3	57	12.5	351	77.1	242.54 (2)	.00
Agree	87	77.7	17	15.2	8	7.1		
To be offered but not be required								
Disagree	32	14.5	10	4.5	179	81.0	86.87 (2)	.00
Agree	121	35.7	77	22.7	141	22.7		
Feasibility of transition								
Not feasible	0	0.0	1	0.8	127	99.2	102.35 (2)	.00
Feasible	159	31.5	92	18.3	253	50.2		
Negative impact to the PA-physician relationship								
Disagree	108	60.3	26	14.5	45	25.1	198.72 (2)	.00
Agree	19	6.0	29	9.2	268	84.8		
Negative impact to the availability of clinical training sites								
Disagree	90	62.1	21	14.5	34	23.4	167.43 (2)	.00
Agree	31	9.3	30	9.0	272	81.7		



PHYSICIAN

LEADERSHIP AND LEARNING ACADEM

Results: Binomial logistic regression model regarding perception of the entry-level doctoral degree causing more harm to the PA profession

Model	OR	95% CI	p
Model 1			
Black/African American ^a	.45	.11–1.78	.26
Doctorate degree ^b	.35	.16–.78	.01
≥ 5 years ^c	.72	.37–1.39	.32
Model 2			
Black/African American ^a	.28	.03–2.32	.24
Doctorate degree ^b	.82	.22–3.13	.77
≥ 5 years ^c	.54	.19–1.55	.25
To be required ^d	.07	.02–.21	.00
To be offered but not be required ^d	.38	.13–1.11	.08
Feasibility to transition ^e	.00	.00	1.00
Negative impact on the PA-physician relationship ^d	2.43	.80–7.38	.12
Negative impact on the availability of clinical training sites ^d	4.39	1.57–12.32	.01

Note. OR = odds ratio, CI = confidence interval. Reference group for predictors: aNon-Black/non-African American, Master's degree or lower, c<5 years, disagree, enot feasible. Since there was no variance in the category variable of occupation, that variable was removed from the regression analysis. Due to a small sample size, neutral category was excluded for the data analytic purpose. Model evaluation: Model 1 R^2 = .06; Model 2 R^2 = .72



PHYSICIAN AS

Results: Potential impact of doctoral degree on PA scope of practice and patient-related outcomes

Enhance billing and reimbursement opportunities			44%			22	0/		2.40/		
			44%			22	70		34%		
Enhance Optimal Team Practice (OTP)	-		39%			25%			36%		
Enable PAs to practice at the top of their license	-		48%				19%		33%		
Increase access, quality, cost effective care	-	27%			24%			49	%		
Increase patient satisfaction	-	25%			28%			4	17%		
Limit PA flexibility working across various specialties	-		37%			23%			40%		
Promote PA practice autonomy	-			59%				19%		21%	
c		%	20%	30%	40%	50%	60%	70%	80%	90%	100%
			Agi	ree 🔲 Neutra	I Disagree						



Results: Potential impact of doctoral degree on the PA Profession



LEADERSHIP AND LEARNING ACADEMY

Results: Recommended transitional pathways





LEADERSHIP AND LEARNING ACADEMY

Results: Appropriate entry-level PA doctoral degree title





PHYSICIAN ASSIS

LEADERSHIP AND LEARNING ACADEMY

Results: Qualitative

Perceived Risks	Perceived impact on PA profession
Harm the PA-physician relationship	Put PAs on a level playing field with NPs
Confuse patients	Enable PAs to remain competitive in healthcare
Increase in cost of education and student debt	No immediate return on investment
Increase faculty shortage	No change in patient perception
Marginalize PAs with master's degrees	No change in clinical expertise
Lengthen the curriculum	No impact on the scope of PA practice
Reduce overall PA career flexibility	Increase leadership opportunities in higher education
Threat to building diversity within the profession	Increase access to administrative positions in the healthcare system





Discussion

- Perception surrounding risks/benefits is strongly influenced by the lens of the stakeholder.
 - University and PA leaders support a transition
 - Majority of PA clinicians and PA students are not in favor
- Over 70% of respondents disagree with requiring a doctoral degree
- Significant number supportive if the doctoral degree was offered as an option but not required



Conclusion

- While some respondents anticipate that there will be benefits, the overall majority of respondents believe a transition will do more harm than good.
- The PA profession should continue to cultivate relationships and address concerns with key stakeholders.
- A systematic approach to PA doctoral education should not just follow other health professions, it should be tailored to the unique features of the PA profession.



References

- Plack MM, Wong CK. The evolution of the doctorate of physical therapy: moving beyond the controversy. *J Phys Ther Educ*. 2002;16(1):48-59.
- Supapaan T, Low BY, Wongpoowarak P, Moolasarn S, Anderson C. A transition from the BPharm to the PharmD degree in five selected countries. *Pharm Pract (Granada).* 2019;17(3):1611-19. https://doi.org/10.18549/PharmPract.2019.3.1611.
- American Association of Colleges of Nursing. AACN position statement on the practice doctorate in nursing. 2004. https://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Practice-Doctorate. Accessed 12 Jun 2020.
- Spetz J, Cawley JF, Schommer J. Transformation of the nonphysician health professions. In: Hoff TJ, Sutcliffe KM, Young GJ, editors. The healthcare professional workforce: understanding human capital in a changing industry. New York: Oxford University Press; 2016. p. 51-72.
- American Academy of Physician Assistants. Policy on doctoral degrees. https://www.aapa.org/about/aapa-governance-leadership/house-of-delegates/policy-manual-papers-and-forms/. Accessed 29 Oct 2020.
- Physician Assistant Education Association. Physician assistant clinical doctorate summit: final report and summary. *J Physician Assist Educ*. 2009;20(2):22-8.
- Miller AA, Coplan B. Physician assistant doctorate: a ticket to autonomy? *J Physician Assist Educ*. 2017;28 Suppl 1:S33-7.
- Kibe L, Kayingo G, Cawley JF. Postprofessional PA doctorates: a new era. JAAPA. 2018;31(11):46-51.
- Physician Assistant Education Association: Call for proposals: PA entry-level doctoral degree research. https://paeaonline.org/alerts/call-for-proposals-pa-entry-level-doctoral-degree-research/. Accessed 4 May 2020.
- Martsolf GR, Auerbach DI, Spetz J, Pearson ML, Muchow AN. Doctor of nursing practice by 2015: an examination of nursing schools' decisions to offer a doctor of nursing practice degree. *Nurs Outlook*. 2015;63(2):219-26.





References

- Coplan B, Richardson L, Stoehr JD. Physician assistant program medical directors' opinions of an entry-level physician assistant clinical doctorate degree. *J Physician Assist Educ*. 2009;20:8-13.
- Cawley JF, Gruppo L, Blessing J. Doctorates for physician assistant education: movement, models, or madness? Paper presented at Physician Assistant Education Association Conference; Tucson, AZ; 2007 Oct 25.
- Kibe LW, Cawley JF. Doctoral education for physician assistants: demand, design, and drawbacks. In: Kayingo G, Haas VM, editors. The health professions educator: a practical guide for new and established faculty. New York: Springer Publishing Company; 2017. p. 397-406.
- Institute of Medicine. Health professions education: a bridge to quality. Washington (DC): National Academies Press; 2003.
- Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington (DC): National Academies Press; 2001.
- Institute of Medicine. Assessing progress on the Institute of Medicine report The Future of Nursing. Washington (DC): National Academies Press; 2016.
- American Academy of Physician Assistants. Optimal team practice. https://www.aapa.org/advocacy-central/optimal-team-practice/. Accessed 29 Oct 2020.
- Cecil G. Sheps Center for Health Services Research. The move toward the clinical doctorate in the allied health professions in North Carolina. 2011. https://www.shepscenter.unc.edu/workforce_product/move-toward-clinical-doctorate/. Accessed 29 Oct 2020.
- Fleming S, Gordes KL, Kayingo G, Kulo V, Cawley JF. An exploration into the PA entry-level doctoral degree: a report to the PAEA board of directors. The Physician Assistant Leadership and Learning Academy (PALLA), University of Maryland Baltimore. Baltimore, MD, August 2020.



Acknowledgements

The authors express their appreciation to:

- Physician Assistant Education Association (PAEA) for funding the project "An Exploration into the PA Entry-Level Doctoral Degree: A Report to the PAEA Board of Directors."
- Shani Fleming, MSHS, MPH, PA-C, Principal Investigator
- American Academy of Physician Assistants and Noël Smith for assistance with the administration of the national survey.



Contact for questions

Violet Kulo, EdD, MS, MA Associate Professor, Health Professions Education Physician Assistant Leadership & Learning Academy (PALLA) University of Maryland Baltimore Email: vkulo@umaryland.edu

Shani Fleming, MSHS, MPH, PA-C Associate Professor Graduate School Chief Equity, Diversity, and Inclusion Officer Physician Assistant Leadership & Learning Academy (PALLA) University of Maryland Baltimore Email: shani.fleming@umaryland.edu



