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Background & Purpose

- The number of PA programs is increasing rapidly
- There is a critical need for a diverse pool of academic leaders to lead these programs and to increase the diversity of the medical workforce
- There is no standardized training for academic PA leaders.

This study characterizes PA academic leaders and examines the impact of doctoral degree credentials, gender, and minority status.

Methodology

Using the 2019 PAEA Faculty and Director survey, we assessed the relationship between academic leadership groups: Program Director (PD); Academic Director* (AD); and Clinical Director* (CD) and:

- Demographic variables (gender, race, ethnicity, underrepresented minority in medicine (URIM) status);
- Time-dependent variables;
- Doctoral degree.

Univariate and multivariable logistic regression models were used to determine the unadjusted odds ratio (OR) and adjusted odds ratio (AOR) of being in a leadership role relative to having no leadership role. Results with p< 0.05 were considered statistically significant.

Academic Directors and Clinical Directors may be titled Academic Coordinators and Clinical Coordinators respectively



PA academic leaders differ by doctoral degree attainment but not by gender and URIM status. URIM faculty are grossly underrepresented in the PA professorate, but disproportionately have doctoral degrees. Academic training opportunities for all PA academic leaders and strategies to increase URIM faculty are needed.

Academic Leadership in PA Education: A cross-sectional Analysis of the Association with Doctoral Degree, Gender, and Minority Status

Characteristics of Participants by Leadership Role								
Characteristic	Total	No Leadership (NL)	Academic Director (AD)	Clinical Director (CD)	Program Director (PD)	P value		
		# (%)	# (%)	# (%)	# (%)			
	956	472 (49.4)	95 (9.9)	156 (16.3)	233 (24.4)			
Has a doctorate						<.0001		
No	771 (80.8)	407 (52.8)	76 (9.9)	142 (18.4)	146 (18.9)			
Yes	184 (19.3)	65 (35.3)	19 (10.3)	13 (7.1)	87 (47.3)	0.0070		
Gender						0.0279		
Male Female	270(28.8)	128 (47.4)	23 (8.5)	36(13.3)	83 (30.7)			
Race/Ethnicity	667 (71.2)	336 (50.4)	69 (10.3)	116 (17.4)	146 (21.9)			
White	817 (85.5)	405 (49.6)	84 (10.3)	131 (16.0)	197 (24.3)			
Asian	19 (2.0)	10 (52.6)	1 (5.3)	4 (21.1)	4 (24.1)			
African American	38 (4.0)	17 (44.7)	6 (15.8)	6 (15.8)	9 (23.7)			
Hispanic	36 (3.8)	17 (47.2)	3 (8.3)	7 (19.4)	9 (25.0)			
NHPI/AIAN	8 (0.8)	4 (50.0)	0 (0.0)	1 (12.5)	3 (1.3)			
Other or no answer	38 (4.0)	19 (50.0)	1 (2.6)	7 (18.4)	11 (29.0)			
URIM Status						0.9523		
Non-URIM	831 (91.0)	413 (49.7)	84 (10.1)	134 (16.1)	200 (24.1)			
URIM	82 (9.0)	38 (46.3)	9 (11.0)	14 (17.1)	21 (25.6)			
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	p value		
Age	45.6 ± 10.2	46.3 ± 10.0	43.8 ± 9.8	44.0 ± 10.3	50.1 ± 9.5	<.0001		
Years in PA Education	2.9 ± 1.4	3.2 ± 1.3	2.5 ± 1.3	2.6 ± 1.3	3.9 ± 1.1	<.0001		
Years at Current Program	2.5 ± 1.3	2.6 ± 1.2	2.2 ± 1.3	2.3 ± 1.2	3.1 ± 1.2	<.0001		

Representation of racial/ethnic groups



Conclusion

- 2.38. May be due to:
- URIM
- doctoral degrees than non-URIMs
- but not CD
 - "Home grown leaders"

Odds ratios for predictors of having leadership role

	Any leadership role (N=904)					
	OR	pvalue	AOR	pvalue		
Doctorate: yes vs no	2.05 [1.47 - 2.86]	<.0001	1.46 [1.01 - 2.11]	0.0421		
Yrs in PA education	1.07 [1.05 - 1.09]	<.0001	1.07 [1.04 - 1.09]	<.0001		
Gender: female vs male	0.89 [0.67 - 1.18]	0.4115	1.08 [0.80 - 1.47]	0.6158		
UR in Med vs Non-UR in Med	1.14 [0.73 - 1.80]	0.5631	1.05 [0.65 - 1.70]	0.8492		

	OR	pvalue	AOR	pvalue					
Academic Director/Coordinator (N=91)									
Doctorate: yes vs no	1.57 [0.89 - 2.76]	0.1224	1.23 [0.67 - 2.24]	0.5037					
Yrs in PA education	1.06 [1.03 - 1.10]	<.0001	1.06 [1.03 - 1.09]	0.0001					
Gender: female vs male	1.14 [0.68 - 1.91]	0.6116	1.24 [0.73 - 2.09]	0.4247					
URIM vs Non-URIM	1.16 [0.54 - 2.51]	0.6968	1.06 [0.47 - 2.38]	0.8848					
Clinical Director/Coordinator (N=146)									
Doctorate: yes vs no	0.57 [0.31 - 1.07]	0.0821	0.56 [0.29 - 1.09]	0.0874					
Yrs in PA education	1.00 [0.97 - 1.03]	0.9633	1.01 [0.98 - 1.04]	0.5962					
Gender: female vs male	1.23 [0.80 - 1.88]	0.3468	1.32 [0.84 - 2.06]	0.2294					
URIM vs Non-URIM	1.14 [0.60 - 2.16]	0.6994	1.04 [0.53 - 2.06]	0.9111					
Program Director (PD) (N=219)									
Doctorate: yes vs no	3.73 [2.57 - 5.42]	<.0001	2.38 [1.57 - 3.59]	<.0001					
Yrs in PA education	1.11 [1.09 - 1.14]	<.0001	1.10 [1.07 - 1.12]	<.0001					
Gender: female vs male	0.67 [0.48 - 0.94]	0.0205	0.88 [0.61 - 1.29]	0.5233					
URIM vs Non-URIM	1.14 [0.65 - 2.00]	0.6444	1.04 [0.56 - 1.92]	0.9070					

Smedley DB, Stith Butler A, Bristow LR, eds. In the Nation's Compelling Interest: Ensuring Diversity in the lealth-Care Workforce, Washington, DC: National Academies Press: 2004. https://www.nap.edu/read/10885/chapter/1#iv. Accessed January 18, 2022. 2004. Sklar DP. Leadership in Academic Medicine: Purpose, People, and Programs. Acad Med. 2018;93(2):145 Kayingo G, Kibe L, Venzon A, Gordes KL, Cawley JF. Demand and supply for doctoral-prepared PA

- faculty: A 5-year national longitudinal study. JAAPA. 2021;34(12):1 PAEA. The PA Pipeline to Practice Applicant and Matriculation Data from CASPA. 2020. Educ. 2021;10(5):272-278.
- oles. Educational Leadership. 2010;20(1):61-97.



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Results/Discussion

PDs had more doctoral degrees than ADs and CDs (ADs>CDs). Having a doctoral degree increased the odds of being a PD by

Recent demand for doctoral trained PDs Peer pressure, desire to climb academic ladder Males and females are equally represented in leadership roles URIM faculty are equally represented in leadership roles as non-

URIM faculty are grossly underrepresented in PA education • Due to disparities in URIM matriculation, few in pipeline Although fewer by proportion, URIM are more likely to have

"Do twice as much phenomenon"

More time in PA education increased odds of being a PD or AD,

References

sik U, Wouters A, Verdonk P, Croiset G, Kusurkar RA. "As an ethnic minority, you just have to work twice as hard." Experiences and motivation of ethnic minority students in medical education. *Perspect Med*



