Understanding Academic Rank Among Physician Assistants Practicing in Academic Medical Centers

Victoria S. Louwagie, DMSc (s), PA-C
Mayo Clinic Health System
Mankato, MN

Presenter

- Assistant Professor
- Clinical PA
- Workforce Consultant
- Researcher
- NPPA Advocate

Disclosures

- Victoria S. Louwagie discloses she is a principle consultant and co-owner of Expanding Healthcare Solutions (EHS).
- EHS did not financially contribute or benefit from this study.

Learning Objectives

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

1. Have awareness of national PA academic rank trends and perceptions
2. Identify barriers towards seeking academic rank and promotion
3. Advocate for national, state and organizational involvement to foster PA academic rank and promotion

Background

- Academic or clinical rank can signify advancement or achievement in a medical career.

- These ranks in academic centers, can have benefits including more money, more time to pursue research, eligibility for larger grant funding, and potentially more ability to influence the direction of your profession, department, and/or field.

Slide 5

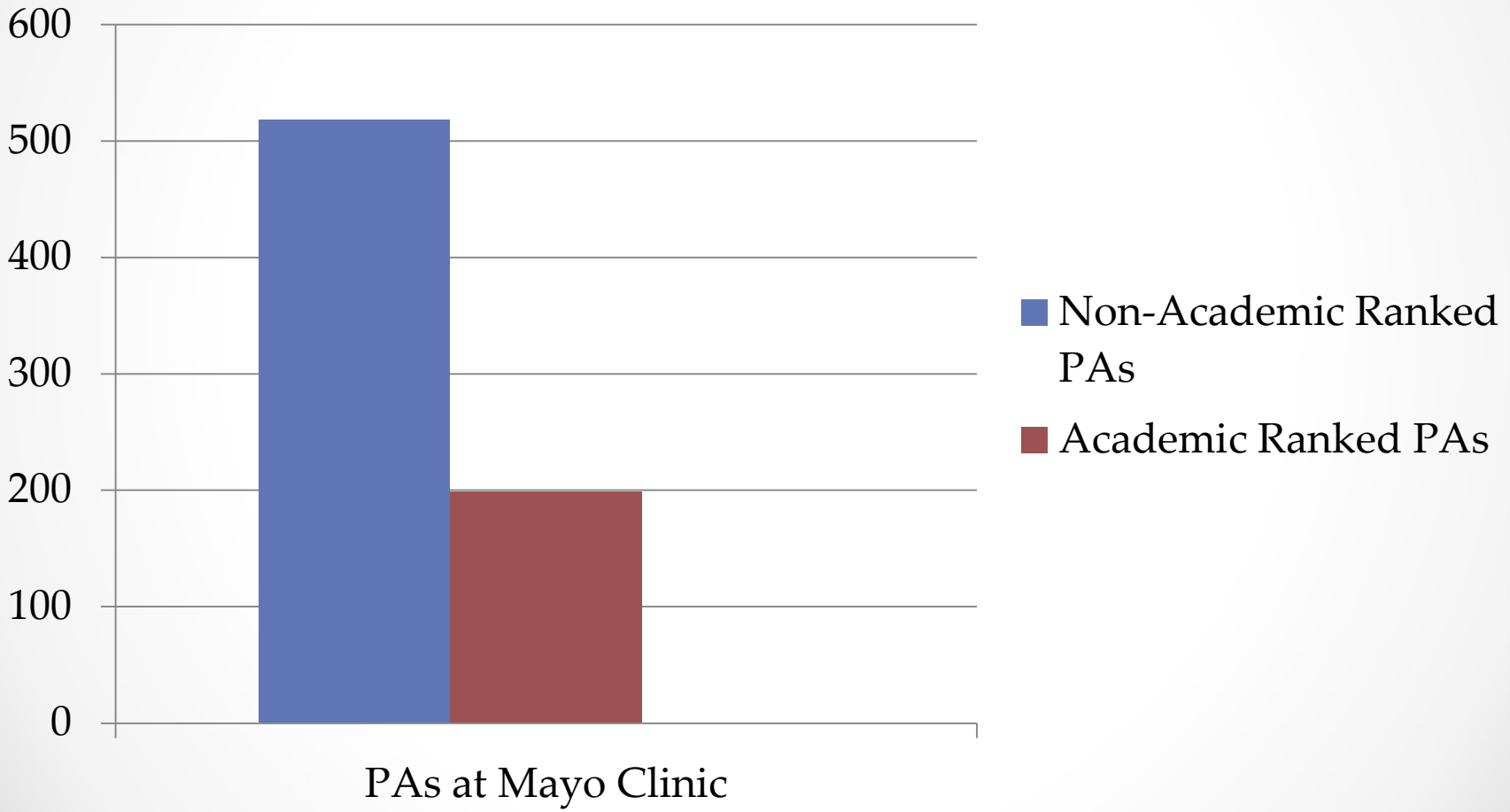
VSL1 Physician Assistant Education Association, By the Numbers: Faculty Report 3: Data from the 2017 Faculty & Directors Survey. Washington, DC: PAEA; 2018. doi:10.17538/FR3.2018

Victoria S Louwagie, 2/5/2021

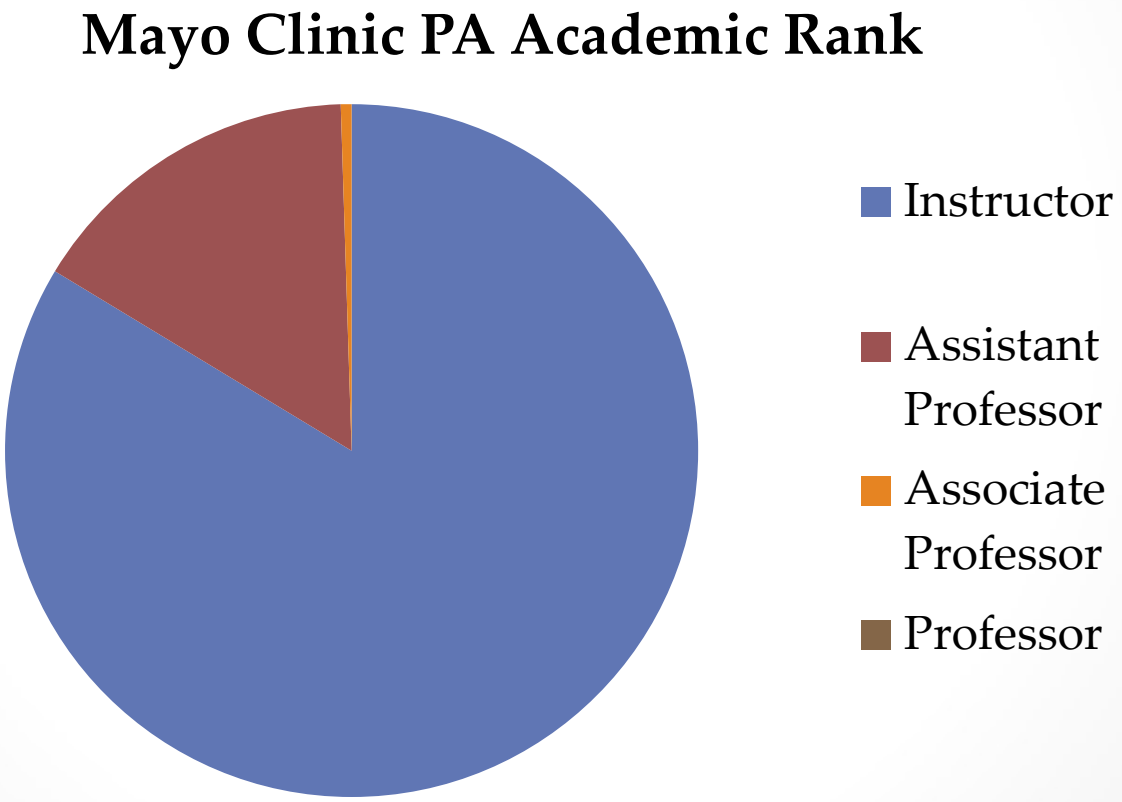
Background

- Physicians who practice clinically in academic medical centers are often granted rank and expected to progress through the structure, yet little is known if this is similar in the PA profession.

Background


600
500
400
300
200
100
0
PAs at Mayo Clinic
Non-Academic Ranked PAs
Academic Ranked PAs

Background


Mayo Clinic PA Academic Rank
Instructor
Assistant Professor
Associate Professor
Professor

Background

- Physician workforce literature shows there are discrepancies noted with academic rank and promotion in regards to women and underrepresented minority.

Hypotheses

- To better understand academic and/or clinical rank prevalence among practicing PAs. We specifically seek to understand the following questions:
  - How many PAs practicing clinically in the United States in University or Academic medical centers have academic rank?
  - Are there any differences based on age, sex, gender, or race?
  - How do PAs perceive or understand academic rank?
  - Are there geographic differences?

Research Gap

- This data could help PAs as a profession both grow and understand barriers to achieving academic rank and parity amongst clinical colleagues.

- This data could help advance and strengthen the PA profession.

What to do?

- We proposed a national evaluation of the prevalence, as well as attitudinal beliefs regarding academic or clinical rank among PAs practicing clinically.

- There is little known about this.

Literature Review

- A study completed by Mackey, et. al. in 2016, evaluated both PAs and NPs at Mayo Clinic across the Enterprise, demonstrated that 70% of respondents indicated that they did not have academic rank, while 74% felt that achieving rank was important.

VSL2 Mackey, PA, Perez, ST, Frederixon, MA, Larson-Cain, TL, Jameson, KA, Cook, CB. Academic Rank Barriers for Physician Assistants and Nurse Practitioners. The Journal for Nurse Practitioners. 2016;12(5):E211-E218.

Victoria S Louwagie, 2/5/2021

Literature Review

- Multiple publications have demonstrated differences in academic rank amongst female physicians compared to their male physician colleagues.
- Differences in academic rank in medicine, also have been noted for minorities particularly those that are Black, Indigenous and persons of color.

Methods and Data Collection

- Approved by the Mayo Clinic Institutional Review board (20-007534)
- Descriptive, correlational, cross sectional study
- Partnered with PA Observations through the AAPA
- REDCap and SAS JAM Pro 14.1.0

Data Analysis & Findings

- 776 working emails out of an initial 800 PA provider sample population
- 178 respondents participated (RR=22.9%)
- On examination, the response group was representative of the whole sample population

Data Analysis & Findings

		Respondent Population	Sample Population
Age	20-29	20 (11.3%)	NA
	30-39	66 (37.3%)	NA
	40-49	40 (22.6%)	NA
	50-59	31 (17.5%)	NA
	60-69	19 (10.7%)	NA
	70+	1 (0.6%)	NA
Gender	Male	53 (29.8%)	NA
	Female	125 (70.2%)	NA
Practice setting-Academic/University practice	Yes	105 (59.3%)	62%
	No	72 (40.7%)	38%
Time in Academic/University practice	0-5	49 (46.2%)	43.8%
	5-10	24 (22.6%)	23.2%
	11-15	17 (16.0%)	11.1%
	16-20	7 (6.6%)	10.0%
	21 +	9 (8.5%)	11.7%
Race	White-Non Hispanic	141 (81.5%)	NA
	White-Hispanic	8 (4.5%)	NA
	African-American	4 (2.2%)	NA
	Black-Not African or Caribbean	2 (1.1%)	NA
	Asian	4 (2.2%)	NA
	Asian-Chinese	3 (1.7%)	NA
	Asian-Filipino	1 (0.6%)	NA
	Asian-Indian	2 (1.1%)	NA
	Other	4 (2.2%)	NA
	Choose not to disclose or unknown	5 (2.8%)	NA

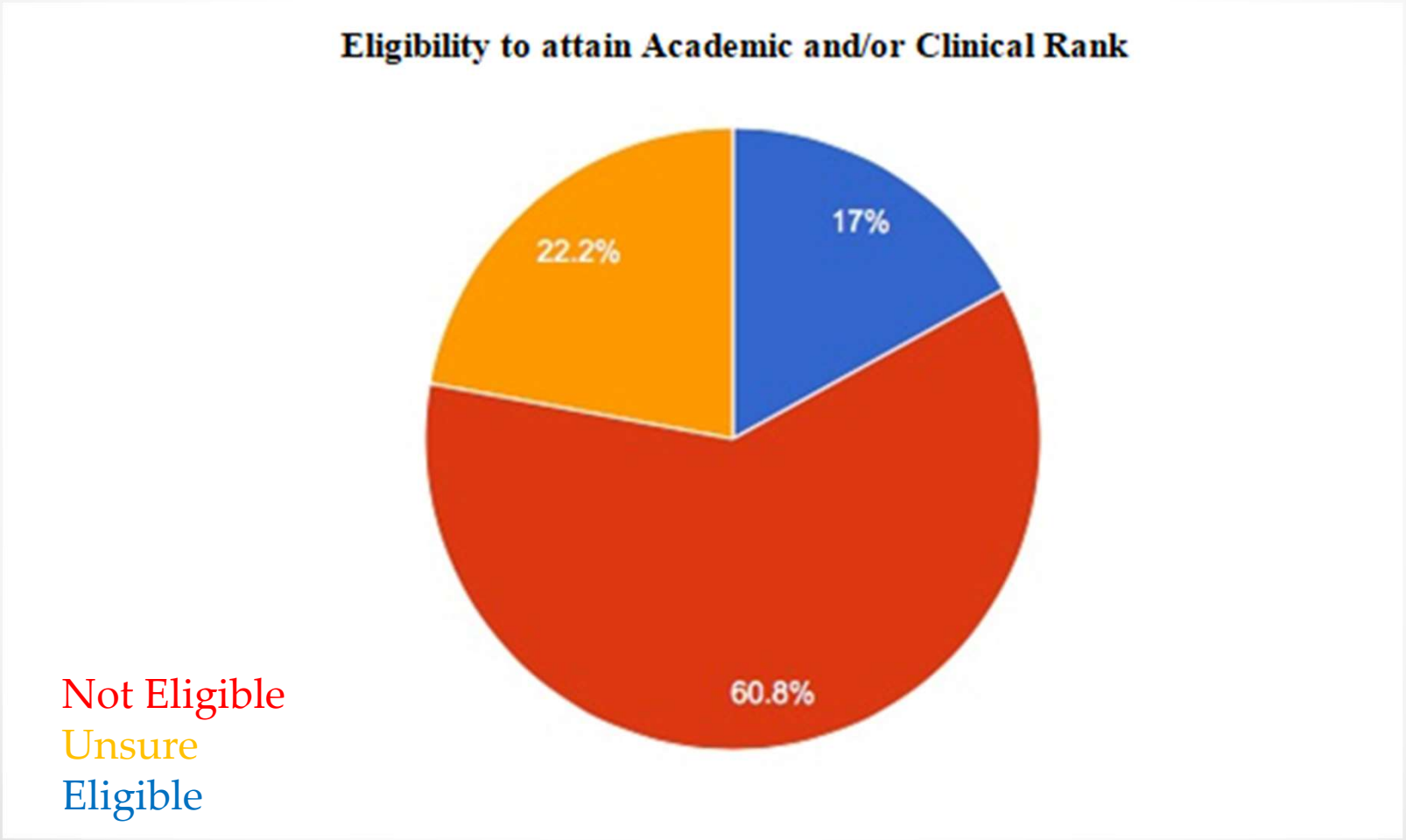
Data Analysis & Findings

		Respondent Population	Sample Population
Geographic Region	Northeast (CT, ME, MA, NH, RI, VT, NJ, NY, PA)	49 (27.8)	24.8%
	Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)	46 (26.1%)	22.1%
	West (AZ, CO, ID, MT, NV, NM, UT, WY, AK, CA, HI,OR, WA)	29 (16.5%)	19.1%
	South (DE, FL, GA, MD, NC, SC, VA, DC, WV, AL, KT, MI, TN, AR, LA, OK, TX)	52 (29.5%)	33.2%

Data Analysis & Findings

		Respondent Population	Sample Population
Current Specialty	Primary Care (Family Medicine, Internal Medicine, Pediatrics)	24 (13.9%)	12.6%
	Medical Specialty (Outpatient)	53 (30.6%)	30.8%
	Medical Specialty (Inpatient- such as Hospital Medicine/ICU)	43 (24.9%)	24.7%
	Surgical Specialty	53 (30.6%)	31.9%
Highest Degree Held	Associates	2 (1.1%)	NA
	Bachelors	13 (7.3%	NA
	Masters	147 (83.1%)	NA
	Doctorate	15 (8.5%)	NA

Data Analysis & Findings



Data Analysis & Findings

Current Academic Rank

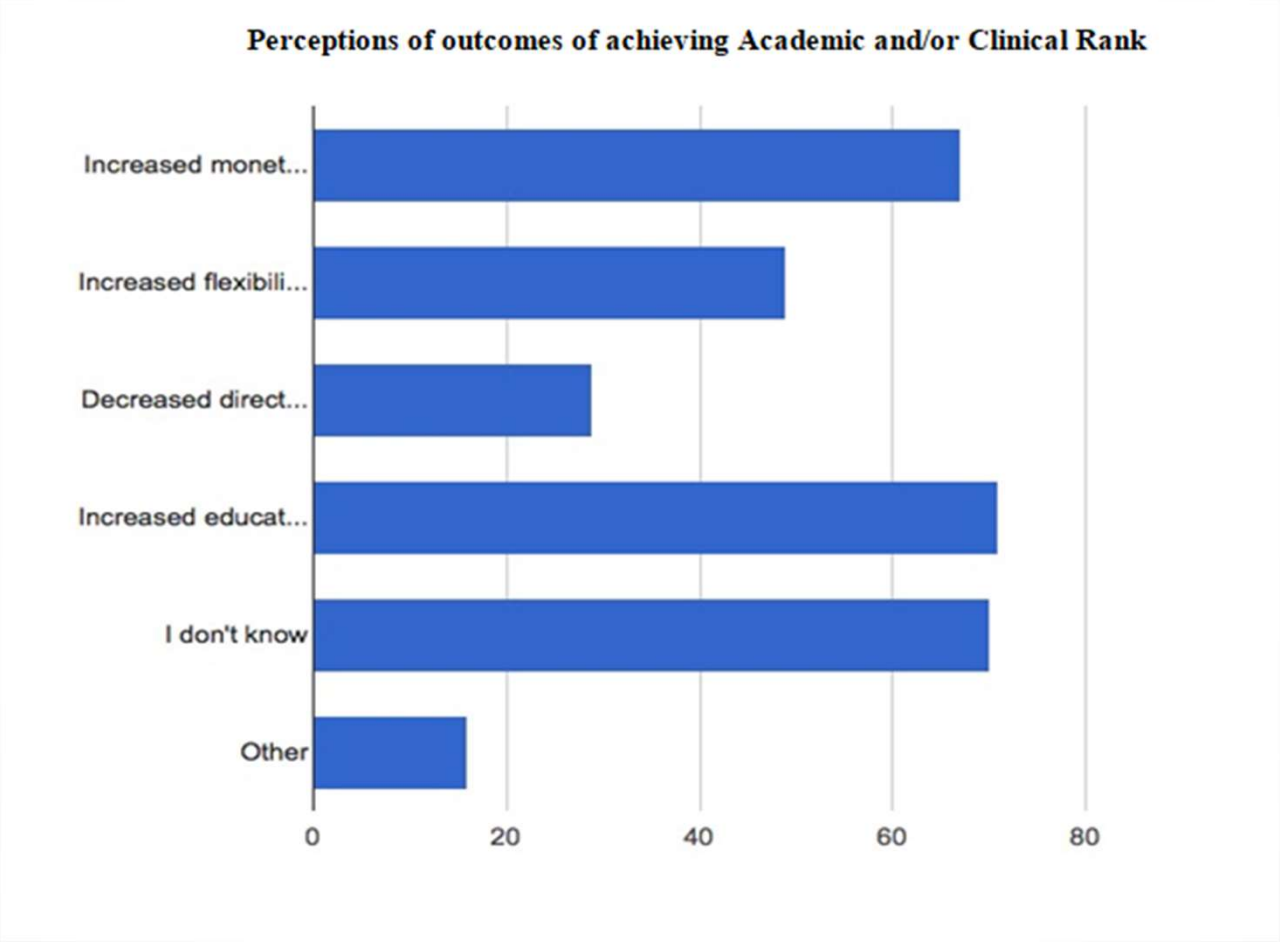
Instructor	6 (3.4%)
Clinical Instructor	11 (6.2%)
Assistant Professor	5 (2.8%)
Clinical Assistant Professor	1 (0.6%)
Associate Professor	3 (1.7%)
Clinical Associate Professor	5 (2.8%)
Professor	0 (0.0%)
Clinical Professor	1 (0.6%)
I do not currently hold rank	145 (81.9%)

Data Analysis & Findings

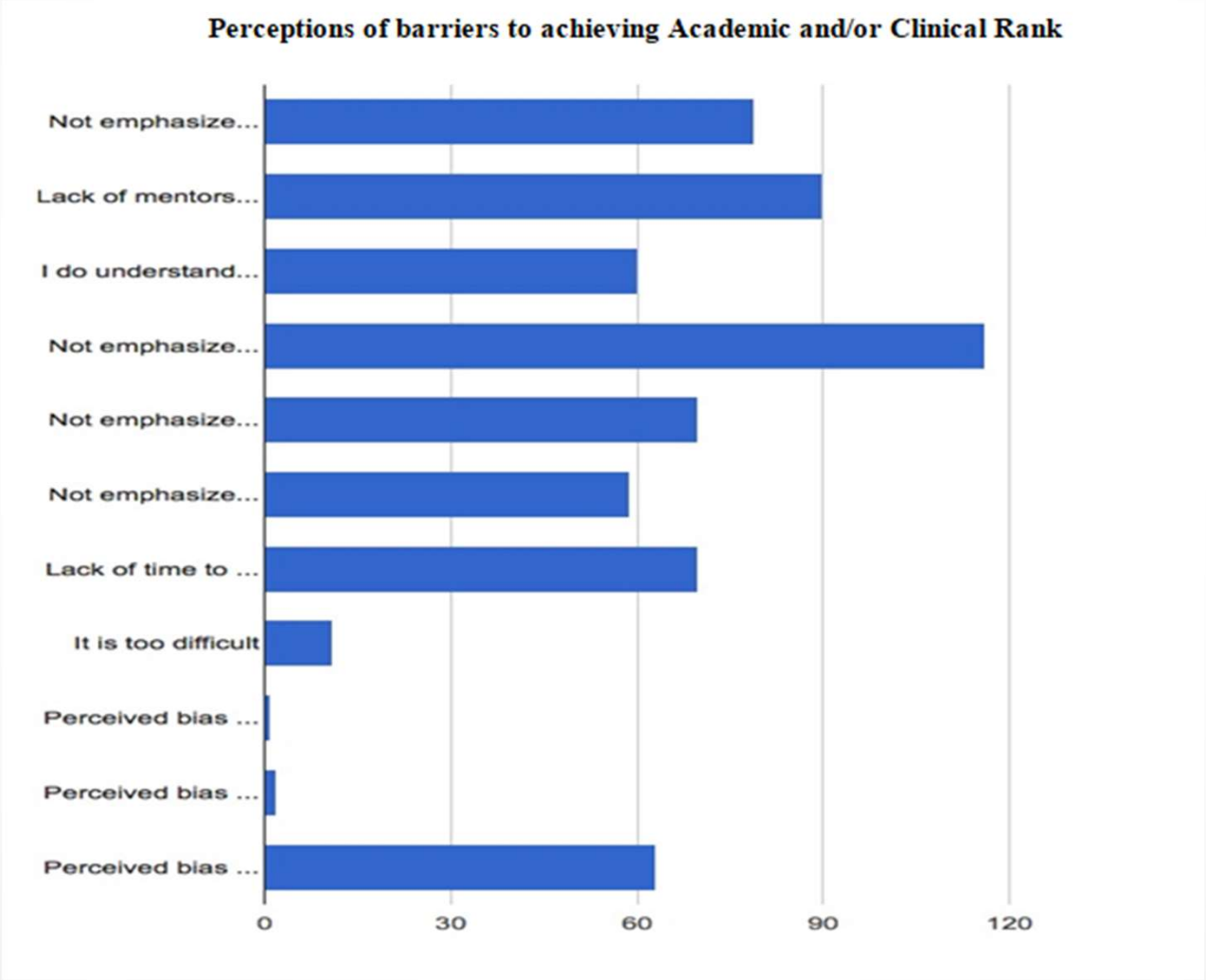
Association of positive correlations between Demographics and importance/desire for rank.
(Positive correlations are bolded with a notation of the positive finding)

Demographic	Achieve or Advance Rank	Desire for Academic or Clinical Rank	Importance of Academic or Clinical Rank
Age	*P=0.8732*	*P=0.4915*	*P=0.4000*
Gender	*P=0.9748*	*P=0.7619*	*P=0.1408*
Practice Setting	*P=0.2899*	*P=0.0566*	***P=0.0164 (Academic or Hospital Setting)***
Time in Setting	*P=0.3557*	*P=0.5671*	*P=0.2204*
Race	*P=0.6328*	*P=0.3227*	***P=0.0124 (African American and Asian Indian)***
Geographic Region	*P=0.6450*	***P=0.0321 (Southern Region)***	*P=0.0906*
Specialty	*P=0.2571*	*P=0.3060*	*P=0.3080*
Education	*P=0.0743*	***P=0.0165 (Doctoral Degree)***	***P=0.0373 (Doctoral Degree)***
Current Rank	*P=0.4294*	*P=0.4556*	***P=0.0001 (Having current Rank)***
Eligibility	*P=0.0720*	*P=0.1093*	***P=0.0283 (Being eligible for Rank)***

Data Analysis & Findings



Data Analysis & Findings



Limitations

- Novel and first of its kind
- Relatively low response rate
- Limited number of professional and demographic characteristics
- COVID-19 pandemic

- Major strengths include a national sample of PAs with the majority practicing in multiple specialties

Discussion

- PA providers would not only pursue rank opportunities when available but also have a strong desire to do so.
- Unfortunately, many of the PAs noted that academic/ clinical rank was not available for them at their institutions
- This creates a unique tension and possible career dissatisfier.

Discussion

- PAs noted that a lack of mentorship or an emphasis on achieving rank in formal PA educational training, among their departmental/divisional leadership, institutional PA leadership and/or state or local academy involvement all created barriers to the ability to pursue academic clinical rank.

- There are numerous publications that highlight quality academic/ career mentor ship significantly and substantially positively impact academic progress, productivity, retention and job satisfaction.

Discussion

- As the profession sees and expansion of DMSc programs targeted at clinically practicing PAs, we may see an increase in a desire for academic or clinical rank among these providers and they may intentionally seek out employment at centers that allowed them to pursue these goals.

- These PAs with doctorates may have the most career mobility for promotion and professional impact.

Conclusion

- This is a first of its kind, novel study of clinically practicing PAs across the country examining perceptions, believes and prevalence of academic/clinical rank.

- We would suggest that the findings indicate that PA leadership in academic or teaching hospitals work hard with individual department individual leadership, academic promotion committees and try to developed a mentor should program to help developed and advance this part of practicing PAs careers.

Conclusion

- Additionally we encourage state academies and the AAPA to work to support clinical PAs who pursue or wish to pursue academic clinical rank opportunities.

- Finally, we welcome PA programs to discuss rank, and encourage graduates to pursue it when and if possible.

Acknowledgements

- This study was supported with an internal grant from the Office of Mayo Clinic Health System Research in Southern Minnesota.
- This study was also supported by the Research Computing Facility grant (UL1TR002377).

References

- **References**
-
- 1. Stein SL. Scholarship in Academic Surgery: History, Challenges, and Ideas for the Future. *Clin Colon Rect Surg.* 2013;26(4):207-211.
- 2. Fye WB. The History of the Full-Time Clinical Faculty System - Reply. *Jama-J Am Med Assoc.* 1991;266(4):514-514.
- 3. Rushing GD, Mokadam NA. Faculty Development Using Education for Career Advancement. *Thorac Surg Clin.* 2019;29(3):321-+.
- 4. McCook A. RESEARCH MISCONDUCT Duke fraud case highlights financial risks for universities. *Science.* 2016;353(6303):977-978.
- 5. Aronoff D. And Then There Were None: The Consequences of Academia Losing Clinically Excellent Physicians. *Clinical Medicine & Research.* 2009;7(4):125-126.
- 6. Long J, Allison P, McGinnis R. Rank Advancement in Academic Careers: Sex Differences and the Effects of Productivity. *American Sociological Review.* 1993;58(5):703-722.
- 7. Travis E. Academic medicine needs more women leaders. *AAMC News and Insights.* 2018. Published January 15, 2018. Accessed December 26, 2019.
- 8. Carr PL, Raj A, Kaplan SE, Terrin N, Breeze JL, Freund KM. Gender Differences in Academic Medicine: Retention, Rank, and Leadership Comparisons From the National Faculty Survey. *Acad Med.* 2018;93(11):1694-1699.
- 9. Fang D, Moy E, Colburn L, Hurley J. Racial and ethnic disparities in faculty promotion in academic medicine. *JAMA.* 2000;284(9):1085- 1092.
- 10. Palepu A, Carr PL, Friedman RH, Amos H, Ash AS, Moskowitz MA. Minority faculty and academic rank in medicine. *JAMA.* 1998;280(9):767- 771.
- 11. Association PAE. Physician Assistant Education Association, By the Numbers: Faculty Report 3: Data from the 2017 Faculty and Directors Survey. 2018. doi:doi:10.17538/FR3.2018
- 12. Perez ST, Mackey P, Garcia H, et al. Decreasing Barriers to Academic Rank for Advanced Practice Providers. *Jnp-J Nurse Pract.* 2017;13(4):296-302.
- 13. Fulton BD. Health Care Market Concentration Trends In The United States: Evidence And Policy Responses. *Health Aff (Millwood).* 2017;36(9):1530-1538.
- 14. Walensky RP, Kim Y, Chang Y, et al. The impact of active mentorship: results from a survey of faculty in the Department of Medicine at Massachusetts General Hospital. *BMC Med Educ.* 2018;18(1):108.
- 15. Dandar V, Corrice AM, Bunton SA, Fox S. Why faculty mentoring matters: a review of literature on the impact of faculty mentoring in academic medicine and research-based recommendations for developing effective mentoring programs. First International Conference on Faculty Development in the Health Professions; 2011; Toronto, Canada.
- 16. Mylona E, Brubaker L, Williams VN, et al. Does formal mentoring for faculty members matter? A survey of clinical faculty members. *Med Educ.* 2016;50(6):670-681.
- 17. Pololi L, Knight S. Mentoring faculty in academic medicine. A new paradigm? *J Gen Intern Med.* 2005;20(9):866-870.
- 18. Valentin V. Is a doctoral degree right for you? 2019. Published December 4, 2019. Accessed February 23, 2021.

Questions

- Victoria S. Louwagie, DMSc (s), MSPAS, PA-C
  - Louwagie.victoria@mayo.edu
- Michael P. Halasy, DHSc, MS, PA-C
  - Halasy.michael@mayo.edu