

PERCEPTIONS OF U.S. PAs REGARDING THE ENTRY-LEVEL DOCTORAL
DEGREE IN PHYSICIAN ASSISTANT EDUCATION

Submitted by

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I hereby recommend that the research project prepared under my supervision by Lindsay Ohlemeier entitled Perceptions of U.S. PAs Regarding the Entry-Level Doctoral Degree in Physician Assistant Education be accepted as partial fulfillment for the degree of Master of Physician Assistant.

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ABSTRACT

Introduction: Although many health care professions have implemented the entry-level clinical doctorate, the physician assistant (PA) profession has not done so to date. Furthermore, no research has been done on the PA profession to determine the appropriateness of entry-level doctoral education. Methodology: This cross-sectional study was designed to determine the perceptions of practicing PAs regarding an entry-level Doctorate of Physician Assistant (DPA) degree. A randomized sample of 1,500 United States PAs was surveyed and the results were analyzed using descriptive and Chi-Square statistics. Results: The response rate for this survey was 23% (n=352). The majority of the respondents (82.8%) did not perceive the DPA degree to be necessary for entry into the PA profession. Likewise, 55.8% were not interested in returning to school to obtain the DPA. Additionally, the majority of the respondents believed that the master degree was sufficient for PA education, did not believe the DPA was necessary to deliver high standards of care, would not leave the field of PA if the DPA were required, and believed the DPA would not be needed to compete with nurse practitioners. Conclusion: The study results reveal a group of PAs in the United States who do not favor the profession moving toward offering a DPA degree. These results are similar for other professions who have already moved toward doctoral education.

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INTRODUCTION

Physician assistant (PA) education has been evolving since the creation of the profession. Recently, many clinical professions have increased their education level to the doctorate level; including the nurse practitioner profession. With the movement of many medical professions to the doctorate level, especially the nurse practitioner profession, the physician assistant profession must evaluate the doctoral degree as well.

In the 1960s an impending physician shortage brought about a new idea to create a new mid-level health care provider that would be an extension of the physician.¹ The physician assistant was created to be an extension of the physician in tasks such as physical exams, history taking, routine procedures, and working with the physician to set forth a plan of care for a patient.² In most cases, the physician assistant was allowed to perform all tasks the physician felt comfortable delegating to the PA. The physician assumed the legal responsibility for the care that the physician assistant provided.¹ Most PAs are in family practice settings.³ Physician assistants also specialize in fields such as surgery, orthopedics, or OB/GYN. As physician assistants are becoming more specialized and autonomous, some are evaluating if the education level of the physician assistant should be increased.

The doctoral program for physician assistants is a relatively new topic. Many debates are still pending on the appropriateness of moving the profession to a doctorate level. Other mid-level health care professions; however, have made the move to the doctorate level. Some of these include: physical therapy, occupational therapy, podiatry, pharmacy, audiology, and now, nurse practitioner.^{4,5} As these programs moved to the doctorate level, many issues were raised that had to be addressed. These issues hold true

for the physician assistant program of study. For example, one of the most discussed issues would be the physician and doctorate of physician assistant relationship. Many believe that the doctorate for the physician assistant has already been accomplished in the medical doctorate (MD) or the doctor of osteopathic medicine (DO), especially since PAs receive their knowledge based on the medical curricula.⁴ Problems could arise with the patients as well. With nurse practitioners, MDs, Dos, physical therapists (PTs), and physician assistants all being called doctor, it could be difficult for patients to know who is their primary care doctor.⁵ Many believe that the move to a doctorate is just for professional pride.⁶ An argument against moving to the doctoral degree may be that PAs with a bachelor's or a master's degree would lose out on job opportunities to PAs with a doctoral degree.^{5,7} The PA profession was built on the idea that the PA should be flexible, the education be condensed, and be an extension of any specialty or family practice doctor. With a doctoral degree, some fear that PAs could also lose the ability to move from specialty to specialty.⁵

The United States is changing. It is estimated that there will be a physician shortage and medicine will be in great need for skilled mid-level health care workers.^{8,9} Some argue a doctorate degree would offer the mid-level health care professional a better understanding and appreciation of research, and clinical practice.¹⁰ However, some argue that additional education required of the doctorates would limit the number who could qualify for PA school, especially minorities, and/or limit the number who could afford the additional education. Also, some believe that the additional education would lead to a further shortage of health care professionals due to the longer amount of time needed to graduate.⁶

The physician assistant education program currently lacks the curriculum to move to a doctoral degree. A debate against the doctoral program is that it is just an extension of the master's program and has no real difference.¹⁰ It has also been debated that the postgraduate educational programs already set up to train PAs in specialty areas would not be willing to switch to the doctorate degree.⁴ It has also been proposed that the physician assistant profession use an education curriculum that is based off of physical therapy's doctorate program or even the nurse practitioner doctoral program.^{4,5} This type of curriculum is an expanded version of the master curriculum, with additional time spent in the clinical setting, leading to an entry-level professional doctorate. Recently, a small class of Army PAs graduated with a clinical doctorate degree. The PAs were taught using an 18 month residency type curriculum and graduated with a Doctor of Science in Physician Assistant Studies with a major in Emergency Medicine (DscPA-EM).¹¹ While these PAs will hold a doctoral degree, this type of curriculum is not what is being discussed in this paper. This paper will focus on an expanded version of the master curriculum that can be applied to all practice areas.

Literature Review/Purpose of the Study

Using MEDLINE, Cochrane Library, and Cambridge Scientific Abstracts, the literature was searched. The Physician Assistant Education Association (PAEA) website was also searched for articles in the *Journal of Physician Assistant Education*. The terms used to search were physician assistant education, physician assistant doctoral programs, nurse practitioner doctoral programs, clinical professional doctorate, and physical therapy doctoral programs. Since the physician assistant doctorate concept is fairly new, limited information was found. Information could; however, be found about the nurse

practitioner, occupational therapy, audiology, and physical therapy professions move to the professional doctorate.

In an effort to understand the evolution of professional doctoral education, the Higher Learning Commission (HLC), North Central Association (NCA) of Colleges and Schools' *Report of the Task Force on the Professional Doctorate* was published in 2006.¹² The members of the Task Force described the issues in regard to first professional doctoral degrees (degrees conferred on those who wanted to be licensed to practice a particular profession, e.g., M.D., D.D.S., D.V.M., or J.D.), which are simply referred to today as professional doctorates. The report states:

“With a few important exceptions, all of these programs typically are post-baccalaureate in nature and require approximately three years of study. In many universities that offer graduate education at the doctoral level, these programs are not included in the graduate school and therefore they are not shaped significantly by the graduate school’s academic practices and policies. Moreover, the heads of the professional schools do not report to the graduate dean. Professional doctorates are not new to U.S. higher education; they have served a specific role in preparation for a profession; and they have usually been located in schools within a university or freestanding, focused, professional institutions. Within the past decade, several new degrees have been created particularly in health care fields. They are called doctoral programs, but clearly are not in title or content the same as the research doctoral programs in the field. Nor do they always follow the model of the “1st Professional Degrees.” Often referred to as the “clinical doctorate,” “professional doctorate” or “practicing doctorate,” most of these new programs do not yet serve as the professional degree required for licensure. The National Center for Education Statistics

(NCES) is not clear about how to classify them. And there is no consistency among colleges and universities that offer them; that is, if a graduate school exists, these degrees may or may not fall under its aegis. While the various professions have defined the nature of each program, there seems to be no obvious consistency among the various degrees as to length of study; rigor, substance, or content of the program; or the ultimate utility of the degree to the person who earns it.³ (Note: In 2006, the NCES changed the way they classified doctoral degrees into three categories: research/scholarship [e.g., Ph.D., Ed.D., D.Sc.], professional practice [e.g., M.D., D.O., D.V.M., J.D., D.C., D.D.S., Pharm.D.], and other [not meeting criteria of the other two categories], *NCES*, 2006).

The HLC-NCA report provides concrete information, which may be useful for those interested in grappling with the concept of the professional doctorate in general, and the DPA in particular.

The most useful piece of information from the HLC-NCA report was the information provided in regard to designing and evaluating the core characteristics of a professional doctorate. Although one could argue that this would be an important first step as the DPA concept is evaluated, it appears through reviewing the literature more basic issues should be addressed first.

It is believed that by acquiring a doctoral degree, the practitioner would be more prepared and more skillful in the health care that they provide.⁸ However, a study asked PT employers if the new doctorate degree would be preferred for entry into the profession compared to the master's degree. The majority of the employers stated that they would have preferred a master's degree.⁷ One fact that seems to be agreed upon by all mid-level

health care professionals, is that the doctoral degree would give credit to those who spend many years perfecting their skills as a practitioner.^{5, 7, 8, 10}

There is no indication that a study has been performed to evaluate the United States' PAs perceptions toward the upward movement. Physical therapists that were asked about the doctorate of physical therapy were divided between the doctorate degree being beneficial and whether or not it would harm other PTs chances of finding jobs.⁷ Another survey was done to determine if the audiology profession should move to the professional doctorate. The majority of the audiologists surveyed were not certain if they wanted to obtain the doctoral degree, and only 33% indicating they would pursue a doctorate.¹³ A similar study for occupational therapy showed that only 22% of occupational therapists would be interested in seeking the doctorate.¹⁴ To further address this issue, it is important to understand all constituencies involved.

As a starting point, research questions were developed to assess practicing PA perceptions regarding the doctoral degree:

- Question 1: What are the perceived benefits of the DPA among United States PAs?
- Question 2: What are the perceptions of United States PAs regarding the DPA?

METHODOLOGY

Design

This study was cross-sectional in nature and randomly sampled PAs from the United States. Likewise, a survey was developed to determine the perceptions of PAs in the United States regarding doctoral level PA education (Appendix).

Participants

The American Academy of Physician Assistants (AAPA) membership list was used to obtain a randomized sample of PAs in the United States (n=1,500). To assure an adequate sample size for generalization purpose, a sample calculation was conducted and determined to be 382 with a 5% margin of error, at a 95% confidence level, based on a population size of 65,000. A 25-30% response rate was expected. Fifteen hundred PAs were surveyed to ensure a response rate of approximately 382.

Measurement

The survey consisted of multiple choice, Likert based, and dichotomous questions, and it was mailed out via the United States Postal Service. The survey assessed the current practice setting of the subject, their age, and their current terminal PA degree. A series of Likert questions were asked to determine the perceptions the subjects had pertaining to the DPA. The subjects were also asked if they would be interested in an online degree completion program to obtain the DPA if available. Finally, the subjects were asked to rank in order from one to five in order of importance of the perceived benefits of the DPA (Appendix).

Data Analysis

Frequency statistics were used to determine the most common practice setting, terminal degree, mean age, and to determine the most common answer for all ten of the Likert based questions regarding the PAs perceptions of the DPA. Frequency statistics were also used to determine how many respondents were interested in the DPA and to determine their most important perceived benefit of the DPA. Chi-Square analyses were used to measure if there were any significant relationships in regard to perceptions of the

DPA and whether or not the respondents were interested in the DPA, their terminal degree, practice setting, and age. Surveys were collected from April 23, 2007 to June 19, 2007. A total of 352 surveys were collected corresponding to a 23 percent response rate. The data collected from the surveys was entered manually into an Excel spreadsheet, then imported into Statistical Package for the Social Sciences software, version 15.0 for analysis. The alpha level was set at .05.

RESULTS

Descriptive Statistics and Demographic profile

The number of surveys returned was slightly less than the expected. The mean age of the respondents was 40.39 years with a standard deviation of +/-11.17 years (Table1).

Table 1

Physician Assistant Characteristics (N=352)

	Percent
Degree	
Certificate without degree	9.7
Associate degree	8.0
Bachelor degree	32.6
Master degree	49.4
Informally trained PA	0.3
Specialty	
Family Practice	21.9
Internal Medicine	6.5
Internal Medicine subspecialty	8.2
OB/Gyn	1.1
Pediatrics	2.6
Emergency Medicine	11.6
General surgery	2.0
Surgery subspecialty	15.1
PA educator	1.4
Other	14.8
Not in clinical practice	14.5
Interested in DPA degree	
Yes	44.2
No	55.8

Most of the respondents held a terminal PA master degree (49.4%) or a bachelor degree (32.6%). Family practice was the most common practice setting among the respondents (21.9%, n=77) and 14.5% were not in clinical practice. When asked whether or not they would be interested in pursuing the DPA degree, the majority of the respondents stated that they were not interested (55.8%). A summary of these demographics can be found in Table 1.

Research Questions

The research questions consisted of the perceived benefits of the DPA degree and the perceptions of PAs regarding the DPA. Questions were designed to measure the population sample's opinions on these questions.

Research Questions

- Question 1: What were the perceived benefits of the DPA among United States PAs?
- Question 2: What were the perceptions of United States PAs regarding the DPA?

To answer question one, the respondents were asked to rank in order from the most important perceived benefit of the DPA to the least important out of six possible choices, including a write-in section that allowed respondents to write in their most important perceived benefit. In an attempt to answer question two, the respondents were asked a series of ten Likert based questions regarding their perceptions of the DPA.

The respondent's most important perceived benefit of the DPA was professional recognition (33.2%, n=72). It was followed closely by improved competency (28.1%, n=61). Table 2 summarizes the importance of each perceived benefit based on the respondent's ranking.

Table 2

Perceived Benefits of DPA Ranked in Order of Importance (N=352)

	Number	Percent
First Choice		
Professional recognition	72	33.2
Earning power	28	12.9
Improved competency	61	28.1
Self-esteem	14	6.5
Professional identity	36	16.6
Other	6	2.8
Second Choice		
Professional recognition	65	30.1
Earning power	41	19.0
Improved competency	26	12.0
Self-esteem	22	10.2
Professional identity	62	28.7
Third Choice		
Professional recognition	40	18.5
Earning power	64	29.6
Improved competency	34	15.7
Self-esteem	31	14.4
Professional identity	47	21.8
Fourth Choice		
Professional recognition	22	10.2
Earning power.	56	25.9
Improved competency	56	25.9
Self-esteem	34	15.7
Professional identity	48	22.2
Fifth Choice		
Professional recognition	16	7.4
Earning power	26	12.0
Improved competency	38	17.6
Self-esteem	115	53.2
Professional identity	21	9.7
Sixth Choice		
Professional recognition	2	50.0
Earning Power	0	0.0
Improved competency	1	25.0
Self-esteem	0	0.0
Professional identity	0	0.0
Other	1	25.0

Non-Parametric Data

To determine the perceptions of the DPA, the respondents were asked questions based on a Likert scale from strongly agree to strongly disagree (Table 3). Overall, the majority (79.1%) of the respondents agreed that the master degree was sufficient for PA

education. Also, a large percentage (83.1%) of the respondents did not believe the DPA was necessary to deliver high standards of care. A large portion of the respondents (45.6%) disagreed that they would leave the field of PA if the DPA was required. The respondents (56.7%) also felt that the DPA would not be needed to compete with nurses. Most of the respondents (37.5%) either disagreed or strongly disagreed that the DPA would not affect minority application. In addition, most of the respondents (46%) either strongly agreed or agreed that educationally disadvantaged students will not be able to compete.

Table 3

Perceptions (%) Among PAs on the Doctorate of Physician Assistant (N=352)

Perception	Strongly Agree		Strongly Disagree		
	1	2	3	4	5
Bachelor degree is sufficient	16.0	46.3	11.4	21.1	5.1
Master degree is sufficient	31.3	47.8	13.3	5.5	2.0
DPA should be entry level	2.3	5.2	9.7	39.0	43.8
Will leave field of PA if DPA required	17.4	22.4	14.7	34.1	11.5
DPA necessary for highest standards of care	4.0	7.7	5.2	48.1	35.0
DPA necessary to increase income	4.3	15.8	10.3	46.4	23.2
Educationally disadvantaged students will not be able to compete	7.5	38.5	27.3	22.7	4.0
DPA will not affect minority application	4.0	27.1	31.4	26.9	10.6
Financially disadvantaged will not be able to afford DPA	12.6	44.1	17.2	22.9	3.2
DPA needed to compete with Nurse Practitioners	8.1	20.5	14.7	37.9	18.8

To further analyze the perceptions of the DPA, a comparison was completed between those who were interested in pursuing a DPA degree versus those who were not. (Table 4). Those who would pursue a DPA tended to agree more with questions supporting the DPA. Not surprisingly, those interested in the DPA appeared less

concerned about the impact the DPA would have on educationally and financially disadvantaged applicants and minorities.

Table 4

Perceptions (%) of DPA Degree by Interest in DPA Option (N=352)

	Strongly Agree		Strongly Disagree			X ²
	1	2	3	4	5	
Bachelor degree is sufficient						17.696 [†]
Interested	10.0	40.7	15.3	27.3	6.7	
Not interested	21.1	50.3	8.5	16.4	3.7	
Master degree is sufficient						5.818
Interested	27.5	53.0	11.4	6.7	1.3	
Not interested	35.1	42.7	15.1	4.3	2.7	
DPA should be entry level						58.336*
Interested	5.3	9.3	16.7	45.3	23.3	
Not interested	0.0	2.1	4.8	33.2	59.9	
Will leave PA field if DPA required						98.572*
Interested	2.0	10.9	15.6	48.3	23.1	
Not interested	29.3	32.6	13.3	22.7	2.2	
DPA necessary for highest standards of care						54.702*
Interested	8.0	12.7	9.3	54.0	16.0	
Not interested	1.1	3.7	2.1	43.9	49.2	
DPA required to increase income						69.538*
Interested	8.8	26.4	13.5	46.6	4.7	
Not interested	0.5	8.5	7.9	46.6	36.5	
Educationally disadvantaged students not able to compete						18.518 [†]
Interested	4.0	36.2	22.8	32.9	4.0	
Not interested	10.6	39.9	30.3	14.9	4.3	
DPA will not affect minority application						17.432 [†]
Interested	6.0	35.3	28.7	24.0	6.0	
Not interested	2.1	20.2	34.0	29.3	14.4	
Financially disadvantaged will not be able to afford DPA						26.455*
Interested	7.3	39.3	16.0	31.3	6.0	
Not interested	16.5	49.5	18.6	14.9	0.5	
DPA needed to compete with Nurse Practitioners						87.916*
Interested	17.1	34.2	15.1	31.5	2.1	
Not interested	1.1	11.1	14.8	41.3	31.7	

[†]df = 4, p < 0.05

*df = 4, p < 0.001

Another comparison was completed to determine if the perceptions of the DPA would change based on the subject's current terminal PA degree. Most of the respondents (82.3%) strongly disagreed that the DPA should be the entry level degree. Overall, and regardless of the subject's terminal degree, the perceptions were fairly

congruent among subjects. Table 5 lists a summary of the comparison based on the subject's terminal degree.

Table 5

Perceptions (%) of DPA degree by Terminal PA Degree (N=352)

	Strongly Agree 1 ----- 2 Collapsed+ 1/2	3	Strongly Disagree 4 ----- 5 Collapsed# 4/5	X ²
Bachelor degree is sufficient				
Certificate without degree	6.60	0.86	2.01	51.353*
Associate degree	6.60	0.29	0.86	
Bachelor degree	27.1	1.73	4.03	
Master degree	21.9	8.35	19.6	
Master degree is sufficient				
Certificate without degree	6.44	1.75	0.88	46.201*
Associate degree	4.39	1.17	2.05	
Bachelor degree	22.2	8.48	2.05	
Master degree	45.9	2.05	2.63	
DPA should be entry level				
Certificate without degree	0.00	0.57	8.55	7.251
Associate degree	0.00	0.57	7.23	
Bachelor degree	2.90	3.47	26.6	
Master degree	4.62	5.20	39.9	
Leave PA field if DPA required				
Certificate without degree	5.64	1.19	2.08	25.308*
Associate degree	5.34	0.89	1.78	
Bachelor degree	13.7	5.64	13.1	
Master degree	15.4	6.83	28.5	
DPA necessary for highest standards of care				
Certificate without degree	0.58	0.58	8.38	6.299
Associate degree	0.00	0.58	7.23	
Bachelor degree	4.62	1.16	26.9	
Master degree	6.36	2.89	40.8	
DPA required to increase income				
Certificate without degree	0.58	0.87	8.38	10.917
Associate degree	1.45	0.58	5.78	
Bachelor degree	6.07	2.31	24.6	
Master degree	11.9	6.65	30.9	

Table 5 Continued

Educationally disadvantaged not able to compete				6.817
Certificate without degree	5.22	2.61	1.74	
Associate degree	4.93	1.74	1.16	
Bachelor degree	13.3	10.1	9.00	
Master degree	22.6	12.8	14.8	
DPA will not affect minority application				10.819
Certificate without degree	1.15	3.46	5.20	
Associate degree	2.60	1.44	3.75	
Bachelor degree	10.4	11.8	10.7	
Master degree	16.7	14.7	18.2	
Financially disadvantaged will not be able to afford DPA				6.531
Certificate without degree	7.00	1.16	1.74	
Associate degree	4.64	1.45	1.45	
Bachelor degree	18.0	7.25	7.83	
Master degree	27.2	7.54	14.8	
DPA needed to compete with Nurse Practitioners				5.894
Certificate without degree	1.75	0.87	6.41	
Associate degree	1.46	0.87	5.54	
Bachelor degree	10.5	5.20	17.2	
Master degree	14.9	7.87	27.4	

*df= 6, p< 0.001

+ Strongly agree and agree responses collapsed to increase responses in each Chi-square cell

Strongly disagree and disagree responses collapsed to increase responses in each Chi-square cell

Note: Informally trained PA responses removed due to few responses (n=3)

However, there were three statistically significant relationships found with this comparison. As expected, those with a bachelor's degree believed that the bachelor degree was sufficient (27.1%). Likewise, those with a master's degree agreed that the master degree was sufficient (45.9%). Regarding whether the respondent would leave the field of PA if the DPA was required, the respondents with a lower degree tended to agree with the statement while those with higher degrees tended to disagree.

Comparisons were made between the respondents' self-identified practice setting and the DPA perception questions. Practice setting was defined as primary care (31%), which included family practice, internal medicine, and pediatrics; specialty (52.8%), which included internal medicine subspecialties, OB/GYN, emergency medicine, general surgery, surgery subspecialties; and non-practicing PAs (14.5%). There were no significant relationships found in this analysis (Table 6).

Table 6

Perceptions (%) of Respondents Regarding DPA Degree by Specialty (N=352)

	Strongly Agree		Strongly Disagree			X ²
	1	2	3	4	5	
Bachelor degree is sufficient						9.611
Primary Care	4.9	13.7	3.2	27.3	1.2	
Specialty	9.3	26.5	5.5	16.4	2.6	
Not in Clinical Practice	1.2	6.4	2.9	2.9	1.2	
Master degree is sufficient						6.268
Primary Care	10.0	13.9	5.3	2.1	0.0	
Specialty	15.9	27.4	6.2	2.9	1.5	
Not in Clinical Practice	4.4	7.4	1.8	0.6	0.6	
DPA should be entry level						3.809
Primary Care	1.2	1.2	3.2	12.2	13.4	
Specialty	0.9	3.5	4.7	21.3	23.9	
Not in Clinical Practice	0.3	0.6	2.0	5.8	5.8	
Will leave PA field if DPA required						6.948
Primary Care	6.3	6.9	4.5	10.8	3.9	
Specialty	9.6	11.1	8.1	18.6	7.2	
Not in Clinical Practice	1.2	4.2	2.4	4.8	0.6	
DPA necessary for highest standards of care						12.776
Primary Care	2.6	2.6	1.2	15.2	9.9	
Specialty	1.5	4.7	2.6	25.7	19.8	
Not in Clinical Practice	0.0	0.6	1.5	7.9	4.4	
DPA required to increase income						8.857
Primary Care	2.0	4.4	4.4	15.2	5.8	
Specialty	2.3	8.5	5.0	24.2	13.7	
Not in Clinical Practice	0.0	3.2	1.2	7.6	2.6	
Educationally disadvantaged students not able to compete						9.283
Primary Care	2.6	13.7	6.7	7.9	0.9	
Specialty	3.5	17.8	18.1	11.4	2.6	
Not in Clinical Practice	0.9	6.4	2.9	3.8	0.6	
DPA will not affect minority application						11.080
Primary Care	1.5	8.1	8.1	9.3	4.4	
Specialty	2.6	14.0	19.8	13.4	4.4	
Not in Clinical Practice	0.0	5.5	3.5	4.1	1.5	

Table 6 Continued.

Financially disadvantaged will not be able to afford DPA						6.685
Primary Care	4.4	13.2	5.3	8.5	0.6	
Specialty	6.4	22.8	10.2	11.7	2.6	
Not in Clinical Practice	1.8	7.6	2.0	2.9	0.0	
DPA needed to compete with Nurse Practitioners						5.398
Primary Care	2.9	5.0	3.8	14.1	5.6	
Specialty	4.4	12.6	8.8	18.2	9.7	
Not in Clinical Practice	0.9	3.2	2.1	5.9	2.6	

A final comparison was made between age and the DPA perception questions. Based on the age of 38 being at the mid-point of frequency counts (50.8%), age was divided into two groups; less than or equal to 38 and those over 38. Seven significant relationships were found between these two groups. Those who were older perceived the bachelor degree to be sufficient for PA preparation (36%) and did not support the DPA as the entry-level degree for PA practice (43.6%). Likewise, older PAs would leave the PA field if the DPA were required (26.5%). Older PAs also believed financially disadvantaged students would not be competitive for admission to a DPA program (26.2%). Younger PAs more likely to agree a DPA was necessary to improve the economic status of PAs (11.2%), but more likely to disagree that minorities applying to DPA programs would not be affected (14.5%). The two age groups were split in their perception of whether the DPA was necessary to ensure higher standards of care (Table 7).

Table 7

Perceptions (%) of Respondents Regarding DPA Degree by Age (N=352)

	Strongly Agree		Strongly Disagree			X ²
	1	2	3	4	5	
Bachelor degree is sufficient						35.625 ⁺
≤ 38	4.5	20.5	10.3	11.8	3.9	
> 38	10.9	25.1	1.5	10.0	1.5	
Master degree is sufficient						7.020
≤ 38	19.3	24.5	5.2	2.1	0.6	
> 38	12.8	23.2	7.6	3.4	1.2	
DPA should be entry level						13.940*
≤ 38	1.8	4.2	6.1	20.6	18.5	
> 38	0.6	0.9	3.6	19.1	24.5	
Will leave PA field if DPA required						35.132 ⁺
≤ 38	4.4	8.1	9.3	21.8	8.4	
> 38	12.5	14.0	5.0	13.1	3.4	
DPA necessary for highest standards of care						12.063*
≤ 38	2.1	4.2	2.7	28.8	13.3	
> 38	1.8	3.3	2.1	20.0	21.5	
DPA required to increase income						12.247 *
≤ 38	2.7	8.5	6.9	24.2	8.5	
> 38	1.9	7.6	2.7	22.7	14.5	
Educationally disadvantaged students not able to compete						12.442 *
≤ 38	2.1	16.7	15.2	14.9	2.1	
> 38	5.2	21.0	12.2	8.5	2.1	
DPA will not affect minority application						16.802*
≤ 38	3.0	16.6	16.9	12.1	2.4	
> 38	1.2	11.2	13.9	15.1	7.6	
Financially disadvantaged will not be able to afford DPA						4.958
≤ 38	4.6	21.9	9.7	12.8	2.1	
> 38	7.6	22.2	7.3	10.6	1.2	
DPA needed to compete with Nurse Practitioners						3.547
≤ 38	5.2	11.9	7.0	19.0	8.3	
> 38	3.1	9.2	7.0	19.0	10.4	

⁺df = 4, p < 0.001

*df = 4, p < 0.05

DISCUSSION

Overall, the subjects did not support the DPA. The most important perceived benefit of the DPA was professional recognition. Those subjects that supported the DPA did not seem to be concerned about the effects the DPA would have on minorities or those who are financially or educationally disadvantaged.

Summary of Results as Compared to the Literature

The PA respondents seemed to agree with those in the audiology study. Only 44% of the respondents were interested in the DPA degree as compared to 33% of audiologists who were supportive of the doctoral degree.¹³ The results were also similar to the occupational therapy study. Only 22% of the surveyed occupational therapists were for the doctorate in occupational therapy.¹⁴

Anecdotally, many feel that the DPA will be needed to compete with nurse practitioners as they begin their doctoral program. However, the majority of respondents in this survey disagreed with this as a rationale for the DPA (56.7%). Those that were interested in the DPA tended to agree more with this statement (51.3%) than those who were not interested in the DPA (12.2%). Bollag wrote in his article that some feel that professional doctorates are for professional pride.⁶ The PA respondents tended to agree. Most chose professional recognition (33.2%) for their number one choice when asked about the most important perceived benefit of the DPA. This was also consistent with those who believe that the doctorate would give credit to those who spend many years perfecting their skills as a practitioner.^{5, 7, 8, 10}

When the PA respondents were asked if they felt the master's degree was sufficient for today's healthcare standards, the majority (79.1%) agreed that it was. This is consistent with the study of PT employers stating that they would prefer a master's degree.⁷ Likewise, the majority of the respondents strongly disagreed (82.8%) with the DPA being the entry level degree. Occupational therapists also agreed that the doctorate level should not be the entry level degree for their profession.¹⁴ Furthermore, the respondents who were not interested in the DPA believed that the degree would hinder

those who were financially disadvantaged (66.0% agreed) or those who were educationally disadvantaged (50.5% agreed) from entering the PA field.

Analysis of specialty designation of respondents did not reveal any significant relationships; however, comparisons of age did. Older PAs perceived the currently offered bachelor and master degrees to be sufficient for PA education, did not believe the DPA was necessary, and were twice as likely to agree with the statement which indicated they would leave the PA field if the DPA were required. Similarly, older PAs believed that educationally disadvantaged and minority students would be adversely affected when applying to a DPA program. Although this research did not delve into age related factors, the age relationships may be due to older PAs being more attuned with the roots of the PA profession, which was built on the idea that PA education should be flexible, condensed, and provide patient care access to underserved communities.

Overall Significance of the Study Findings and Opportunities for Further Research

This was a nationwide survey limited by a slightly smaller study sample than expected; therefore, generalizations should be considered with caution. Furthermore, gender was not collected; therefore, conclusions about gender cannot be made. In either case, the purpose of the study was to get a general understanding of the PA population. The significance of this study rests in the fact that no other study has been conducted that asks the opinions of PAs regarding the doctorate in physician assistant studies.

The results of this study demonstrate that most PAs do not wish to pursue a DPA or feel that it is necessary. Since the decision regarding the movement of the PA profession to the doctoral level will be made by PA administrators, it would be helpful to determine their perceptions along with PA faculty and physician perceptions, as the

employers of PAs. Information from all three groups may influence those who may wish to initiate a DPA program.

CONCLUSION

The clinical PA doctorate is a rapidly progressing idea that has already been initiated in many non-physician health care professions. The PA profession must be aware of this trend in order to make informed decisions about the future direction of the profession. Those who would consider starting an entry-level clinical DPA program may want to take into consideration the perceptions of PAs in this study.

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APPENDIX



WICHITA STATE UNIVERSITY

Dear Physician Assistant:

The following survey was developed for my Wichita State University Physician Assistant (PA) Master Research Project to evaluate the perceptions of physician assistants regarding the possibility of PA education moving to the doctoral level (Doctorate of PA or DPA). My PA faculty advisor is Dr. Richard Muma, Program Director. To reach Dr. Muma or myself regarding this survey, use the email listed on page two of this survey or call 316/978-3011. This survey will ask about your views on the possibility of PA education moving to the doctoral level. The results will be beneficial to those considering the DPA topic (e.g., educators, administrators, PAs). Please indicate your responses using this survey. No identifying marks will be included on the survey. This process will likely eliminate harm to you, protect your privacy and prevent discrimination of any kind. You will not incur any personal expense, other than time, in connection with this research project. All data will be kept in my possession in a locked file cabinet. This survey has been approved by the Wichita State University Institutional Review Board. **Approximate time to complete the survey is 5 minutes. Completing this survey indicates your consent to participate in this study.**

Thank you for your time and participation. Lindsay Ohlemeier, PA-S, Wichita State University

Section I: General Information

1. Which best represents your current major practice setting? Please select only one.
 - A. Family Practice
 - B. Internal Medicine
 - C. Internal Medicine- subspecialty- please specify _____
 - D. OB/Gyn
 - E. Pediatrics
 - F. Emergency Medicine
 - G. General surgery
 - H. Surgery subspecialty- please specify _____
 - I. PA educator
 - J. Other- please specify _____
 - K. Not in clinical practice
2. What is your highest academic credential in physician assistant studies? Please select only one. (Note: If you received a certificate and degree, select the degree. Certificate should only be selected if there was a certificate, but no degree awarded when graduating).
 - A. Certificate without a degree
 - B. Associate degree
 - C. Bachelor degree
 - D. Master degree
 - E. Informally trained PA
3. What is your age? _____

Section II: Views on the DPA

For each of the following statements, circle the one response that most closely matches your opinion about each statement

4. The Master of Physician Assistant degree sufficiently prepares PAs to provide the full scope of services required to practice in today's healthcare setting upon graduation.

Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree
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5. The Doctorate of Physician Assistant should be the entry-level degree for the practice of physician assistant.

Strongly Agree	Agree	No opinion	Disagree	Strongly Disagree
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6. I would leave the field of PA rather than pursue the necessary requirements to obtain a DPA if required.
- Strongly Agree Agree No opinion Disagree Strongly Disagree
7. I believe the DPA degree is necessary to insure the highest standards of service delivery in the field of PA?
- Strongly Agree Agree No opinion Disagree Strongly Disagree
8. I believe a DPA degree is necessary to increase the economic status of PAs?
- Strongly Agree Agree No opinion Disagree Strongly Disagree
9. Those who are educationally disadvantaged (graduates from low performing high schools) may not be competitive for admission to a DPA program.
- Strongly Agree Agree No opinion Disagree Strongly Disagree
10. Changing to a DPA degree will have no bearing on minorities applying to a DPA program.
- Strongly Agree Agree No opinion Disagree Strongly Disagree
11. Those who are financially disadvantaged will not be able to afford the DPA degree.
- Strongly Agree Agree No opinion Disagree Strongly Disagree
12. I believe that we will need the DPA to compete with the Doctorate of Nursing Practice (DNP).
- Strongly Agree Agree No opinion Disagree Strongly Disagree
13. If available, would you be interested in an on-line degree completion or bridge program to obtain a DPA?
- A. Yes (proceed to question 15)
- B. No
14. If you WOULD NOT be interested in a DPA degree completion or a bridge program, why not? (circle all that apply)
- A. Will be too expensive
- B. I do not have enough time to advance my education level
- C. I will receive no personal benefit from the DPA
- D. The DPA is not necessary
- E. Other: Please specify reasons: _____
15. What are the perceived benefits to you of the DPA?
- RANK IN ORDER OF IMPORTANCE:
- 1 = **MOST** IMPORTANT
- 5 = **LEAST** IMPORTANT
- A. _____ Professional recognition among other professionals
- B. _____ Economic: will enhance earning power
- C. _____ Improved professional competency
- D. _____ Self esteem
- E. _____ Professional identity/Public identification
- F. _____ Other: _____
- G. _____ I do not believe that the DPA is of benefit

Thank you for completing this survey!
Please return in the postage paid envelope.

Please make note of the following contact information if you have any questions regarding this survey.
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