

The PsyD: Heterogeneity in Practitioner Training

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The paucity of research on PsyD programs has led to unsubstantiated generalizations and uniformity myths about practitioner training. The authors collected information on the admission rates, financial assistance, theoretical orientations, and selected characteristics of American Psychological Association (APA)-accredited PsyD programs in clinical psychology (89% response rate). Systematic comparisons were made between PsyD programs housed in university departments, university professional schools, and freestanding institutions to describe the differences and commonalities among the heterogeneous PsyD programs. Empirical comparisons were provided among APA-accredited PsyD, practice-oriented PhD, and research-oriented PhD programs in clinical psychology to highlight the distinctive features of PsyD programs.

The first national training conference on clinical psychology, the Boulder conference (Raimy, 1950), was a milestone for several reasons. First, it established the PhD as the required degree, as in other academic research fields. Second, the conference reinforced the idea that the appropriate location for training was within university departments, not separate schools or institutes as in medicine. And third, clinical psychologists were to be trained as scientist-practitioners for simultaneous existence in two worlds: academic/scientific and clinical/professional.

Dissension with the recommendations of the Boulder conference gradually culminated in the 1973 national training conference

held in Vail, Colorado. The Vail conferees endorsed different principles, leading to a diversity of training programs (Korman, 1974; Peterson, 1976, 1982). Psychological knowledge, it was argued, had matured enough to warrant creation of explicitly professional programs along the lines of professional programs in medicine, dentistry, and law. These “professional” programs were to be added to, not replace, Boulder-model programs. Further, it was proposed that different degrees should be used to designate the scientist role (PhD) from the practitioner role (PsyD). Graduates of Vail-model professional programs would be scholar/professionals: The focus would be primarily on clinical service and less on research (Stricker & Cummings, 1992).

The Vail conference led to the emergence of two relatively distinct training models typically housed in different settings. Boulder-model programs are almost universally located in graduate departments of universities. However, Vail-model programs can be housed in three organizational settings: within a psychology department; within a university-affiliated psychology school; or within an independent, freestanding psychology school.

Clinical psychology now has two established and complementary training models that typically, but not invariably, generate different doctoral degrees. Although Boulder-model programs still outnumber Vail-model programs, Vail-model programs enroll, as a rule, three to four times the number of incoming doctoral candidates (Mayne, Norcross, & Sayette, 1994). This creates almost a numerical parity in terms of psychologists produced.

Several early studies demonstrated that initial worries about stigmatization, employment difficulties, and licensure uncertainty for PsyDs did not materialize (Hershey, Kopplin, & Cornell, 1991; Peterson, Eaton, Levine, & Snapp, 1982). Nor are there discernible differences in employment except, of course, that the more research-oriented, Boulder model graduates are far more likely to be employed in academic positions and medical schools (Gaddy, Charlot-Swillely, Nelson, & Reich, 1995).

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Although 30 years have passed since the Vail conference and PsyD programs are now a training mainstay, there is a paucity of reliable information on PsyD programs as a whole. With the prominent exception of several studies published by Peterson (see Peterson, 1997, for a review), little empirical data are available. The National Council of Schools of Professional Psychology publishes conference proceedings (e.g., Callan, Peterson, & Stricker, 1990) and individual PsyD programs prepare systematic self-studies (e.g., Hershey et al., 1991), but these do not inform psychologists, prospective students, and faculty advisors of the larger picture of PsyD programs. The American Psychological Association's (APA; 2002) biennial *Graduate Study in Psychology* and the biennial *Insider's Guide to Graduate Programs in Clinical and Counseling Psychology* (Norcross, Sayette, & Mayne, 2002) both provide data on individual PsyD programs, but these publications do not aggregate the data or present the larger picture of PsyD programs.

The unfortunate consequences of the research void are unsubstantiated conclusions and continuing myths about PsyD programs as a whole. The myths we frequently encounter include the following: "Almost anyone can be admitted," "No financial assistance is provided," "Do not bother to apply to a PsyD program until you have a master's degree," and "Psychoanalytic and humanistic faculty dominate those programs."

We initiated the PsyD Project with three objectives in mind. First, we wanted to provide contemporary and factual data on APA-accredited PsyD programs in clinical psychology. Second, we wanted to examine the variability among PsyD programs housed in university departments, university professional schools, and freestanding institutions. As Peterson (1992, p. 843) observed, "In gauging prospects of the success of a practitioner program, the importance of the institutional setting in which the program is located . . . cannot be overemphasized." Third, we wanted to place the PsyD results in the context of scientist-practitioner PhD programs in clinical psychology to describe their differences and similarities.

The PsyD Project

As of December 2001, APA had accredited a total of 56 PsyD programs. Five of these programs were in school psychology, 2 were in counseling psychology, and 3 were in combined psychology. Because of the small number of these programs, we opted not to report data on them. All results are based solely on APA-accredited PsyD programs in clinical psychology.

Questionnaires were mailed in June 2001 to the directors of the 46 APA-accredited PsyD programs in clinical psychology. The two-page questionnaire requested information on the program's faculty theoretical orientations; number of applicants, acceptances, and enrollment in 2001; percentage of incoming students receiving financial assistance; characteristics of incoming students, including gender, ethnicity, and previous degree; length of the program; and the percentage of students securing APA-accredited internships in 2001. Data were secured from 41 of the 46 PsyD programs, yielding a 89% return rate.

We examined the variability among PsyD programs in terms of their institutional setting: university departments, university professional schools, and freestanding institutions. Table 1 lists all APA-accredited clinical PsyD programs as a function of their

institutional setting: university departments ($n = 13$), university professional schools ($n = 17$), and freestanding institutions ($n = 15$).

In doing so, we encountered some difficulty in classifying certain programs that shared features of two institutional settings. For example, in September 2001, the American Schools of Professional Psychology merged with the University of Sarasota to create Argosy University, which has 12 campuses around the United States and provides online courses in psychology and education. Of the Argosy campuses, 7 offer APA-accredited PsyD programs in clinical psychology, and the remaining 5 offer newer PsyD programs not yet accredited. We continue to list the APA-accredited Argosy programs as freestanding programs: Although they are certainly moving toward a more comprehensive university, virtually all of their programs are in psychology and education. For another example, the California School of Professional Psychology and United States International University combined in 2001 to form Alliant International University, which has six California campuses. Although Alliant too is evolving toward a comprehensive university, practically all of its undergraduate programs are offered only at its San Diego campus (and overseas sites), and virtually all of its graduate programs are in clinical psychology, organizational psychology, and education. In June 2001 when our data were collected, Alliant was not a comprehensive university in the conventional sense of the term or in the Carnegie designation. For these reasons, we also categorized Alliant programs as freestanding while recognizing that they will probably soon be recategorized as university professional schools.

In order to secure a comparison sample, we sought the identical data from the training directors of the 163 PhD programs in clinical psychology accredited by APA in 2001. Fully 159 of the 163 programs responded, for a return rate of 97%.

General Characteristics of PsyD Programs

Table 1 also presents the year the 46 clinical PsyD programs were initially accredited by APA and their Carnegie type. APA accreditation of PsyD programs is relatively new, as evidenced by the median year of accreditation of 1991. The freestanding programs tended to be initially accredited a bit later, in 1994.

The Carnegie classifications of the PsyD institutions were obtained from the 2000 online edition of the Carnegie Classification of Institutions of Higher Education of American Colleges and Universities. As shown in Table 1, the PsyD programs located in university departments were, with one exception, entirely in master's and doctoral institutions. The PsyD programs located in university professional schools were divided among doctoral institutions, master's institutions, and specialized institutions. All 15 of the freestanding schools were classified as "specialized, other."

Application, Acceptance, and Enrollment Statistics

Table 2 summarizes the application, admission, and enrollment statistics for responding APA-accredited PsyD programs in clinical psychology. In general, programs averaged 150 applications and 57 acceptances, but there were significant differences by institutional setting. Freestanding programs, on average, received twice the number of applications as university department programs (with university professional schools in between). Similarly,

Table 1
APA-Accredited Clinical PsyD Programs by Institutional Setting and Carnegie Type

Program	Year accredited	Carnegie type
University departments of psychology		
Baylor University	1976	doctoral intensive
Central Michigan University	1990	doctoral intensive
Immaculata College	1999	master's I
Indiana State University	1985	doctoral intensive
Indiana University of Pennsylvania	1987	doctoral intensive
University of Indianapolis	2000	master's I
Loma Linda University	1998	doctoral intensive
Long Island University/C.W. Post	1994	master's I
Loyola College in Maryland	2000	master's I
Pepperdine University	1990	doctoral intensive
Wheaton College	1998	baccalaureate
Xavier University	2001	master's I
University-based professional schools		
Antioch New England Graduate School	1986	doctoral intensive
Biola University	1980	doctoral intensive
Carlos Albizu University—Miami	1991	specialized, other
Carlos Albizu University—San Juan	1994	specialized, other
University of Denver	1979	doctoral extensive
Florida Institute of Technology	1983	doctoral intensive
Fuller Theological Seminary	1972	specialized, theology
George Fox University	1998	master's I
George Washington University	2001	doctoral extensive
University of Hartford	1991	doctoral intensive
Nova Southeastern University	1983	doctoral intensive
Pacific University	1990	master's I
Rutgers University	1977	doctoral extensive
Spalding University	1989	master's I
Widener University	1989	doctoral intensive
Wright State University	1982	doctoral intensive
Yeshiva University	1985	doctoral extensive
Freestanding schools		
Alder School of Professional Psychology	1998	specialized, other
American School of Professional Psychology—Hawaii ^a	1998	specialized, other
American School of Professional Psychology—Virginia ^a	1999	specialized, other
California School of Professional Psychology—Alameda ^b	1995	specialized, other
California School of Professional Psychology—Fresno ^b	1994	specialized, other
California School of Professional Psychology—Los Angeles ^b	1991	specialized, other
California School of Professional Psychology—San Diego ^b	1994	specialized, other
Chicago School of Professional Psychology	1987	specialized, other
Forest Institute of Professional Psychology	1994	specialized, other
Georgia School of Professional Psychology ^a	1994	specialized, other
Illinois School of Professional Psychology—Chicago ^a	1985	specialized, other
Illinois School of Professional Psychology—Meadows ^a	1999	specialized, other
Massachusetts School of Professional Psychology	1987	specialized, other
Minnesota School of Professional Psychology ^a	1993	specialized, other
Wright Institute	1998	specialized, other
Other setting (interinstitutional program)		
Virginia Consortium Program in Clinical Psychology	1982	not listed

^a Recently renamed Argosy University. ^b Recently renamed Alliant International University.

the freestanding programs accepted significantly more applicants than university-based professional schools, which in turn accepted significantly more applicants than university-based department programs.

The average acceptance rate for the PsyD programs was 41%. That is, 4 out of 10 applicants to any PsyD program, on average, are accepted. The differences among the types of programs—34% to 50%—failed to reach statistical significance, but the trend was definitely for higher acceptance rates among the freestanding PsyD programs.

The enrollment statistics showed a similar pattern as the acceptance rates except that the differences reached the threshold for statistical significance. Freestanding programs enrolled far more students (49 per year typically) than university professional schools (35 typically) and university departmental programs (15 typically in a year).

GPAs and GREs

We asked program directors to indicate their program's mean, cutoff, and/or preferred Graduate Requirement Examination

Table 2
Application, Admission, and Enrollment Statistics for APA-Accredited Clinical PsyD Programs

Variable	All PsyD programs			University department programs			University professional school programs			Freestanding programs			F
	N	M	SD	n	M	SD	n	M	SD	n	M	SD	
No. of applications	40	149.7	81.1	11	88.4 ^a	48.7	15	164.3	84.4	13	186.5	76.6	5.8**
No. of acceptances	40	57.4	39.1	11	25.4 ^a	13.1	15	52.8 ^a	18.7	13	92.8 ^a	44.4	16.5**
% accepted	40	41.3	19.8	11	33.5	20.9	15	40.9	21.5	13	50.1	13.6	2.3
No. enrolled	41	33.1	20.7	11	14.7 ^a	6.0	16	34.6 ^a	18.0	13	48.6 ^a	19.5	12.9**
% enrolled	40	59.3	13.4	11	63.1	15.6	15	60.4	12.5	13	55.4	12.8	1.0

^a This group differs significantly from all other groups ($p < .05$ by Newman-Keuls procedure).

** $p < .01$.

(GRE) scores. Similar questions were posed for grade point averages (GPAs). Unfortunately, directors were reluctant to provide mean GRE scores for incoming students, preferring instead to leave the questions blank or to indicate a preferred minimum score. Only 12 of the 41 PsyD programs provided mean GRE scores, and only 13 provided mean GPAs for their incoming students. As a result of the small number of respondents, we are unable to present descriptive or comparative data. (Directors of PhD programs were proportionally more likely to report mean GRE and GPA scores for their incoming students.)

Faculty Theoretical Orientations

Program directors provided the percentages of their full-time faculty subscribing to or practicing five theoretical orientations: psychodynamic/psychoanalytic, applied behavioral/radical behavioral, family systems/systems, humanistic/phenomenological, and cognitive/cognitive-behavioral. Faculty could endorse multiple theoretical orientations, resulting in total percentages exceeding 100%. As seen in Table 3, PsyD faculty were primarily cognitive-behavioral (33% on average), psychodynamic (29%), and systems (19%) in orientation. The percentage of cognitive-behavioral faculty was substantially higher in the university department programs (44%), as compared with university professional schools (28%) and freestanding programs (28%). Conversely, the percentage of humanistic/phenomenological faculty was significantly higher in freestanding programs than in university departments or university professional schools (16% vs. 8% and 10%).

Table 3
Theoretical Orientations of Faculty in APA-Accredited Clinical PsyD Programs

Orientation	All PsyD programs		University department programs		University professional school programs		Freestanding programs		F
	M	SD	M	SD	M	SD	M	SD	
Psychodynamic/psychoanalytic (%)	29.4	17.6	27.2	19.4	29.7	19.1	31.9	15.6	0.2
Applied behavioral/radical behavioral (%)	7.6	8.4	4.9	5.3	9.2	7.9	7.3	10.8	0.9
Family systems/systems (%)	18.9	10.2	14.0	12.3	19.2	9.5	22.0	8.2	1.9
Humanistic/phenomenological (%)	11.2	8.4	8.2	8.7	9.5	5.8	16.5 ^a	9.0	4.2*
Cognitive/cognitive-behavioral (%)	32.8	17.9	44.2 ^a	18.7	28.3	18.4	28.4	13.4	3.4*

^a This group differs significantly from all other groups ($p < .05$ by Newman-Keuls procedure).

* $p < .05$.

Financial Assistance

Table 4 summarizes the financial assistance awarded to incoming students in APA-accredited clinical PsyD programs. Programs reported the percentage of students receiving a tuition waiver only, an assistantship only, or both tuition and assistantship. Across all PsyD programs, 18% of students received both. About 20% of students received an assistantship only, and another 8% received a tuition waiver. University department programs offered more aid: 38% of their students received both a tuition waiver and an assistantship compared with 9% and 6% of incoming students in university professional schools and freestanding programs, respectively. Put differently, over 60% of students attending a university-based department PsyD program received some form of financial assistance, compared with 47% of students in university professional schools and 26% of students in freestanding programs.

Demographic Characteristics of Incoming Students

On average, 70% ($SD = 8.7$) of incoming PsyD students were women and 21% ($SD = 16.0$) were ethnic minorities. A mean of 35% ($SD = 19.4$) possessed a master's degree prior to entry. There were no significant differences across program location.

Length of Training and Internship Acceptance

We inquired about the length of the PsyD program, including the internship. The average was 5.1 years ($SD = .70$), with a

Table 4
Percentage of Incoming Students Receiving Financial Aid in APA-Accredited Clinical PsyD Programs

Variable	All PsyD programs (<i>N</i> = 40)		University department programs (<i>n</i> = 10)		University professional school programs (<i>n</i> = 16)		Freestanding programs (<i>n</i> = 13)		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Tuition waiver only (%)	7.9	16.6	13.6	25.1	8.4	15.5	3.8	8.5	0.9
Assistantship only (%)	19.5	22.6	9.8	16.7	29.2	28.2	16.5	14.4	2.7
Both tuition waiver and assistantship (%)	17.5	32.0	37.7 ^a	49.1	9.4	15.4	5.7	11.1	4.5*

^a This group differs significantly from all other groups ($p < .05$ by Newman-Keuls procedure).

* $p < .05$.

minimum of 4 years and a maximum of 7 years. There were no significant differences between types of PsyD programs.

We also asked about the percentage of students applying for internships in 2001 who were accepted into APA-accredited internships. Across all PsyD programs, an average of 74% of students ($SD = 26.9$) were accepted. Again, no significant differences were found among PsyD programs in their percentage of students accepted at APA-accredited internships in 2001.

PsyD Versus PhD Versus PhD

The characteristics of PsyD programs are instructive and interesting in and of themselves. However, the distinctive attributes of PsyD programs are highlighted in comparison with more traditional PhD programs.

Clinical training programs can be identified along a practice–research continuum (Conway, 1988; Norcross et al., 2002). On one end of the continuum are the PsyD programs, accounting for roughly 30% of APA-accredited clinical doctoral programs that are by definition practitioner oriented. In the middle of the continuum are the equal-emphasis PhD programs that, as the name implies, emphasize both research and practice. These programs account for about 40% of APA-accredited clinical programs. On the other end of the continuum are the research-oriented PhD programs that account for approximately 30% of the accredited programs (Mayne et al., 1994). Because the practice-oriented programs accept and graduate far larger numbers of students than research-oriented programs, the proportion of new doctorates in clinical psychology is almost equally divided between Boulder-model and Vail-model programs.

For the following comparisons, we divided APA-accredited clinical psychology programs into the mutually exclusive categories of PsyD ($n = 41$), equal emphasis PhD ($n = 74$), and research-oriented PhD ($n = 85$) programs. The category placement was determined by the directors' program ratings along a 7-point, practice–research continuum from *clinically oriented program* (1) to *equal emphasis* (4) to *research-oriented program* (7). Table 5 summarizes the comparisons among APA-accredited PsyD, practice-oriented and equal-emphasis PhD (ratings from 1 to 4), and research-oriented PhD (ratings from 5 to 7) programs in clinical psychology.

With regard to admission statistics, the three types of clinical psychology programs are similar in the number of applications

they receive each year—about 135 to 170. Further, they are quite similar in the percentage of accepted students who eventually enroll—59% to 63%.

The commonalities end there. Clinical PsyD programs accepted, on average, 41% of their application pool, compared with practice-oriented PhDs programs' 17% and research-oriented PhD programs' 11%. The raw number of students accepted in PsyD programs was concomitantly higher—57 students on average—as was the raw number of students enrolled—33 students on average.

With regard to faculty theoretical orientation, the three types of clinical psychology programs are similar in their percentages of faculty committed to the behavioral and systems traditions. The programs diverge on the percentage of psychodynamic, humanistic, and cognitive–behavioral faculty. The research-oriented PhD clinical programs were characterized by a significantly higher proportion of cognitive–behavioral faculty—64% of the faculty—and lower percentage of psychodynamic faculty—12% on average. Put differently, PsyD and equal-emphasis PhD programs are distinctive in offering a larger percentage of psychodynamic and humanistic faculty.

With regard to financial assistance, the differences are quite large. On average, 84% of students entering research-oriented PhD programs received full financial assistance (both tuition waiver and assistantship). By contrast, 57% of the students entering equal-emphasis PhDs programs and about 20% of entering PsyD students received a full financial assistance package.

With regard to student characteristics, the demographic commonalities are impressive. In all three types of programs, 70% of incoming clinical doctoral students in 2001 were women and approximately 20% were ethnic minorities. More than a third of incoming PsyD students already possessed master's degrees, in contrast to 17% of those entering research-oriented PhD programs.

Finally, Table 5 presents the mean lengths of the training programs and the mean percentages of internship applicants who were accepted into APA-accredited internships. An average of 74% of PsyD students secured an APA internship in 2001, compared with 91% and 96% of students from equal-emphasis and research-oriented PhD programs, respectively. Clinical PhD students took 6.1 to 6.2 years to complete their programs (including internship), but PsyD programs took a year less—5.1 on average.

Table 5

Comparisons Among APA-Accredited PsyD, Practice-Oriented PhD, and Research-Oriented PhD Programs in Clinical Psychology

Variable	PsyD programs		Practice-oriented and equal emphasis PhD programs		Research-oriented PhD programs		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Admission statistics							
No. of applications	149.7	81.1	133.7	83.5	168.5	87.4	3.2*
No. of acceptances	57.4 ^a	39.1	18.5	19.6	14.1	10.8	54.1**
% accepted	41.3 ^a	19.8	16.8 ^a	13.9	11.3 ^a	10.3	66.2**
No. enrolled	33.1 ^a	20.8	9.9	7.2	8.6	9.3	64.2**
% enrolled	59.3	13.5	62.7	19.3	60.0	17.2	0.7
Theoretical orientation							
Psychodynamic/psychoanalytic (%)	29.4	17.7	29.6	23.1	12.0 ^a	12.5	23.0**
Radical behavioral (%)	7.6	8.4	8.1	11.5	11.1	15.7	1.4
Systems (%)	18.9	10.2	20.6	17.8	14.5	15.9	3.1
Humanistic/phenomenological (%)	11.2	8.4	11.7	12.3	6.1 ^a	9.9	6.3*
Cognitive-behavioral (%)	32.8 ^a	17.9	49.0 ^a	25.0	64.4 ^a	20.7	30.2**
Financial aid							
Tuition waiver only (%)	7.9	16.6	5.2	15.3	2.2	11.8	2.4
Assistantship only (%)	19.5	22.6	25.7	37.4	8.5 ^a	24.8	6.7**
Both tuition waiver and assistantship (%)	17.5 ^a	22.6	57.2 ^a	41.7	84.2 ^a	31.6	48.0**
Student characteristics							
Women (%)	69.9	8.6	71.6	8.1	70.8	11.1	0.5
Ethnic minority (%)	20.8	16.0	19.7	13.5	18.7	10.1	0.4
Possessed master's (%)	35.2 ^a	24.8	23.8 ^a	17.1	17.2 ^a	11.7	18.5**
Students entering APA internships (%)	74.4 ^a	25.6	90.8	16.7	95.5	10.0	22.4**
Years to complete degree	5.1 ^a	0.7	6.1	0.8	6.2	0.9	27.7**

Note. Sample sizes were 40–41 for PsyD programs, 71–74 for practice-oriented and equal-emphasis PhD programs, and 80–85 for the research-oriented PhD programs.

^a This group differs significantly from all other groups ($p < .05$ by Newman-Keuls procedure).

* $p < .05$. ** $p < .01$.

Concluding Comments

The overriding objective of our study was to disseminate objective data about APA-accredited PsyD programs and, in so doing, to dispel several of the nagging myths and unfounded generalizations about practitioner training. As with many myths, the PsyD myths contain a kernel of truth. It is true, for example, that freestanding PsyD programs offer admission to a far higher percentage of applicants, but certainly not “Almost anyone can be admitted.” It is also true that PsyD programs provide comparatively little financial aid to their students, but it is inaccurate to declare “No financial assistance is provided.” PsyD programs routinely accept a higher proportion of master’s-degree students, but our data show that almost two thirds of incoming PsyD students in clinical psychology are now baccalaureate level. And while psychoanalytic and humanistic orientations are more prominently represented on the faculty of PsyD programs than in PhD programs, the modal theoretical orientation is cognitive-behavioral in both types of programs.

A second aim of the PsyD Project was to highlight the heterogeneity of the PsyD programs, largely as a function of their institutional settings. The different types of PsyD programs shared similar financial assistance levels, faculty theoretical orientations, student demographics, and time to complete training. By contrast, the freestanding programs differed from both types of university-based PsyD programs on several dimensions. In particular, the former programs received more applications and accepted more students than did the latter programs.

The high rates of acceptance into APA-accredited freestanding PsyD programs—one half of all applicants—raise understandable concerns about quality control. Previous studies (e.g., Mayne et al., 1994; Murray & Williams, 1999; Norcross, Hanych, & Terranova, 1996; Norcross, Sayette, Mayne, Karg, & Turkson, 1998) invariably found that higher acceptance rates were associated with lower GRE scores and GPAs. We would immediately advise caution not to overgeneralize this finding to all PsyD programs. Moreover, our study does not provide data on the GRE scores, GPAs, other academic credentials, and clinical skills of these applicants, more than one third of whom have already earned a master’s degree. At the same time, even supporters of PsyD programs have tactfully echoed Peterson’s (1997, p. 248) “painful worry about the expansion of PsyD programs in institutions where the general standard of academic quality is—how can I say this—less than lofty.” Indeed, after reviewing the accumulating evidence about professional education in clinical psychology, Peterson (2003, p. 795) ruefully concluded “As the professional school movement has advanced, the average performance of graduates has declined.”

Differences among the three types of PsyD programs pale in comparison with differences between all PsyD programs and PhD programs in clinical psychology, particularly research-oriented PhD programs (Maher, 1999). Research-oriented PhD programs accepted a much smaller percentage of their applicants but were far more likely to provide financial aid than did PsyD programs. Students at research-oriented PhD programs required more time to complete their degree and were more likely to gain admittance to

an APA internship compared with PsyD students. Research-oriented PhD programs had a significantly higher proportion of cognitive-behavioral faculty and lower proportion of psychodynamic faculty than PsyD programs. PsyD programs were more theoretically pluralistic, at least in comparison with the 64% of faculty of research-oriented PhD programs subscribing to the cognitive-behavioral orientation.

The disparities in financial aid between PsyD and PhD programs were indeed pronounced. Fully 84% of students entering research-oriented clinical PhD programs received full financial assistance compared with 6% of students entering freestanding PsyD programs. The probability of receiving full financial assistance in a freestanding PsyD program is 14 times less than in a research-oriented PhD program, but the acceptance rate is 4 to 5 times greater. This difference in financial assistance is undoubtedly related to the differential debt experienced by recent graduates in clinical psychology. Graduates of PsyD programs reported a median debt of \$53,000 to \$60,000 related to graduate education. Recipients of Boulder-model clinical PhDs, by contrast, reported a median level of debt of \$22,000 (Kohout & Wicherski, 1999).

Students in PhD programs take significantly longer, approximately 1 year in our study and 1.5 years in previous research (Gaddy et al., 1995), to complete their degrees than do students in PsyD programs. Various interpretations can be given to this robust difference, from PsyD training is more focused and efficient on one pole to PhD training is more comprehensive and rigorous on the other.

One consistent finding from previous studies is that PsyD graduates do not perform as well as PhD graduates on the national licensing examination for psychologists (Kupfersmid & Fiola, 1991; McGaha & Minder, 1993; Yu et al., 1997). That is, doctoral students who graduate with a PsyD score lower, on average, than doctoral students who graduate from a traditional clinical psychology PhD program on the Examination for Professional Practice in Psychology (EPPP), the national licensing test. Higher EPPP scores have been reliably associated with smaller-sized clinical programs, larger faculty-to-student ratios, and traditional PhD curricula (also see Maher, 1999; Templer et al., 2000). Unfortunately, the previous research did not systematically compare EPPP scores as a function of the type of institutional setting for the PsyD degrees nor of the length of training.

Prospective graduate students and faculty advisors may view some of the data presented here in a positive light: An increasing number of PsyD programs are accepting proportionally larger number of applicants. Thus, there is increased opportunity and a higher likelihood of acceptance into a doctoral program in clinical psychology. PsyD programs also graduate students, on average, a year sooner—likely seen as a positive prospect to potential graduate students. Further, many professional schools have been leaders in emphasizing ethnic diversity among faculty and students (Kenkel, DeLeon, Albino, & Porter, 2003); while the percentage of ethnic minority students in PsyD programs is about the same as in PhD programs, a higher proportion (16%) of full-time faculty in professional schools are ethnic minorities than full-time faculty in traditional doctoral departments (10%; Pate, 2001).

At the same time, there are negative consequences—for the student and for the discipline—associated with several of these potential benefits. Rising acceptance rates and shorter training periods will probably translate into less qualified students (at least

on conventional academic criteria), larger incoming classes, less financial aid, greater student debt, shortages in APA-accredited internship positions, and lower scores on the national licensing examination. If these trends continue, the proportion of clinical psychologists graduating from PsyD programs will soon surpass those from university-based PhD programs. Such a shift will raise important questions regarding the identity of psychology as a doctoral-level profession (see Belar, 1998; Maher, 1999; Peterson, 2003).

Ultimately, the PsyD Project has underscored, in quantitative measures, the heterogeneity in training of clinical psychologists. McFall (2002, pp. 660–661) observed: “It is mythical to treat clinical psychology as though it were a homogeneous, unified field, standing all in one place, conveniently marked by a ‘you are here’ arrow.” The once-presumed homogeneity in clinical psychology training has vanished; students and advisors alike confront expanding choices with consequences that carry forward well into one’s career. It is the obligation of advisors to enlighten potential clinical psychologists on these tradeoffs and to help make their choices informed. It is also incumbent on clinical psychologists to examine the path their discipline is taking. What will the heterogeneity among the PsyD programs in particular, and doctoral training in clinical psychology in general, mean to the science and practice of psychology?

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