CHAPTER 2
CHOOSING THE Ph.D. OR Psy.D.

Clinical psychology has two distinct training systems by which students earn their doctorates. In the words of the APA Standards of Accreditation: "In general, PhD programs place relatively greater emphasis upon training related to research, and PsyD programs place relatively greater emphasis on training for engaging in professional practice." Without a firm understanding of the differences in these training models, many applicants will waste valuable time and needlessly experience disappointment.

In this chapter, we explain and distinguish between the two prevalent training models in clinical psychology—the Boulder model (Ph.D.) and the Vail model (Psy.D.). Counseling psychology has parallel differences in training emphases (Norcross, Evans, & Ellis, 2010); however, it offers only a handful of Psy.D. programs (see Table 1-3). Thus, we spend most of our time on clinical psychology in this chapter.

The Boulder Model (Ph.D.)

The first national training conference on clinical psychology was held during 1949 in Boulder, Colorado (hence, the "Boulder model"). At this conference, equal weight was accorded to the development of research competencies and practice skills. This dual emphasis resulted in the notion of the clinical psychologist as a scientist-practitioner. Clinical psychologists were considered first and foremost as scientific psychologists and were to have a rigorous, broad-based education in psychology. Their training would encompass statistics and research methods, with core courses in development, biopsychology, learning, and the like. The emphasis was on psychology; clinical was the adjective.

The Boulder conference was a milestone for several reasons. First, it established the Ph.D. as the required degree, as in other academic research fields. To this day, all Boulder model, scientist-practitioner programs in clinical psychology award the Ph.D. degree. 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 law. And third, clinical psychologists were trained for simultaneous existence in two worlds: research/scientific and practice/professional.

The important implication for you, as an applicant, is that Boulder-model programs provide rigorous education as a researcher along with training as a practitioner. Consider this dual thrust carefully before applying to Boulder-model programs. Some first-year graduate students undergo undue misery because they dislike research-oriented courses and the research projects that are part of the degree requirements. These, in turn, lead to the formal dissertation required by Boulder-model programs. Many applicants are specifically seeking this sort of training.

Other applicants are seeking training focused on clinical practice. For these applicants, there is an alternative to the Boulder model: the Vail model of training psychologists.
The Vail Model (Psy.D.)

Some dissonance with the recommendations of the Boulder conference emerged at later training meetings; however, there was a strong consensus that the scientist-practitioner model, Ph.D. degree, and university training should be retained. But in the late 1960s and early 1970s, change was in the wind. Training alternatives were entertained, and diversification was encouraged. This sentiment culminated in a 1973 national training conference held in Vail, Colorado (hence, the "Vail model").

The Vail conference endorsed different principles than the Boulder model, leading to a diversity of training programs (Peterson, 1976, 1982). Psychological knowledge, it was argued, had matured enough to warrant creation of explicitly professional programs along the lines of professional training in medicine, dentistry, and law. These "professional programs" were to be added to, not replace, Boulder-model programs. There was also a clear mandate that students selected for these professional programs be chosen from "a pool of socially responsive, culturally diverse, and professionally sensitive" applicants (Korman, 1974, p. 44) instead of favoring grades and test scores alone.

Further, it was proposed that different degrees should be used to designate the scientist role (Ph.D.—Doctor of Philosophy) from the practitioner role (Psy.D.—Doctor of Psychology). Graduates of Vail-model professional programs would be scholar—professionals: the focus would be primarily on practice and less on research.

This revolutionary conference led to the emergence of two distinct training models typically housed in different settings. Boulder-model, Ph.D. programs are almost universally located in graduate departments of large universities. Vail-model programs are housed in three organizational settings:
- a psychology department (as Ph.D. programs)
- within a university-affiliated psychology school (for instance, Rutgers and Adelphi universities)
- independent, "freestanding" university (for instance, Alliant University, Argosy University)

These last programs are part of independent institutions, some of which are run as for-profit companies. Although they are titled "universities," they are frequently not comprehensive universities offering degrees in dozens of subjects. Rather, they only offer degrees in a handful of subjects and thus not "universities" in the traditional sense of comprehensive universities.

Clinical psychology boasts two established and complementary training models, each of which graduates about an equal number of psychologists each year. 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. This creates numerical parity in terms of psychologists produced.

Details on individual PsyD (and PhD) clinical programs may be found in the Reports on Programs in the back of this book. Here we focus on the general patterns of differences between these two training models.

Salient Differences

The primary disparity between Boulder-model and Vail-model programs lies in the relative emphasis on scientific research: Boulder programs aspire to train producers of research; Vail programs train consumers of research. Even Vail programs require research and statistics courses; you simply cannot avoid research sophistication in any APA-accredited psychology program. The practice opportunities are very similar for students in both types of programs.

Several studies have demonstrated that initial worries about stigmatization, employment difficulties, licensure uncertainty, and second-class citizenship for university-based Psy.D.s have not materialized (Hershey, Kopplin, & Cornell, 1991; Peterson, Eaton, Levine, & Snepp, 1982). There do not appear to be strong disparities in the pre-internship clinical skills of Ph.D. and Psy.D. students as evaluated by internship supervisors (Snepp & Peterson, 1988). Nor are there discernible differences in employment except, of course, that the research-oriented, Boulder-model graduates are far more likely to be employed in academic positions and medical schools (Gaddy et al., 1995). While Vail-model graduates may be seen as second-class citizens by some Boulder-model traditionalists, this is not the case among health care organizations or individual patients.

Which training model do clinical psychologists themselves prefer? In one of our studies (Norcross, Gallagher, & Prochaska, 1989), we found that 50% favored the Boulder model, 14% the Vail model, and the remaining 36% both models equally. However, preferences varied as a function of the psychologist's own doctoral program: 93% of the psychologists trained in a strong Boulder tradition preferred the Boulder model or both equally. Likewise, 90% of the psychologists trained in a strong Vail tradition preferred the Vail model or both equally. In short,
CHOOSING THE Ph.D. OR Psy.D.

psychologists preferred the training model to which they applied and in which they completed their training.

As we discuss in subsequent chapters, there are important trade-offs between Vail-model and Boulder-model programs. Here are 8 differences to bear in mind as you read through our book and as you become an informed consumer.

1. Research skills. Vail-model, Psy.D. programs provide slightly more clinical experience and courses but less research experience and courses than do Boulder-model programs (Tibbits-Kleber & Howell, 1987). Psy.D. programs typically require a clinical dissertation, substantially less than an original research dissertation required by Ph.D. programs. An important caveat: if you desire to teach full time at a 4-year college or university, we strongly advise you not to seek the Psy.D. degree. The Psy.D. is an explicitly professional or practitioner degree; your training and expertise will be as a practitioner, not as a professor, researcher, or academician.

2. Length of training. The additional research training and the large dissertation required in Boulder-model Ph.D. programs translate into an additional year of training, on average. Students in Ph.D. programs take significantly longer, 1 to 1.5 years longer, to complete their degrees than do Psy.D. students (Gaddy et al., 1995; Norcross, Castle, Sayette, & Mayne, 2004). Various interpretations are given to his robust difference, from “Psy.D. training is more focused and efficient” on one pole, to “Ph.D. training is more comprehensive and rigorous” on the other.

3. Class size. Each year, Boulder-model Ph.D. programs in clinical psychology will take in 7 to 10 new students. The rule of thumb is to accept one new student annually for each full-time clinical faculty in that program. Each year, Vail-model Psy.D. programs in clinical psychology will take in 20 to 60 new students (Norcross et al., 2011). The natural consequence is that the number of students in graduate courses tends to be much larger in Psy.D. programs than in Ph.D. programs. The amount of individual mentoring by full-time faculty will also be less in Psy.D. programs.

4. Acceptance rates. Both Vail and Boulder programs have similar admission criteria, which favor grade point average, entrance examination scores, letters of recommendation, and so on. (All these topics are covered in detail in later chapters.) But Vail-model programs afford easier admission than Boulder-model programs. On average, clinical Ph.D. programs accept 6% to 10% of applicants, whereas clinical Psy.D. programs accept 41 to 50% of applicants (Norcross et al., 2010; see Table 4-1 for details).

5. Financial assistance. Admission rates are higher in Psy.D. programs, but financial assistance is lower. These numbers are plainly visible in the Reports on Individual Programs. As a rule, only 1 to 10% of Psy.D. students will receive full financial assistance (tuition waiver plus a paid assistantship), whereas 70 to 100% of clinical Ph.D. students will (Norcross et al., 2010; see Table 5-3 for details).

We will return repeatedly to matters of financial assistance and student debt throughout the Insider’s Guide, but a few more words here about unequal “pay” in doctoral studies. Students with generous stipends/grants and tuition waivers are better able to focus on learning and career prospects, while the rest frequently spend much of their time preoccupied with making ends meet. Those without stipends or fellowships typically have two options: take out loans or work outside the university. Both can prove a gamble and both typically detract from the educational experience. In this sense, unequal financial assistance frequently leads to unequal education and careers (Patel, 2015). So begin now thinking through the financial consequences of graduate school. No need to become dissuaded or anxious; forewarned is forearmed.

6. Loan debt. The paucity of financial assistance to Psy.D. students translates into increased personal debt. If the program does not provide funding, then students are forced to rely on personal funds or loans. The median debt for Psy.D. recipients is now $200,000 (American Psychological Association, 2015). That does not include debt from undergraduate education, which averages $33,000 to $35,000. The median debt for clinical Ph.D. recipients is $75,000, less than half that of Psy.D.s but still substantial. (For comparison, the median debt for psychology Ph.D.s in nonclinical fields is $55,000; American Psychological Association, 2015.)

7. Accredited internships. All doctoral students in clinical and counseling psychology must complete the equivalent of a year-long, full-time intern-
ship before receiving their degrees. Students desire an internship accredited by APA or, in lieu of that, an internship belonging to the APPIC (Association of Psychology Postdoctoral and Internship Centers). The competition for an APA-accredited or APPIC-member internship can be keen, and in recent years, only 76% of intern applicants matched with an accredited internship. The research consistently demonstrates that students enrolled in large, freestanding Psy.D. programs match at a lower rate than students enrolled in smaller, Ph.D. programs (APPIC, 2006; Norcross & Karpia, 2015; Parent & Williamson, 2010). Several large, freestanding Psy.D. programs account for over 30% of the unmatched applicants (Parent & Williamson, 2010).

8. Licensure exam scores. One disconcerting trend is that Vail-model, Psy.D. graduates do not perform as well as Ph.D. graduates on the national licensing examination for psychologists (Graham & Kim, 2011; Templar et al., 2008; Mahler, 1999; Schaffer et al., 2012). That is, Psy.D. graduates score lower and pass less frequently, on average, than graduates of traditional Ph.D. clinical programs 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 and larger faculty-to-student ratios, in addition to traditional Ph.D. curricula. EPPP scores are also correlated .78 with the GRE General Test score, so the selectivity of the program and the student's ability level may be more predictive than the graduate program per se (Sharpless & Barber, 2013).

From a student's perspective, these 8 differences between the Boulder Ph.D. programs and the Vail Psy.D. programs do not reliably favor one training model over the other. As a potential applicant, you will probably prefer the shorter training and higher admission rates among Psy.D. programs, on the one hand. Easier to get in and quicker to finish. You will probably prefer the greater probability of financial assistance, accredited internships, and higher license scores among Ph.D. programs, on the other hand. More money and better outcomes.

In the final analysis, the decision comes down to your personal interests and career trajectory. Certainly if you have primarily academic or research aspirations, then a Boulder model Ph.D. program would be wise. Certainly if you adore clinical practice and dislike much of research, then a Vail model Psy.D. program would be your choice. These truly represent choice points for an informed student.

A Boulder Boulder Model (Ph.D.)

The rise of the Vail model and the Psy.D. degree has always concerned many research-oriented academic psychologists, but their simmering concern rose to collective action in the past decades. Some psychologists believe that the professional schools, especially the large multi-campus institutions, have seriously compromised the quality of training and the scientific nature of psychology.

In a provocative monograph, three prominent clinical psychologists argue that the “evidence shows that many clinical psychology doctoral training programs, especially Psy.D. and for-profit programs, do not uphold high standards for graduate admission, have high student–faculty ratios, de-emphasize science in their training, and produce students who fail to apply or generate scientific knowledge” (Baker, McFall, & Shoham, 2009). As the role of psychotherapist has been increasingly taken up by social workers, counselors, and assorted other master’s-level clinicians, the distinctive value of a doctorate in clinical psychology lies in research and evaluation skills. These authors argue for a return to the Boulder model of training and endorse the new accreditation system—Psychological Clinical Science Accreditation System (PCSAS)—which is supported by the Association for Psychological Science.

This movement toward a “bolder” Boulder or clinical scientist model was crystallized by the 1995 creation of the Academy of Psychological Clinical Science (APCS) and the initiation of the PCSAS accreditation system. APCS is an alliance of scientifically oriented doctoral and internship training programs. APCS programs are strongly committed to research training and to the integration of such training with clinical practice. They are also committed to raising the standards of graduate education in psychology and upholding a science of psychology, even within professional training. (More information on APCS can be found on their Web site: acadpsychclinicalscience.org/). Table 2-1 presents the clinical psychology Ph.D. programs that are accredited by PCSAS and also those that are members of APCS. Our research has determined that APCS (and PCSAS-accredited) programs are indeed distinct from other APA-accredited clinical psychology programs in that they are more selective and more research-focused. Based on the data from previous editions of our Insider’s Guide, we found that APCS Ph.D. programs, compared to nonmember Ph.D. programs, admit a lower percentage of applicants (who had higher GRE scores) and were more likely to provide full financial support to
TABLE 2.1. Clinical Psychology Ph.D. Programs Accredited by PCSAS and Members of APCS

**Programs That Are Accredited by PCSAS**
- Arizona State University
- Duke University
- Emory University
- Harvard University
- Indiana University
- McGill University
- Northwestern University
- Ohio State University
- Stony Brook University
- University of Arizona
- University of California, Berkeley
- University of California, Los Angeles
- University of Delaware
- University of Georgia
- University of Illinois at Urbana-Champaign
- University of Iowa
- University of Kentucky
- University of Minnesota
- University of Missouri
- University of Oregon
- University of Pennsylvania
- University of Pittsburgh
- University of Southern California
- University of South Florida
- University of Virginia
- University of Wisconsin, Madison
- Virginia Tech University
- Washington University in St. Louis

**Programs That Are Members of APCS (cont.)**
- Purdue University
- Rutgers University
- San Diego State University
- Stony Brook University
- University of Arizona
- University of Buffalo
- University of California, Berkeley
- University of California, Los Angeles
- University of Delaware
- University of Denver
- University of Georgia
- University of Hawaii
- University of Illinois at Chicago
- University of Illinois at Urbana-Champaign
- University of Iowa
- University of Kansas
- University of Kentucky
- University of Maryland
- University of Massachusetts, Amherst
- University of Memphis
- University of Miami
- University of Michigan
- University of Minnesota
- University of Missouri
- University of Nevada-Reno
- University of New Mexico
- University of North Carolina at Chapel Hill
- University of Oregon
- University of Pennsylvania
- University of Pittsburgh
- University of South Florida
- University of Southern California
- University of Texas
- University of Toronto
- University of Utah
- University of Virginia
- University of Washington
- University of Wisconsin, Madison
- University of Wisconsin, Milwaukee
- University of Wisconsin
- Vanderbilt University
- Virginia Commonwealth University
- Virginia Polytechnic University
- Washington University in St. Louis
- West Virginia University
- Yale University
their students. APCS programs also subscribe more frequently to a cognitive-behavioral orientation, report a stronger research emphasis, and engage more frequently in research supported by funding agencies than non-APCS programs (Sayette, Norcross, & Dinoff, 2011).

Students interested in the “bolder” Boulder or clinical scientist model will find these APCS/PCSAS Ph.D. programs to be especially attractive in that they represent evidence-based, research-focused training in clinical science.

A Continuum of Training Opportunities

In truth, the doctoral training opportunities in clinical and counseling psychology are more nuanced than the either/or, Ph.D./Psy.D. dichotomy we have presented above. There is considerable variation within the Ph.D. and Psy.D., not only between them.

Think of a training continuum in psychology programs running from practice oriented on the left side to research oriented on the right. In the middle are programs equally emphasizing science and practice. Such a practice–research continuum is displayed below.

<table>
<thead>
<tr>
<th>Practice-Oriented Programs (Practitioners)</th>
<th>Equal-Emphasis Programs (Scientist–Practitioners)</th>
<th>Research-Oriented Programs (Clinical Scientists)</th>
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PsD Programs

Ph.D Programs

The practice-oriented Psy.D. programs account for roughly one-third of APA-accredited programs. Psy.D. recipients are typically known as practitioners. In the middle of the continuum are the equal-emphasis Ph.D. programs that account for another one-third of the APA-accredited programs. Graduates of these programs are typically called scientist-practitioners. On the other end of the continuum are the research-oriented Ph.D. programs that account for the final one-third. These Ph.D. recipients are called either scientist-practitioners or increasingly clinical scientists, especially if they graduate from an APCS/PCSAS program.

As you will soon discover in the Reports on Individual Programs, training directors rated their programs along this continuum. They assigned themselves a number from 1 to 7 corresponding to their training orientation.

Consider the heterogeneity of Psy.D. programs (Norcross, Castle, Sayette, & Mayne, 2004). Yes, all are dedicated to training practitioners (ratings of 1 to 3), but they do so in different settings and in different ways. Some are small, university-based programs accepting 15 students a year, and others are huge, for-profit campuses enrolling 70 to 80 students per year. It's inaccurate to simply lump them all together. For example, the smaller, university-based Psy.D. programs are more likely to offer financial assistance than the larger, multi-campus Psy.D. programs.

Also look at the diversity of Ph.D. programs in clinical psychology. They range from 4 to 7, from equal-emphasis, scientist–practitioner training to the research-oriented, clinical scientist training. It is mythical to treat clinical psychology Ph.D. programs as homogeneous and unified (McFall, 2002). The differentiation among types of clinical programs—beyond the dichotomy of Ph.D. and Psy.D.—is now abundantly clear and consistently replicated.

Our research substantiates a similar continuum among counseling psychology, except that there are only a few Psy.D. programs in counseling psychology. Counseling psychology has historically endorsed scientist–practitioner training and, with a few exceptions, actively resisted the practice-oriented Psy.D. (Neimeyer, Saferstein, & Rice, 2005). Hence, the practice–research continuum in counseling psychology begins with equal-emphasis programs (a rating of 3) and ends with the research-oriented programs (7). As in clinical psychology, the practice-oriented and equal-emphasis Ph.D. programs in counseling psychology accept a higher percentage of applicants but offer less financial assistance than the research-oriented programs (Norcross, Evans, & Ellis, 2010).

In short, you are not simply restricted to the Ph.D. or the Psy.D., but to all the variations and permutations within the practice–research continuum. Most students are, at once, excited and dismayed by this diversity. Excited because they can select doctoral programs that best match their interests and career goals. But also dismayed because the application process becomes more complicated. Do not fret; we shall take you step-by-step through the process of selecting schools and applying to programs.

Can you apply to both Ph.D. and Psy.D. programs? The answer depends on you. Yes, if your interest lies mostly in practice (a rating of 3) or in equal-emphasis (4). Both Psy.D. and Ph.D. programs would fit your career goals. No, if your interests are almost exclusively practice (1 or 2) or research (5,
CHOOSING THE Ph.D. OR Psy.D.

6, or 7). In those cases, you would be poorly served by applying to a program that trains students for a career in direct conflict to your goal.

Your Informed Choice

In order to become an informed applicant, know the crucial differences between the Boulder-model Ph.D. and the Vail-model Psy.D. training models and the diversity within them. Become aware of the recent movement toward a "bolder" Boulder model prizing clinical science. Begin to notice the important tradeoffs; easier to get in but saddled with debt, or difficult to enter but rewarded with full financial assistance, for example. We shall return to these considerations repeatedly throughout the book.

More importantly, know the specific data on programs to which you will apply. The Reports on Individual Programs later in this book present these data—ratings on the practice-research continuum, theoretical orientations, length of training, acceptance rates, financial assistance, internship match rates, practice and research opportunities, and more—for each APA-accredited program.

The key tasks for you as a potential applicant are, first, to recognize the diversity in training emphases and, second, to understand your best fit. The bottom line for applicants to psychology doctoral programs is one of choice, matching, and parity. You have the choice of two training models (and all the programs in between the two extremes). The choice should be matched to your strengths and interests. Parity has been achieved in that half of all doctorates in clinical psychology are now Psy.D.s. The choices are yours, but make informed decisions. The remainder of the Insider's Guide is designed to do just that.