

CHAPTER 3

PREPARING FOR GRADUATE SCHOOL

People begin the graduate school application process at different stages in their lives. You may be a junior or a senior in college. Maybe you have a bachelor's degree in psychology and have worked for a year or two. Perhaps you are a master's-level counselor or social worker who has decided to return for a doctorate. Or maybe you were not a psychology major but have decided you want to make a career change. Depending on your situation, your needs will be somewhat different. Therefore, each situation is addressed separately throughout this chapter.

One of the more perplexing decisions in applying to doctoral programs is "When—apply now or later?" A creative study of 1,034 Ph.D. students in clinical psychology determined that, after completing their undergraduate degree, 57% postponed graduate study, 10% went directly to a terminal masters' program, and 33% proceeded directly to a clinical psychology Ph.D. program (Zimak et al., 2011). Many students wait before applying to doctoral programs. The top reasons for postponing graduate school were to gain more research experience, further personal development, secure life experience, take a break from school, obtain a job, and desire to travel. All good reasons to wait until later.

The research data and our experience converge on this central point: There is no preordained "right" or "wrong" time in your life to attend graduate school in psychology. The timing, the now or later decision, obviously depends on your life circumstances, career aspirations, and current credentials.

Whatever your current status, recognize this

about becoming a clinical or counseling psychologist: *Do not wait until the year of your application to begin the preparation.* Securing admission into competitive doctoral programs necessitates preparation throughout your undergraduate career and any intervening years. Good grades, adequate test scores, clinical work, and research experience cannot be instantaneously acquired simply because you have made a decision to pursue psychology as your career.

Plan ahead of time using the knowledge and strategies presented in this chapter. Preparing for graduate study is *not* for seniors only (Fretz & Stang, 1980). Timeliness is everything, or, in the vernacular, "you snooze you lose" (Mitchell, 1996).

Much of the "advice" bandied about by fellow students and even some faculty is hopelessly general. Their well-intentioned comments are meant to be universal—one size fits all. However, this advice is akin to the bed of the legendary Greek innkeeper, Procrustes, who insisted on one size bed and who stretched or shortened his unfortunate guests to fit that bed! Do not fall prey to these Procrustean maneuvers; different applicants have different needs. Understanding your particular circumstances and needs will produce an individualized plan for applying to graduate school.

Different Situations, Different Needs

Undergraduates

Some of you are undergraduates, not yet in your senior year. By getting a head start, you can take the

Graduate School Selection Criteria

As an applicant, your perceptions of graduate admissions criteria probably differ from those of the admissions committee. Some of the things you may think are important are actually not so important (Collins, 2001). For two examples, your GRE Psychology Subject score is way less important than your GRE Verbal and Quantitative scores, and your extracurricular accomplishments do not count as much as you might like (Cashin & Landrum, 1991). On the other hand, you probably underestimate the importance of other admissions criteria; two examples are letters of recommendation and research experience, which students routinely undervalue compared to admissions committees (Nauta, 2000).

In this section we acquaint you with the evidence-based practices of graduate admissions committees. Learn what they value in graduate applicants and then tailor your application to those criteria in order to maximize your success.

A number of studies have been conducted to determine the relative importance of selection criteria in psychology graduate programs. The findings of one of our studies (Norcross, Kohout, & Wicherski, 2005) are summarized in Table 3-1. This table presents the average ratings of various criteria for admission into 410 doctoral programs and 179 master's programs in psychology. A rating of 3 denotes high importance; 2, medium importance; and 1, low importance.

The top-rated criteria for doctoral programs were letters of recommendation, personal state-

ments, GPA, interview, research experience, and GRE scores. All received ratings of 2.50 and higher on the 3-point scale, indicative of high importance. Extracurricular activity and work experience were valued substantially less.

The implications for enhancing your application are thus clear and embedded throughout this *Insider's Guide*: secure positive letters of recommendation, write compelling personal statements, maintain your GPA, ace the preadmission interview, obtain research experience, and prepare thoroughly for the GREs. At the same time, being heavily involved in student organizations and campus activities does not carry nearly as much weight as these other criteria. Being a volunteer soccer coach is not a path to graduate school!

Another study (Eddy, Lloyd, & Lubin, 1987) investigated the selection criteria of only APA-accredited doctoral programs in clinical psychology. Program directors rated the importance of each type of undergraduate preparation on a scale ranging from very low importance, 1, to very high importance, 5. Table 3-2 presents the mean ratings and standard deviations for clinical psychology programs.

Research experience emerged as the top-rated variable. The authors of the study concluded that there is simply no better way to increase one's chances for graduate school acceptance than research. The personal visit to a department on an invited interview, computer proficiency, and paid clinical experience were also highly valued. However, as in the previous study, extracurricular activities, such as Psi Chi membership, were rated relatively unimportant.

TABLE 3-1. Importance of Various Criteria in Psychology Admissions Decisions

Criteria	Master's programs		Doctoral programs	
	Mean ^a	SD	Mean ^a	SD
Letters of recommendation	2.74	.49	2.82	.42
Personal statement/goals	2.63	.55	2.81	.41
GPA	2.75	.43	2.74	.45
Interview	2.30	.76	2.62	.60
Research experience	2.04	.74	2.54	.65
GRE scores	2.36	.66	2.50	.55
Clinically related public service	1.94	.70	1.91	.69
Work experience	1.91	.65	1.87	.68
Extracurricular activity	1.46	.54	1.41	.55

Note. Data from Norcross, Kohout, & Wicherski (2005).

^aMeans are calculated on ratings where 1 = low importance, 2 = medium importance, 3 = high importance.

studies should manifest in and outside of the classroom.

Finally, there is a corpus of general knowledge regarding clinical and counseling psychology that may not have been covered in your courses. This body of information includes at least a cursory understanding of diagnosis, for example, the *Diagnostic and Statistical Manual*, 5th ed. (DSM-5); various assessment devices, such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and the Wechsler Intelligence Scales (WAIS-IV, WISC-IV); and ordinary therapy practices, such as individual, group, and family therapy. You must have a passing familiarity with theoretical orientations, for example, cognitive-behavioral, psychodynamic, family systems, and integrative, in order to understand program materials. If you are not already familiar with these concepts, it would be wise to review an introductory textbook in clinical or counseling psychology.

You should also be gaining knowledge specifically about psychology as a field and about the current issues within this field. Toward this end, we suggest you begin reading the *Monitor on Psychology*, a publication sent to all APA members and student affiliates, or the *APS Observer*, the publication distributed to all members of the Association for Psychological Science (APS). Both publications feature articles dealing with psychology in general and clinical/counseling psychology in particular. You can become an APA or APS affiliate and receive a subscription, peruse online abstracts, or ask to borrow a professor's old issues.

Faculty Mentoring

Learning about psychology and achieving good grades are important components of academic work. But classes are also important in that they provide you with the opportunity to become acquainted and form relationships with faculty. It is natural to feel shy around faculty, especially if you are part of a 300-person lecture class. Substantial courage is required to muster the nerve to ask a question or to stay after class and introduce yourself. Equally anxiety provoking is a visit alone to a professor's office during office hours. In the one case, you expose yourself in front of your peers; in the other, you are individually vulnerable and do not have a crowd of faces to blend into. *But find a way to become comfortable in approaching faculty members.*

The irony of student reticence to approach faculty is that professors generally would like more

students to visit them. Many faculty sit alone during office hours wondering why students never come to see them. They love to have students come after class or during office hours with questions. Ideas for questions can include something mentioned in the lecture, something you encountered in the readings, or something that puzzles you about graduate school. You do not have to be a star pupil or ask brilliant questions to begin a conversation with a professor. If you want to develop a relationship, ask professors about their research or other courses they are teaching. Faculty are passionate about their research, and they will be flattered that you investigated their interests online before visiting them during office hours.

What is the importance of meeting faculty? Three compelling reasons spring to mind. First, having a mentor to advise you in your growth as a future psychologist is invaluable. There is no better way to learn about psychology than in a one-on-one, mentoring relationship. When you apply to graduate school (and for employment), having a professor to guide you through the process is a huge advantage. Second, eventually you will need faculty to write letters of recommendation on your behalf. Whether you are applying to graduate school or for employment, everyone wants a few references regarding your performance and responsibility. Occasionally faculty members are asked to write a letter for a pupil who has taken a lecture course with 100 or more students—the professor may not even know the student until he or she requests a letter! It makes a huge difference if you have spent some office hours or time after class with a faculty member, and he or she knows you more personally.

And third, once you get to know professors, you may be able to work with them on a research project or as part of their clinical activities. You will be working closely with your major professor in graduate school, and you might as well begin as soon as possible as a colleague-in-training. Though more will be said about this later, we cannot overemphasize the need to cultivate such a relationship and obtain the rewards that can ensue.

To put it bluntly, the single largest contributor to preparedness for graduate school is students' interaction with faculty members at their undergraduate institution. That's what the research concludes and what graduate students report (Huss et al., 2002). Psychology students who had a mentor and who had high-quality interactions with faculty felt more prepared for graduate school. And the second largest contributor to graduate school preparedness is

with the faculty sponsor. A third option is to enroll in independent psychology research for academic credit. This entails individual study and research under the supervision of a faculty member and is ordinarily limited to junior and senior psychology majors. These three research paths are generally open to psychology majors attending a particular university as well as to graduated students looking to obtain research skills.

A fourth and increasingly common approach is to work or volunteer for a researcher outside of your university—in a hospital, medical center, research institute, private industry, or community-based organization, for example. Especially in large cities, researchers with major grants depend upon individuals (both pre- and post-baccalaureate) for many elements of study management, data collection, and statistical analyses. Many industries, especially biomedical and pharmaceutical research, offer summer research internships. These positions can provide valuable experience in randomized controlled trials. Conversely, community-based organizations commonly conduct outcomes research around clinical or community interventions and accept interns throughout the year. If you have taken a statistics or research methods course that included SPSS or SAS, you may have sufficient skills for an entry-level position on an active research team outside of a university.

A fifth path is to complete a summer research program, typically at another university for a couple of weeks. These are structured, formal programs for stellar undergraduates interested in pursuing advance training in psychology research. APA, APS, and Psi Chi all offer such summer programs or grants to create your own summer research directed by a psychologist. APA maintains a list of *Undergraduate Research Opportunities & Internships* (at www.apa.org/education/undergrad/research-opp.aspx), which presents dozens of research opportunities lasting for a week up to the entire summer.

A sixth alternative, restricted to matriculated undergraduates, is to complete an honors thesis in either a departmental or a university-wide honors program. As with additional courses and post college work, an honors thesis is a “feather in your cap.” For students desiring to move straight into a Ph.D. program, it is one means of presenting evidence to graduate admissions committees that you are capable of performing graduate-level work. Many schools allow motivated students to complete an honors thesis, an original study that the student conceptualizes, conducts, analyzes, and has some

hope of presenting at a regional conference or even publishing. An honors thesis shows a genuine commitment to psychology and is a palpable sign of ability in the applicant.

A seventh and final avenue toward acquiring research competencies is restricted to master's students. A comprehensive paper or a formal master's thesis, requiring original research, practically guarantees additional experience with research. For this reason, undergraduates denied admission directly into doctoral programs frequently enter master's programs to gain valuable research (and clinical) competencies. And remember: the majority of clinical psychology doctoral programs prefer master's-level applicants to have completed a thesis (Piotrowski & Keller, 1996).

Whichever avenue you eventually pursue, the procedures are quite similar. Following is a step-by-step guide to help you make the most of your research experience.

Determining Your Interests

The first step is finding a research area that interests you. If you are not interested in the work, it will diminish your energy and enthusiasm and probably your decision to apply to graduate school. A good place to begin is to read through your department brochure or Web site describing faculty interests and current research. If you are out of school, check with a local university. Visit with the Director of Psychology Advising or the Director of Undergraduate Studies in the psychology department (if a large university) or the department chairperson (if a smaller college) to discuss research possibilities. Speak to other students in the major about potential faculty mentors. Look for professors who have a proven track record of scholarly publications.

Once you have a list of faculty interests, you may find someone interesting but not be sure exactly what the research is all about (“I’ve heard about autism and think I’d like to study it, but I don’t really know much about it . . .”). If publications are not provided on the departmental Web site, or if reprints are not posted in the department, then you can go to *PsycLIT* or *PsycINFO* (found in most university libraries; ask at the reference desk) and read what that professor has published in the area over the last 5 to 7 years. This should make it easier to decide which professor you would like to approach to volunteer to do research with. *Do not narrow your choices too quickly!* Find at least two or three professors whose work initially interests you.

evant activities might include producing honors theses, serving as a research assistant, conducting independent research, coauthoring scientific publications, and developing research skills, such as data analysis and interviewing.

Rating	Criteria
5	Senior author of one or more articles in significant journals in addition to experience that provided a basis for extensive mastery of one or more directly related research skills.
4	Coauthor of one or more articles in significant journals in addition to experiences providing considerable familiarity with one or more directly relevant research skills.
3	Project leadership or significant participation in research activity (beyond activities connected with course work) serving to provide for considerable development of mastery of one or more relevant research skills.
2	Experience that provides a basis for some familiarity with relevant research skills.
1	Little if any experience according to these criteria.

The second rating scale, now in use at the University of Rhode Island, favors four criteria in evaluating research experience.

1. *Demonstrated research productivity*: sole or co-authorship of research publications, presentation of papers at scientific meetings, other tangible indications of research achievement.
2. *Breadth and quality of experience*: development of one or more research skills, data collection with different populations, work on more than one project.
3. *Research interest*: the strength of interest in research can be inferred from research activity over a sustained period of time and recommendations from research supervisors documenting skills, motivation, participation, and accomplishments.
4. *Individual autonomy*: responsibility for planning, implementing, and carrying out research tasks as a member of a research team or evidence of independent work.

Rankings are based on the aforementioned criteria and assigned as follows:

Rating	Criteria
5	Satisfies all four criteria
4	Satisfies three criteria
3	Satisfies two criteria
2	Satisfies one criterion
1	Evidence of some prior research involvement or interest

Balance is the key. On the one hand, an absence of research experience is usually seen as a serious drawback to an application to a doctoral psychology program. On the other hand, over committing yourself to multiple projects at one time can lead to poor performance and a neglect of clinical experience and GRE preparation. And do not forget: research also provides you with the opportunity to make professional contacts. The professors or graduate students with whom you collaborate are excellent sources of information about the discipline and about applying to graduate school.

Entrance Examinations

About 90% of doctoral clinical psychology programs, 82% of doctoral counseling psychology programs, and 81% of master's psychology programs require you to complete the Graduate Record Examination (GRE) General Test (Pagano, Wicherski, & Kohout, 2010; Turkson & Norcross, 1996). Fewer will also require the GRE Psychology Subject Test. The two GRE tests are often used to complement each other in admission decisions because the General Test is a measure of broad abilities and the Subject Test is an index of achievement in a specific field of study. The Miller Analogies Test (MAT) is required by fewer programs, about 3% of graduate programs in psychology (Murray & Williams, 1999; Norcross et al., 2005).

Blanket statements about entrance exams are difficult because not all schools require all tests, and some schools require additional testing (e.g., in the past the University of Minnesota required clinical psychology applicants to take the MMPI—a personality inventory!). Moreover, not all schools weight these test scores equally among the admission criteria. Some schools clearly state a minimum score that all applicants must obtain, whereas others state that they have no such criteria.

Interestingly, a study showed that even without an imposed cutoff, applicants admitted into its program had GRE scores of 600 or better, or about 160 on the revised scale (Rem, Oren, & Childrey, 1987). This suggests that even if a program does not emphasize entrance exams, (1) scores can still play

TABLE 3-5. Average GRE Scores of Incoming Students in APA-Accredited Clinical Psychology Programs

	Freestanding Psy.D. programs	University- based Psy.D. programs	Equal- emphasis Ph.D.	Research- oriented Ph.D.	All programs
GRE scores	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
Quantitative scale	—	148	151	152	151
Verbal scale	—	156	159	160	159
Analytical writing	—	4.7	4.9	5.1	4.9
Psychology subject test	—	644	669	683	672

Note. Adapted from Norcross, Ellis, & Sayette (2010).

stringent the admission requirements in terms of GREs and GPAs. The payoff for the more stringent admission requirements is far more financial assistance and far less debt, as we detail in Chapter 5.

Even if your scores are lower than 145, you can bolster other areas of your application to overcome low scores. But if your GRE scores are below 140, then most Ph.D. programs will not seriously consider your application. In this case, it will probably be necessary to take them again after completing a preparatory course or after spending time with a study guide. Or you may decide to apply to Psy.D. and master's programs as well.

Overconfidence can be disastrous here. Even if you obtained 700 SATs, aced every multiple-choice exam in college, and are cool-headed in testing situations, you should still familiarize yourself with the test format and complete the practice test offered in the application booklet. It certainly would not hurt to prepare more, but this should be considered the bare minimum.

Many self-study manuals and software packages are sufficient for a disciplined applicant to ready him or herself for the GRE. These resources provide helpful test-taking hints, vocabulary and math reviews, and sample tests that the student can self-administer. Many include actual questions given on past GREs that can provide a real flavor for the material you will see on testing day. Sample questions and downloadable practice software can also be ordered on the official GRE Web site at www.gre.com.

In addition to the official site, several commercial Internet sites provide valuable tips and full-length practice tests. Some of the material is offered for free; some offered for a price. Visit:

- ◆ www.princetonreview.com/gre
- ◆ www.kaptest.com/GRE/

- ◆ www.mygretutor.com
- ◆ www.greguide.com/

We heartily recommend taking an online GRE practice test. A practice GRE test serves as a diagnostic tool to assess your abilities, gauges your competitiveness for admission to graduate programs, and identifies areas that need further improvement (Wal-fish, 2004). Our favorites are the practice GRE tests at www.kaplan.com and www.princetonreview.com. These are free and confidential; use the practice test as a starting point.

Lastly, give yourself *at least* 6 weeks of study time if you decide to prepare for the GRE on your own and *at least* 8 weeks if you do not have a lot of time to devote solely to studying.

Figure 3-1 provides a worksheet for preparing on your own for the GRE General Test. It has proven a “winner” with our own students in scheduling the administration date and in decreasing their anxiety. The worksheet walks you step-by-step through the process.

Students feeling less confident, more anxious, or “out of the exam business” should contemplate private courses designed to help you prepare for the GRE. They offer a number of benefits beyond those of study guides:

- ◆ A structured time each week when the material is taught by an impartial instructor who can assess your strengths and weaknesses
- ◆ An abundance of study materials and the possibility of individual tutoring
- ◆ The chance to take tests under actual test-taking conditions (especially helpful for those with test anxiety)
- ◆ Specific work on test-taking skills and the shortcuts that can make problems easier

Extracurricular Activities

An applicant's extracurricular pursuits are accorded less weight than GPAs, GRE scores, research competencies, and clinical experiences. The research reviewed earlier in this chapter clearly bears this point out. However, extracurricular activities, such as Psi Chi membership and campus involvement, are still considered in evaluating the "total person" of the applicant.

The admission implications are thus proscriptive and prescriptive. Strictly in terms of enhancing your candidacy (not in terms of other goals, such as life satisfaction), you should favor good grades and research experience over extracurricular activities. Involvement in a dozen student organizations will not compensate for meager grades and research; doctoral programs will not accept you because you are coaching the junior high's cheerleading squad. When confronted with time conflicts, recall that admissions committees place a premium on variables other than intense campus commitments.

Having stated the obvious but unpleasant facts, we would also urge you to routinely engage in *some* campus and community pursuits. The reasoning here is that clinical and counseling psychology programs seek well-rounded individuals with diverse interests. The "egghead" or "Mr. Peabody" image is to be avoided in the practice of psychology, where your interpersonal skills are as critical as your scientific preparation. Moderate involvement can also better acquaint you with faculty members, who may serve as sources of recommendations, and with the discipline of psychology itself. You can create professional opportunities by being involved in departmental activities. "Familiar faces" are frequently given first shots at clinical or research opportunities.

Applicants frequently learn too late that active involvement outside of the classroom is an indispensable education in and of itself. Consider the following student qualities contained in many letter of recommendation forms:

- ◆ Academic performance
- ◆ Organizational skills
- ◆ Interest/enthusiasm
- ◆ Interpersonal skills
- ◆ Emotional stability
- ◆ Communication skills
- ◆ Originality/resourcefulness

- ◆ Social judgment
- ◆ Responsibility/dependability
- ◆ Stress tolerance

Most of these dimensions refer to faculty-student interactions *outside* of the classroom, not to your course grades. Many a bright student has sabotaged his or her educational experience, recommendation letters, and career goal by not becoming involved outside of the classroom.

In your extracurricular activities, try to exhibit the personality trait which, interacting with intelligence, relates most to vocational success—namely, conscientiousness (Jensen, 1998). Be responsible, dependable, organized, and persistent. This trait applies to every kind of educational and job success. What's more, you want colleagues and friends to document in their letters of recommendation that you are extraordinarily conscientious.

Four specific suggestions come to mind regarding the extracurricular activities to pursue. First, join departmental student organizations, such as the Psychology Club, Psi Chi, and the American Psychological Society's Student Caucus. Second, we heartily recommend that you join the American Psychological Association (APA) and/or the Association for Psychological Science (APS) as a student affiliate. Your APA affiliation brings with it monthly issues of the *American Psychologist*, the flagship journal, and the *Monitor on Psychology*, the association's magazine. Similarly, APS membership includes subscriptions to the monthly journal *Psychological Science* and the *APS Observer*. Student membership in professional associations reflects favorably on your commitment to the discipline, and this affiliation should be recorded on your curriculum vitae. Your psychology advisor might have applications for student affiliation in his or her office; if not, go online to www.apa.org/membership/student/index.aspx and www.psychologicalscience.org/join/.

Third, additional campus and community commitments should be guided by your interests. But those associated with human services, social causes, and artistic endeavors seem to be differentially rewarded. These will obviously vary with the locale; examples include Hand-in-Hand, campus ministries, course tutoring, peer advising, homeless shelters, women's centers, BACHUSS, SADD, theater productions, creative writing, Amnesty International, and the like.

A fourth and invaluable extracurricular experience is to attend a regional or national psychology convention. The benefits are many: socializing you into the profession; learning about current research;